



Intergenerational poverty persistence in Europe – Is there a ‘Great Gatsby Curve’ for poverty?

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ABSTRACT

While the influence of poverty in childhood on adulthood outcomes has been extensively studied, little is known about how the strength of intergenerational persistence in poverty itself varies across countries. Here we examine the intergenerational persistence of poverty in a comparative analysis of 30 European countries using data from the 2019 ad hoc module of the EU-SILC dataset. We construct proxy measures of poverty in the parental household employing information on the inability to meet basic needs and financial hardship when growing up, together with parental education and occupational social class. The strength of the association between current poverty based on the indicators at the core of the EU's social inclusion process and these measures of parental poverty is assessed and compared across countries. The cross-country variation in poverty persistence is probed concerning its relationship with the current and past extent of poverty: persistence tends to be stronger where current or parental poverty is higher, analogous to the Great Gatsby Curve relating intergenerational income mobility to income inequality at the country level. Mediation analysis highlights the role of own education as well as occupation in underpinning the observed relationship between current and parental poverty.

1. Introduction

The persistence of poverty across generations is a particularly salient aspect of broader intergenerational transmission of socio-economic status, and addressing intergenerational ‘poverty traps’ is a key component of anti-poverty strategies. There is extensive research literature on the wide range of channels through which poverty in childhood may affect poverty and disadvantage in adulthood (Duncan et al., 2012; Vauhkonen et al., 2017). However, it is particularly striking in that context that so little is known about how the strength and nature of intergenerational poverty persistence varies across rich countries (Jenkins & Siedler, 2007; Nolan, 2023). This extends to whether cross-country variation in poverty persistence aligns with conventional geographic clusters or welfare regimes, and whether poverty persistence is stronger where poverty levels (in the current or parental generation) are higher in an analogue to the much-discussed Great Gatsby Curve relating intergenerational income mobility to levels of income inequality.

Like poverty itself, as well as being of particular importance from a policy perspective, intergenerational poverty persistence is a distinctive phenomenon reflecting specific causal channels and mechanisms. Just as

poverty dynamics intragenerationally has distinctive features compared with income mobility more broadly, with a focused research literature investigating inter alia particular ‘poverty traps’, growing up in poverty is widely seen as enhancing the risk of poverty in adulthood in specific ways (in degree if not always in kind) to that part of the distribution. This serves to motivate a particular interest in intergenerational poverty, from both research and policy perspectives. Indeed it is striking that so much of the attention in discourse on poverty centres on ‘breaking the vicious cycle’ from one generation to the next, with efforts to do so playing a central role in anti-poverty strategies (De Schutter et al., 2023).

Individual country studies have exploited longitudinal surveys or administrative data to assess the intergenerational persistence of poverty measured in terms of income, but drawing valid comparative conclusions from these is highly problematic due to differences in the methods and poverty measures employed. A recent comparative analysis by Parolin et al. (2023) brings together long-running panel data for five countries to measure poverty in income terms in a comparable fashion across generations and countries. Beyond the very limited number of countries for which such panel data is available, multi-country studies of poverty persistence have generally focused on

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the relationship between poverty in the current generation as conventionally measured (either via income or multidimensionally) and various aspects of disadvantage in the parental generation.

Here we follow that strand of the literature but advance it by exploiting recently available and relatively rich data for 30 European countries from the 2019 EU-SILC ad hoc module on intergenerational transmission of disadvantages, which sought retrospective information from respondents on their household circumstances at about 14 years of age. This includes whether the household could meet specific basic needs, and experienced financial hardship, together with parental education and occupation, but not household income. The central challenge we face is how best to employ this retrospective information to produce proxy measures of poverty for the parental household.

To do so we develop a ‘narrow’ proxy measure for poverty where both inability to meet basic needs and financial difficulties were reported, and a ‘broad’ measure where one of these was reported together with low parental education or a working class parental occupation (including unemployed). Bringing these together with standard EU poverty measures for the current generation allows us to assess and compare across countries how much growing up in a poor household increases the probability of being in poverty now. The measures of childhood versus current poverty differ: we set out the case for why this still provides meaningful measures of intergenerational poverty persistence/transmission.

On this basis, we find substantial differences across countries in the strength of intergenerational poverty transmission that are unaffected by whether our ‘narrow’ or ‘broad’ measures of poverty are employed. We also assess their robustness to various choices in constructing childhood poverty measures from the information available.

We then study the relationship between intergenerational poverty persistence and levels of poverty to assess the evidence for a ‘Great Gatsby Curve for poverty’, analogous to the much-discussed curve for earnings/income inequality.

Finally, cross-country patterns are probed in terms of mediating factors, with education as a particularly strong mediator.

While both the specific measures of parental poverty we develop to exploit the limited information available and more generally the use of different measures of poverty for parental versus current generations can be questioned, the approach adopted allows us to compare the strength of intergenerational poverty transmission across thirty countries, greatly extending the existing comparative literature.

The rest of the paper is organized as follows. In [Section 2](#) we review the relevant literature. [Section 3](#) describes the data to be employed. In [Section 4](#) we outline the way poverty is to be measured in the current and parental household. [Section 5.1](#) sets out the main findings on the strength of the association between current poverty and childhood poverty by country. [Section 6](#) deals with the relationship between intergenerational poverty persistence and the level of poverty in the country in both current and parental generations, as well as other country-level characteristics. [Section 7](#) employs mediation analysis to explore some factors that may play a role in the linkage between parental and current poverty, notably the education and occupational social class attained by the individuals themselves. Finally, in the concluding section, we bring together key findings and discuss their implications, including for future research.

2. Previous research

While there is by now a very extensive comparative research literature on intergenerational mobility in terms of education, income, and social class, this has little to say directly about the intergenerational persistence of poverty from a comparative perspective. The much-discussed Great Gatsby Curve relationship positing that intergenerational mobility tends to be lower where levels of income inequality are higher ([Corak, 2013](#)) for example relates for the most part to mobility in terms of the labour market earnings of parent and offspring. Even when

non-labour income is included the focus is still often on the position of the individual (at least in the offspring generation) rather than their household, whereas poverty is generally assessed based on the circumstances of the household. Even in the minority of studies where both generations can be categorised based on household income, comparative findings about income mobility do not provide a basis for drawing robust conclusions about poverty as the poor may comprise quite different proportions of the low-income population across countries. In a similar vein, the causal processes underpinning poverty persistence versus ‘escapes’ are related to those at work in intergenerational mobility more broadly but have specific features that can only be understood via a particular focus on poverty, reflecting the distinctive, complex and inter-related set of disadvantages associated with growing up in poverty (as brought out in, for example, [De Schutter et al., 2023](#)).

Some individual country studies have exploited longitudinal surveys or administrative data to assess the intergenerational persistence of poverty measured via household income, most often for the USA ([Chetty et al., 2014](#); [Corcoran & Adams, 1997](#); [Mitnik et al., 2015](#); [Parolin et al., 2023](#)) but also for some other rich countries (see [Jenkins & Siedler, 2007](#) and [Nolan, 2023](#) for a review). As noted in the introduction [Parolin et al. \(2023\)](#) recently brought together long-running panel data for five countries to measure intergenerational poverty in income terms in a comparable fashion. They find that intergenerational poverty persistence measured that way is much stronger in the USA than in Denmark and Germany with Australia and the UK in between.

Securing appropriate data on the circumstances of the parental household is the central challenge facing intergenerational analysis. Comparative research on intergenerational relationships has been significantly enhanced by the inclusion of ad hoc intergenerational modules in EU-SILC in 2005, 2011 and 2019. The information sought from survey respondents about their parents in these modules included education level, activity status, occupation and country of birth and citizenship, as well as how often there were financial difficulties and (in 2011) how much difficulty the parental household had in ‘making ends meet’ when the respondent was aged 14. The 2019 module we employ here has only recently become available and includes some additional information as will be described in the next section.

While various studies have focused on for example education, earnings and occupation ([Causa & Johansson, 2009](#); [Esping-Andersen & Wagner, 2012](#); [Raitano & Vona, 2015](#)), here we concentrate on the much more limited sub-set more or less directly related to poverty. A few other studies have looked at poverty using the same dataset. Using the intergenerational module for 2005, [Whelan et al. \(2013\)](#) examined the relationship between both parental social class and childhood financial difficulties and three indicators of current poverty status, namely being below the relative income threshold, having high levels of material deprivation, and having difficulty making ends meet. These indicators of current circumstances were used separately and then combined into a single measure of what was termed ‘economic vulnerability’. They found that the impact of parental social class on income poverty was weak in the social democratic and corporatist countries and strongest for the liberal and southern European countries included in their analysis.

Using the 2011 EU-SILC intergenerational module [Grundiza and Lopez Vilaplana \(2013\)](#) examined how many working-age adults reporting current difficulty making ends meet also said that this was true of their parental household. They found that the association between the two was particularly low in the Nordic countries, Switzerland, Austria, France, Latvia and Lithuania, and particularly high in Romania, Portugal, Malta, Italy, Belgium, Spain, Hungary, Bulgaria and Croatia. [Serafino and Tonkin \(2014\)](#) also employed the 2011 module to analyse the extent to which childhood factors such as parent’s education level and employment status help to predict relative income poverty and material deprivation in adulthood in the UK and fifteen other European countries. They found that across almost all the EU countries examined parental educational levels are significant predictors of relative income poverty in adulthood, with this being particularly pronounced in

Bulgaria and Hungary, and more modest but still substantial in the Baltic states, Spain and France but not in Austria, Sweden, Belgium or the Netherlands. The financial situation of the childhood household was also a significant predictor in Southern and Eastern European countries. [Bellani and Bia \(2019\)](#) used both the 2005 and 2011 EU-SILC modules to look at current income poverty and difficulty making ends meet for those reporting that their parental household experienced financial problems. They found that financial problems in childhood significantly increase the average probability of being poor, especially among Mediterranean countries but also in Continental, Central and Eastern European Countries, but have little such association in Scandinavian or Anglo-Saxon countries.

The ad hoc intergenerational module included with EU-SILC 2019 has been used in only a few studies so far, including [Curristan et al. \(2022\)](#). They found that the relationship between current difficulty making ends meet and childhood financial circumstances was particularly strong in 2019 in the case of Italy, Malta, Finland, Romania and Latvia, and weakest in Greece, Cyprus, Denmark, Austria and France. The present paper seeks to exploit the potential of this module, which is described in detail in the next section.

3. Data

The EU-SILC (European Statistics on Income and Living Conditions) provides the data from which Eurostat produce the official EU statistics on poverty and social inclusion, and also serves as an enormously rich foundation for research. While the EU-SILC presents a common framework, there are some differences in the way countries derive the information required, with the most salient distinction for current purposes being between those countries that rely very heavily on administrative records, typically called 'register' countries, and those that draw on such information to a more limited extent and rely much more on survey evidence. Due to the nature of the data collection process register countries - Denmark, Finland, Iceland, the Netherlands, Norway and Sweden - provide comprehensive information on only one 'selected respondent' rather than all adult household members.¹

The 2019 EU-SILC survey includes an ad-hoc intergenerational module, similar to those included in the 2005 and 2011 waves, with retrospective questions on the socioeconomic status and related characteristics of their parents when respondents were around 14 years of age. Only respondents aged between 25 and 59 years old were posed the retrospective questions, so this includes all adult household members in that age range in most countries but only the 'selected respondents' in register countries.

The information in the module first covers whether the respondent's father and mother were present in the household when the respondent was 14 years of age, how many adults and children were in the household then, and the number at work. Whether the household was in a city, town or rural area and its tenure status. The country of birth, citizenship, highest educational level, activity status, managerial position, and main occupation at that time for the father and the mother. The financial situation of the household when the respondent was around 14 years old

is then probed with six possible answers offered ranging from 'very bad' to 'very good'. Respondents are then asked whether they had three items: basic school needs in terms of books and equipment, having a daily meal with meat, chicken, or fish (or vegetarian equivalent), and a week's annual holiday away from home; For each they specify whether they had it, did not have it due to financial reasons, or did not have it for other reasons.

This information is similar to that obtained in the 2011 intergenerational module except that the earlier version did not include the questions about being able to have the three 'deprivation' items listed above but did include a question about the level of difficulty 'making ends meet' in the parental household not repeated in 2019. The initial 2005 module did not include either of these but had a question about the extent of financial problems in the household (though differing from the question asked about that in 2011 and 2019).

In asking about the highest level of education the 2019 module specified three response categories - Low (less than primary, primary education or lower secondary education), Medium (upper secondary education and post-secondary non-tertiary education) and High ((short-cycle tertiary education, bachelor's or equivalent level, master's or equivalent, doctoral or equivalent). The main occupation of each parent is coded into ISCO-08(COM) 1-digit categories and the additional information on whether the position was a managerial one is helpful in categorising by social class. For this purpose, we employ the European Socio-economic Classification ESEC ([Rose & Harrison, 2014](#)) to assign into 9 categories:

- Large employers, higher managers/professionals;
- Lower managers /professionals, higher supervisory/technicians;
- Intermediate occupations;
- Small employers and self-employed (non-agriculture);
- Small employers and self-employed (agriculture);
- Lower supervisors and technicians;
- Lower sales and service;
- Lower technical;
- Routine.

Those whose activity status is 'unemployed' and for whom a main occupation is not provided are considered a separate group.

The extent of missing responses to key questions in the intergenerational module in 2019 is lower than in 2011 and much lower than in 2005, but still a significant consideration for some items/countries as are discussed below. Note also that we exclude cases where the respondent is an immigrant whose childhood was spent in their country of origin rather than the one in which they were sampled. Such cases pose particular challenges in assessing poverty in the parental household in what may have been a very different context. Migration itself may of course be driven by the hope of escaping poverty by moving to a richer country with greater opportunities, and may indeed lead to a higher standard of living. Here however our primary interest is in the influence that the environment growing up in the country in question has on the likelihood of being in poverty there as an adult. We do none the less look at the impact of including such cases in our robustness analysis in Section 4 below.

4. Measuring and proxying poverty

4.1. Measuring current poverty

Poverty is widely taken to mean deprivation and exclusion due to lack of resources, where - echoing the EU's official definition going back to the 1970s - people's income and resources are so inadequate as to preclude them from having a standard of living considered acceptable in the society in which they live. EU-SILC contains a wealth of information that can be used in trying to capture current poverty among responding households seen in those terms. An extensive literature has explored

¹ Within the EU-SILC frameworks countries can opt to use administrative records to acquire information, and are grouped by the extent to which they rely on such data. 'Register' countries use records to draw data on income and other sociodemographic information, while a selected respondent is surveyed to collect the remaining household information. These countries include the Nordics as well as the Netherlands and Slovenia. As all analyses are constructed for the selected respondent only, the number of observations in these countries is considerably smaller (see [Tables A.2 and A.3](#)). Most studies using retrospective questions have considered these countries, with some authors arguing the need for machine learning methods that consider upward biases due to overfitting (see, inter alia, [Brunori et al., 2023](#)). For an overview of register and survey countries in EU-SILC, see [Carranza et al. \(2023\)](#).

Table 1
Poverty Measures by Generation.

Generation	Indicator	Acronym	Definition
Parental	Narrow	P_N	BN & H
Parental	Broad	P_B	P_N & [(BN or H) and (E + WC)]
Current	Narrow	AROP	60 % median equivalised household income
Current	Broad	AROPE	Either AROP, SMD or LWI

Note: Parental characteristics include unsatisfied basic needs (BN), financial hardship (H), low education (E) or working-class status (WC). Respondent's characteristics include relative income poverty (AROP rate), being severely materially and socially deprived (SMD) or having a low work intensity (LWI).

alternative - or indeed complementary - measures of poverty that can be derived based on this information which we will not attempt to review here (Alkire et al., 2014; Atkinson et al., 2017; Guio et al., 2021; Nolan & Whelan, 2011; Whelan et al., 2014). Instead we will concentrate on what can be characterised as two core measures employed at EU level to monitor poverty and social inclusion.

The first is the income-based relative income poverty measure which has played a prominent role in the EU's suite of social inclusion indicators since these were initially adopted (the 'Laeken indicators') in 2001. Those in households with disposable equivalised income below 60 % of the national median are considered 'at risk of poverty' and this indicator in an EU context is thus frequently referred to as the 'AROP' rate. The choice of that specific proportion of median income is somewhat arbitrary and alternative relative income thresholds are also regularly used both in research and official EU monitoring, notably 50 % of the median, to assess whether findings are robust to that choice.

While such relative income poverty measures are a key reference point in both academic research and official monitoring, reliance on income, and on purely relative income thresholds in particular, to capture poverty has long been subject to a variety of critiques. Those in relative income poverty are at a very different 'level of living'/living standard in, for example, Denmark as opposed to Bulgaria, and current income does not in any case represent a comprehensive measure of economic resources, much less living standards and social inclusion. Such concerns underpin the fact that the high-level poverty reduction target adopted by the EU in its Europe 2020 strategy is instead framed in terms of the risk of poverty or social exclusion, widely referred to as the 'AROPE' rate. This includes all individuals who are either at risk of poverty in terms of the AROP measure, or severely materially and socially deprived (defined as lacking at least seven items out of thirteen material and social deprivation items), or living in a working-age household with a very low work intensity, where the total number of months worked in the year is less than 20 % of the maximum it could potentially have been (Guio et al., 2016). The EU 2030 target on poverty and social exclusion, a key element of the European Pillar of Social Rights, is to reduce the number of people at risk of poverty or social exclusion measured in this way by at least 15 million by that date. A total of 95.3 million people, 21.6 % of the EU population, were at risk of poverty or social exclusion in 2022 compared with 72.8 million (16.5 %) who fall below the AROP relative income threshold.

For current purposes we will take AROP as a narrower measure of current poverty and AROPE as a broader measure encompassing but going beyond it, and use both 'narrow' and 'broad' measures in our analysis as summarised in Table 1. Details by country on both AROP and AROPE poverty rates in 2019 for the working-age samples we are dealing with here are presented in Appendix A. We focus on these as measures of current poverty because they play such a prominent role in European discourse, and by using both are able to assess the robustness of our findings across the rather broad range they cover. It must be emphasised that there is no consensus in research or practice on how best to capture current poverty, and many alternatives have been investigated with an emphasis on multidimensional measures going well beyond income to cover various dimensions of exclusion, and sometimes

including subjective as well as objective measures (Nolan & Whelan, 2011; Whelan et al., 2013). This has implications for how we think about the measurement of poverty in childhood for sample respondents, to which we now turn.

4.2. Proxying parental poverty

The information provided by the intergenerational module on household circumstances when the respondents were aged around fourteen was described in detail above. The central challenge for this paper is how best to exploit it to produce a proxy measure of poverty in the parental household. No information is available on disposable income at that time so a measure based either entirely on relative income (like AROP) or including it (like AROPE) is not an option for the parental household. This means that measures for the latter will necessarily be different from those we are employing for current poverty - a concern to which we return after setting out the specifics of the parental poverty measures we derive and apply.

We focus on four dimensions that the available data allow us to capture to a greater or lesser extent:

- Capacity to meet basic needs.
- Financial hardship.
- Parents' education.
- Parental social class/occupation.

For each of these four dimensions, we construct a binary indicator aimed at reflecting whether the parental household was disadvantaged in that respect.

To capture the household's capacity to meet basic needs we employ the three questions included in the module: whether they had basic school books and equipment, a daily meal with meat, chicken, or fish (or vegetarian equivalent), and a week's annual holiday away from home. If they did not have any one of these items and this is stated to have been due to financial reasons, then we classify this as 'deprived' on that dimension.

To capture financial hardship we use responses to the question about the financial situation of the parental household and where the respondent states this was either very bad, bad or moderately bad we categorize this as deprived on that dimension. For parental education, we look at the highest educational level achieved by either parent and define as disadvantaged those households where both parents had less than upper secondary education. For parental occupation/social class, we assign parents to the ESEC categories described in the previous section and take households to be disadvantaged in those terms where both parents were either in 'working class' occupations, that is ESEC categories lower sales and services, lower technical and routine, or were described as unemployed.

Figs. 1 and 2 display for each country how many respondents are deprived/disadvantaged in terms of each of these four dimensions when measured this way.² The incidence of the inability to meet basic needs ranges from below 20 % up to 40 %, and the incidence of financial hardship displays a quite similar range. Low parental education has a much wider range, from under 10 per cent up to over 80 per cent, with

² These figures are presented in Tabular form in Appendix A, along with some details on the age and gender composition of the samples. Note that the number of missing values and thus of observations varies across dimensions, as also documented in Appendix A. The EU's two-digit country codes are employed: Austria (AT), Belgium (BE), Bulgaria (BG), Switzerland (CH), Cyprus (CY), Czechia (CZ), Germany (DE), Denmark (DK), Estonia (EE), Greece (EL), Spain (ES), Finland (FI), France (FR), Croatia (HR), Hungary (HU), Ireland (IE), Italy (IT), Lithuania (LT), Luxembourg (LU), Latvia (LV), Malta (MT), Netherlands (NL), Norway (NO), Poland (PL), Portugal (PT), Romania (RO), Serbia (RS), Sweden (SE), Slovenia (SI) and Slovakia (SK).

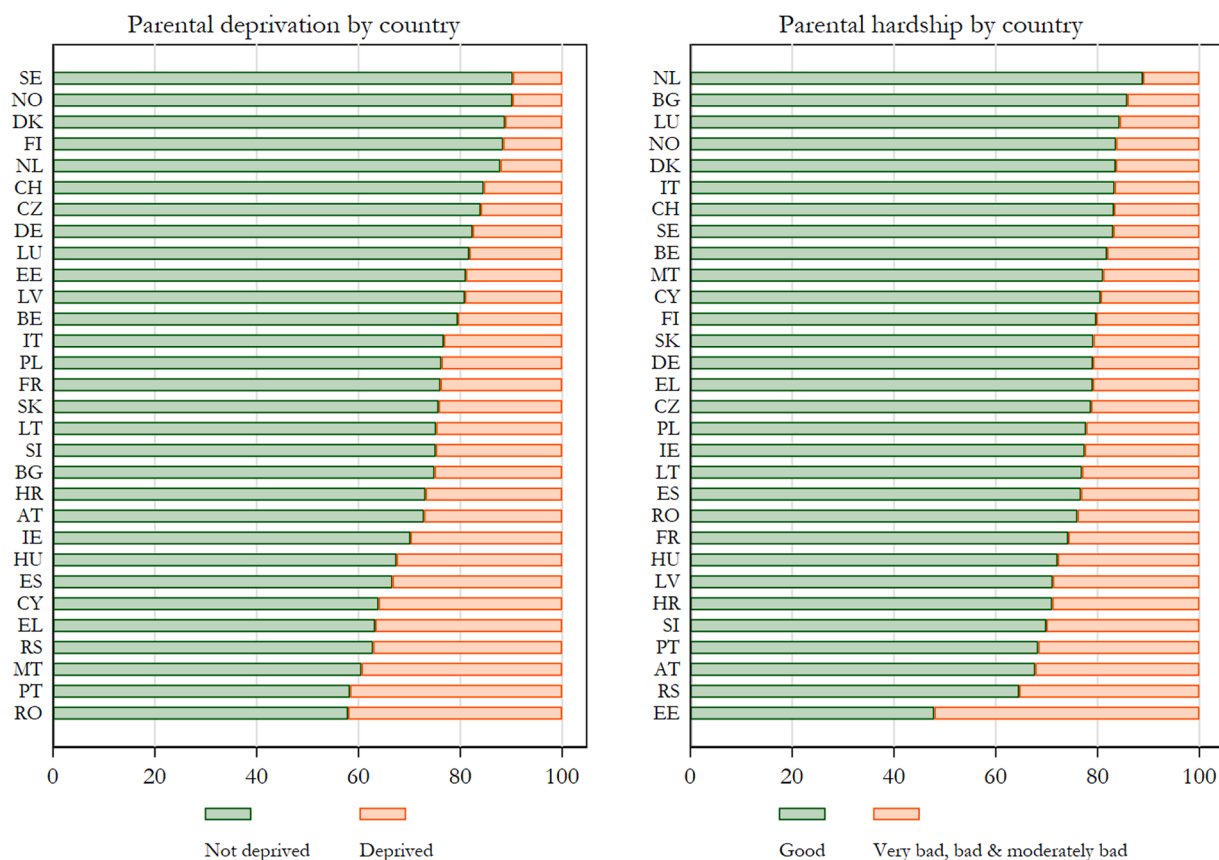


Fig. 1. Parental household basic needs and remembered hardship - incidence by country. **Note:** Figure reports the average rate deprivation for the first two parental dimensions in our analysis. The left panel shows the rate of parental deprivation, measured as whether or not they could not enjoy three 'basic needs' due to financial reasons. The right panel reports if their parental household experienced a bad financial situation. Both questions refer to when respondents were about 14 years of age. **Source:** own elaborations³ based on EU-SILC 2019: no. of obs. = 205,139 for parental deprivation. no. of obs. = 202,480 for parental hardship.

Southern European countries having particularly high levels.³ The pattern for the proportion of parents in the working class is more similar to low education than to the other two dimensions though the countries with the highest levels (Ireland, Italy, Spain and Malta) are at about 60 % rather than 80 %. Switzerland is an outlier with very few working-class parental households, which may inter alia reflect the extent of missing values for parental occupation there.

At the European level 26 % of respondents report the inability to meet basic needs in their parental household, 21 % report financial hardship, 38 % are from a working-class background and 43 % had low-educated parents. Unsurprisingly, conditional on having another disadvantage, the incidence of each of the dimensions increases markedly. For example, about two-thirds of those with low-educated parents reported an inability to meet basic needs and over 60 % reported financial hardship growing up (see [Appendix B](#) for more details on the interrelationships between the dimensions).

It is also helpful to consider these dimensions in two distinct groups, the first comprising basic needs and financial hardship which can be seen as more directly related to poverty and the second comprising low education and working-class background which capture a broader notion of socioeconomic disadvantage. Inability to meet basic needs seeks to capture deprivation in a similar way to the material deprivation component of the current AROPE poverty measure, although with a

much more restricted set of items. Indicators of financial stress/difficulty 'making ends meet' have been employed in various studies of current poverty, regarded as 'subjective' and complementing more 'objective' ones such as income and/or material deprivation-based measures. Parental education and social class may be regarded as risk factors - in the sense that the likelihood of parental poverty is higher where the parents had low levels of education and were in working-class occupations - rather than directly capturing poverty per se. The overall percentage at the European level displaying both the inability to meet basic needs and financial hardship is 15 %, while the percentage with both low parental education and a working-class background is 23 %.

Based on these dimensions we derive two summary proxy indicators of poverty in the parental household, one *narrow* and the other *broad*. We assign the most weight to the two dimensions that can be seen as relating more directly to poverty, namely being unable to meet basic needs and experiencing financial hardship. The narrow measure concentrates entirely on these and is additionally restrictive in only including cases deprived under both dimensions. The underlying logic is that being unable to meet basic needs represents exclusion, that the respondent has attributed this (retrospectively) to not being able to afford it, and that financial hardship reinforces that this exclusion was due to a lack of resources.⁴

³ This is broadly in line with Eurostat statistics show that in 1992, the first year these are available, there was very substantial divergence in the incidence of low education across European countries, from only 20 % in Germany up to 80 % for Portugal.

⁴ An alternative to this *intersection* approach would be to define parental poverty as being deprived in either one dimension or another. While this *union* approach would be interesting to study, it results in a substantial share of parents being treated as poor. On average, the narrow rate of parental poverty goes from 15.4 % to 32.3 %. For that reason, we opt not to include it in our analysis.

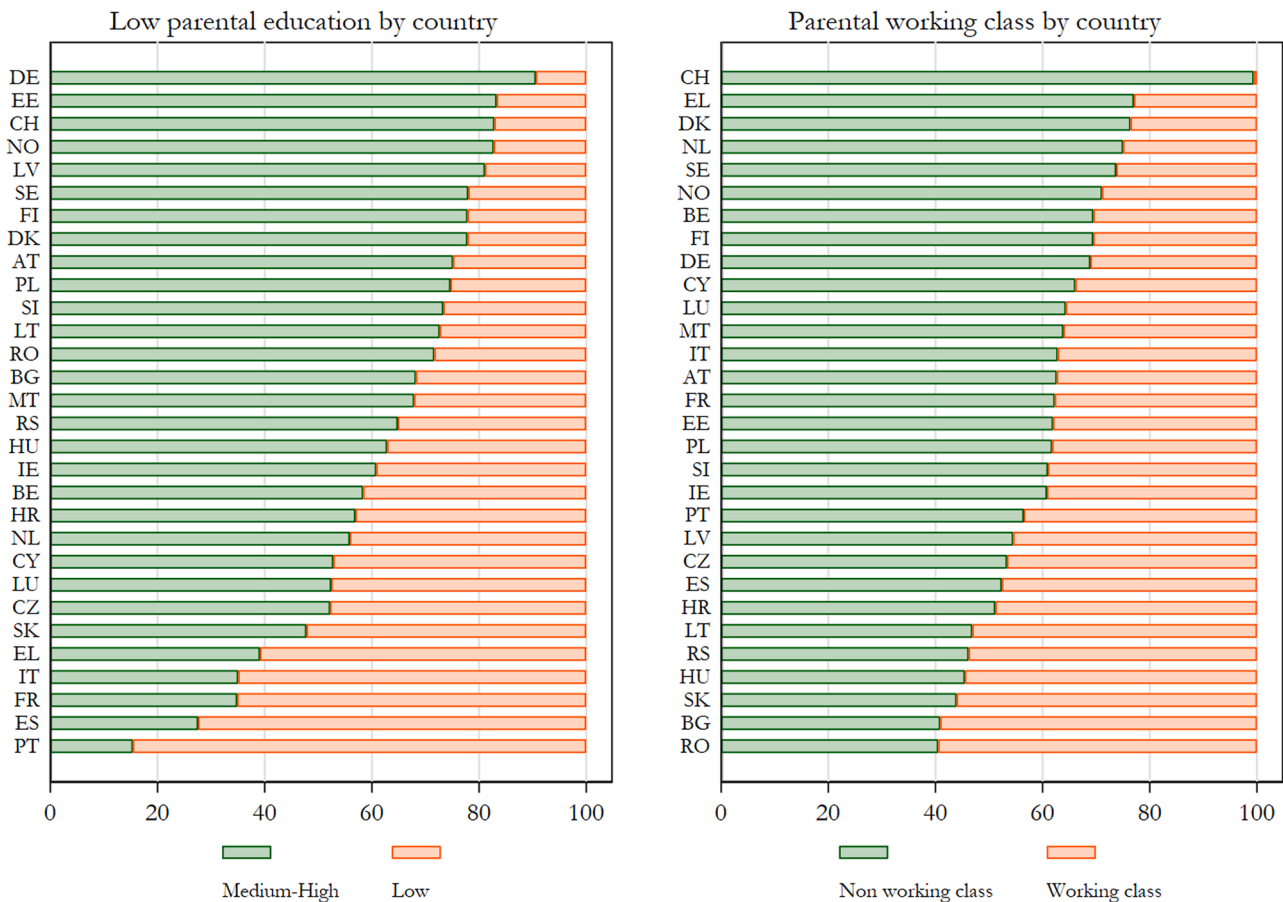


Fig. 2. Parental education and social class - incidence by country. **Note:** Figure reports the average rate deprivation for the latter two parental dimensions in our analysis. The left panel captures the parental level of education while the right panel represents 'working class' occupations, including unemployment. Both questions refer to when respondents were about 14 years of age. **Source:** own elaborations' based on EU-SILC 2019: no. of obs. = 198,861 for parental education. no. of obs. = 197,408 for parental working class.

Table 2
Poverty Rates, at European level and Range Across Countries.

Poverty rate	Parental			Current		
	Avg.	Min.	Max.	Avg.	Min.	Max.
Narrow	15.9	6.9	27.1	13.6	6.7	21.8
Broad	20.8	8.2	37.7	18.8	9.8	31.3

Note: See Table 1 for the definitions of current and parental poverty for the narrow and broad specifications. **Source:** own elaborations' based on EU-SILC 2019.

The broad measure then adds to the narrow measure those reporting either inability to meet basic needs or financial hardship though not both, but only where the parental background is also disadvantaged in terms of both low education and social class. The logic here is that low-educated working-class or unemployed parents had the most limited financial resources in terms of income and wealth, so the likelihood that the reported inability to meet basic needs or financial hardship was reflected in exclusion due to lack of resources is greatest in such cases. Table 1 summarises these criteria. The narrow indicator captures 16 % of respondents while the broader measure captures 21 %.

The construction of these measures of parental poverty involves a variety of choices about how the variables for each of the four dimensions are constructed and then used to produce an overall measure. While we have articulated the logic behind the choices made alternatives are worth examining, and we return to this below in assessing the robustness of our key results in that regard. More broadly, standing back from the specific choices made in constructing these measures, two

features are obvious but worth highlighting: income plays no role in the measurement of parental poverty, and in this and other respects the measures of parental poverty are quite different to those being used to capture current poverty. (Note though that two of the basic needs items used in our measure of parental poverty are also included in the broader set of material deprivation indicators incorporated in the 'broad' AROPE current poverty measure.)⁵ We return to these features in discussing the validity of our measures alongside their robustness in Section 5.2 below.

Finally it is clear that all the information we have about parental circumstances are provided as retrospective assessments by current respondents. The reliability of such retrospective information requires further investigation; studies relating to such information on parental education and occupation/social class provide some basis for confidence in those dimensions (see, e.g., Hout & Hastings, 2016), but we are not aware of validation studies on retrospective responses with respect to meeting basic needs and experiencing financial difficulties. The indicators of inability to meet basic needs may be interpreted in a broadly similar fashion across countries, though what constituted 'a holiday' for example may vary. What respondents count as a difficult financial situation in the parental household would certainly be expected to vary

⁵ While the subjective current economic situation of responding households is probed in EU-SILC the questions employed differ from that relating to the parental household used in the ad hoc module. These subjective assessments do not play any part in our measurement of current poverty, though that could usefully be explored in future work; here we prefer to focus on the two current measures widely employed in EU discourse.

with what they recall as commonplace in the country in question at that time. For our purposes that is not a problem as the underlying concept of poverty we are seeking to tap is itself relative. What would merit further investigation is whether such retrospective responses are systematically related to for example how respondents have fared in the intervening years.

4.3. Current and parental poverty

Table 2 shows both the incidence of the current and parental poverty measures in aggregate at EU level and the range for each across the 30 countries included. The pattern of variation across countries for the current generation measures is well-known: countries such as Italy, Romania and Serbia have particularly high AROP rates while Belgium and Czechia have particularly low ones. For the AROPE rate, Greece, Romania and Serbia have the highest rates while Czechia, Sweden and Switzerland have the lowest ones. For both parental household poverty measures a detailed picture by country is provided in Appendix A. Countries such as the Netherlands, Norway and Sweden have the lowest parental poverty incidence while Hungary, Portugal and Serbia have the highest, for both the narrow and broad measures. The range across countries is greater for parental than current poverty measures because rates for the former are higher at the upper end.

Note that the sample we are using differs somewhat between the narrow and broad measures. While around 9 % of the original sample has missing information on the narrow measure that figure rises to around 15 % for the broad measure, primarily because of the extent of missingness for parental occupation/social class. One could drop cases missing on any of the four dimensions for the analysis of both measures, but that loses available cases with the narrow measure so instead we present results for all the non-missing observations in each case. The demographic characteristics of the two samples are very similar and this does not affect our results in any substantive way. Full details regarding missing values in each dimension are in Appendix A.

Categorizing both the parental and current poverty levels for each country as either below or above the cross-country average, Fig. 3 illustrates in map form the relationship by country between the current versus parental levels for the narrow measures, while Fig. 4 does so for the broad measures. Countries with relatively low poverty in both generations (grey) and those with high poverty in both (green) can be seen as *low static* and *high static* respectively. Countries with low parental poverty and high current poverty (light blue) are facing a worsening situation while those with high parental poverty and low current poverty (yellow) have an improving one over time. Southern and Eastern European countries are mostly among *high static* countries (Spain, Portugal, Greece, Croatia, Romania, Serbia etc.), while Continental countries such as Belgium, Netherlands, and Switzerland as well as Nordic countries such as Sweden and Norway are *low static*. Among the *worsening* we find Denmark, Italy, and Bulgaria. Finally, *improving* are France and Austria. Relying on the narrow versus broad poverty measures makes a difference in this respect. For example, Germany is 'worsening' when we look at the narrow measure but 'low static' with the broad poverty, while the opposite is true for Finland, and Poland is in the 'high static' group with the narrow measure and 'low static' with the broad one. These changes capture the relative incidence of going from a narrow to a broad definition of poverty – and whether this matters for parents, the current generation, or their association.

5. The intergenerational persistence of poverty

5.1. The association between current and parental poverty

The association between current and parental poverty can be quantified in various ways, with a variety of summary measures employed in the broader literature on intergenerational mobility. With a binary dependent variable, one can start by estimating a logistic regression

model of the probability of being poor with parental poverty as the independent variable. This has the advantage that the model can then be expanded to incorporate other factors, either as controls or to explore mediating variables. One option is then to derive the odds ratio, that is in this instance the odds of being poor among those coming from a poor parental household relative to the odds of being poor for those from a non-poor parental household. This measure is commonly employed in the literature on intergenerational mobility in terms of social class. However, as pointed out in Breen et al. (2018), the interpretation of odds ratios in making comparisons across different samples and models with different independent variables is problematic. One strategy in response is to estimate a linear probability model instead, as done in the context of intergenerational poverty persistence in the recent study by Parolin et al. (2023). The alternative we adopt here is to base our analysis on the logistic regression model but as a summary measure of the strength of association focus primarily on the marginal effect of growing up in poor household on the predicted probability of being currently poor.⁶ This has the advantage that we can introduce controls, make comparisons across different samples, and pursue mediation analysis with greater confidence. To help in assessing the robustness of our findings based on marginal effects, though, we also report key results employing odds ratios.

Fig. 5 reports estimated marginal effects for the narrow poverty measures, with countries ranked from lowest to highest, together with 95 % confidence intervals.⁷ Denmark, Sweden, Switzerland, France and Austria have the lowest marginal effects and Bulgaria, Romania, Lithuania and Serbia have the highest. While confidence intervals are particularly wide for some countries, including Ireland, Finland and Norway, the range of marginal effects across countries is substantial, from negative values for Denmark to almost 0.3 for Bulgaria.

The corresponding results for the broad poverty measures are presented in Fig. 6. Point estimates for marginal effects are generally somewhat higher than the corresponding narrow measures for the same country – the cross-country average (labelled 'EU' in the graphs for convenience though not all the countries covered are currently member states) increases from around 0.10 to 0.15. Country rankings are generally similar but some countries do see a noticeable change: Netherlands, Norway and Slovenia improve their rank substantially (in the sense that persistence is lower relative to elsewhere) while France, Czechia and Greece worsen their position. The differences in patterns between the narrow and broad poverty measures are not marked but are nonetheless sufficient to justify us retaining both in our analysis, serving as a robustness check on our findings.

5.2. Robustness and validity

We have discussed how our measures of narrow and broad parental poverty reflect specific choices with respect to the construction of the variables; some other choices were also required in the course of the analysis. To assess the robustness of our findings to these choices we carried out a considerable range of robustness checks, with results summarised here and full details set out in the appendices.

In Appendix C we modify the logistic regression model to control for age and age squared when measuring the intergenerational persistence of poverty. This is relevant because our age range (25–59) means we include individuals whose parental situation is observed in different time periods (at the extremes we have individuals who were 14 in 1974 and those who were 14 in 2008). Figs. 5 and 6 show that the estimated

⁶ Note that in the univariate case and when both the independent and dependent variable are binary (as is our case), the marginal effect of a logistic regression is equivalent to the marginal effect of a linear regression (i.e., γ in $y_i = \eta + \gamma X_i + u_i$). We can therefore interpret this result as one would an intergenerational elasticity.

⁷ These estimates are fully detailed in Table J.1 in Appendix J.

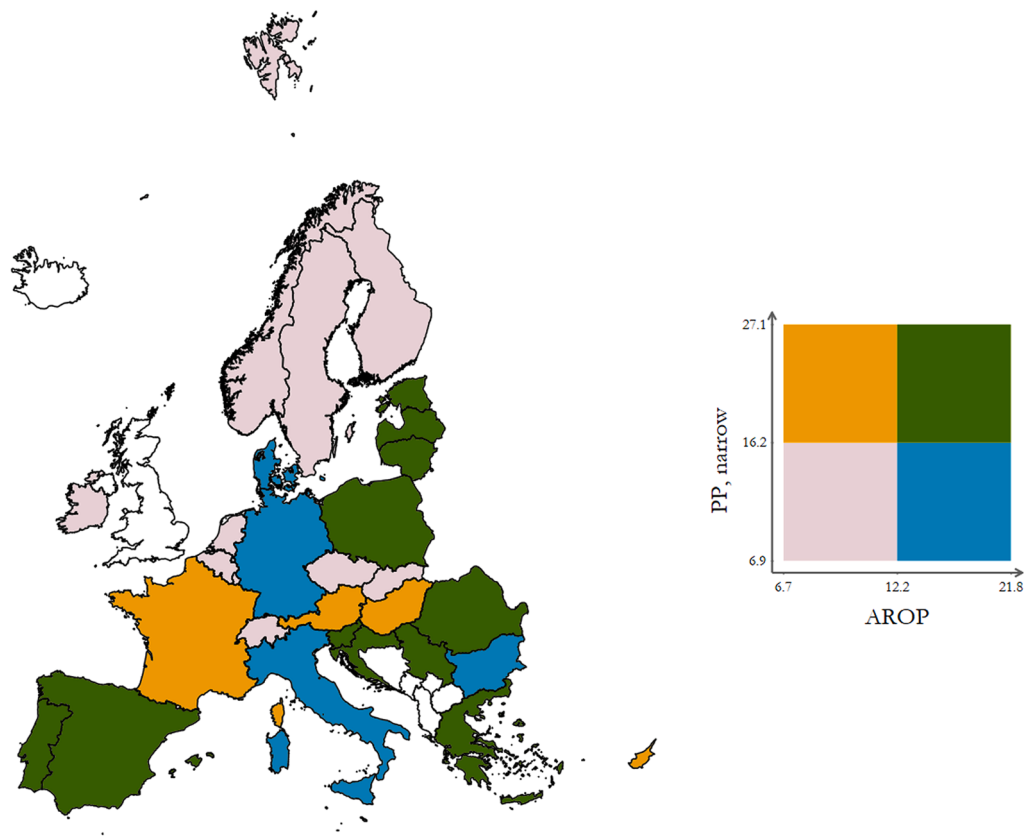


Fig. 3. Narrow parental and current poverty, geographical map of Europe. **Note:** We group countries into four categories based on whether they report above- or below-average poverty rates in the current and the parental generations, based on our narrow definitions of poverty (see Table 1). **Source:** Authors' elaborations based on EU-SILC 2019.

marginal effects are not substantially altered when using either the narrow nor broad poverty measures. Appendix Table K.1 shows that the correlation in country rankings between our baseline version with age controls and results incorporating those controls is 0.99 for the narrow poverty measures and 0.98 for the broad ones.

It was also noted earlier that some respondents included in the EU-SILC module did not spend their childhood in the country in which they now live and have been sampled, and these have been excluded from our analysis. It is of interest to see how much difference it would make if we excluded all immigrants, i.e. all those born elsewhere. These are sufficiently numerous and distinctive that excluding them does affect the level of estimated marginal effects in certain countries, notably Sweden, especially for our broad measure of poverty, as reported in Fig. D.2 in Appendix D. More generally, though, this exclusion can be seen to make little difference to the pattern of cross-country variation; Appendix Table K.1 shows that the correlation in country rankings with the baseline results is 0.99 for the narrow poverty measures and 0.96 for the broad ones (though 5 countries do change rank by more than 2 positions for the latter).

We noted that the samples used to estimate our narrow and broad measures of poverty are not identical as the latter includes additional variables, and therefore additional missing information. One potential issue in our findings is that differences could be driven by changing samples – a problem which is particularly relevant for register countries where samples are considerably smaller. To assess whether this makes much difference to the results Appendix E provides estimates for the narrow definition of poverty under the smaller samples used for the broad measure. Fig. E.2 shows the country rankings for each poverty measure. Panel (a) compares our two measures, which are divided into

differences due to samples in panel (b) and differences in poverty definition in panel (c). Rankings differ mostly due to differences in poverty definition rather than samples. Perhaps two notable exceptions are Norway and Luxembourg, both countries with relatively small samples, but for different reasons. The former is a register country where only selected respondents provide information while the latter combines administrative registers with a small sample survey (Liégeois et al., 2010). While results confirm that sample issues are not major, these exceptions suggest that sampling choices can potentially make an important difference.⁸

Appendix F re-examines key findings using variants of our central measures of poverty. Looking first at varying the measures of current poverty, Fig. F.1 in the Appendix reports the intergenerational persistence of poverty when these are constructed using a income threshold of 50 % rather than the more usual 60 % of the median. The correlation in country rankings with our baseline results is again seen in Appendix Table K.1 to be very high, at 0.97/0.98. Turning to the parental poverty measures, Table F.1 presents the country rankings with two alternative versions of these. The first is based on a more restrictive definition of financial hardship, which counts only the two most negative responses (so not including 'moderately bad') as hardship. The second employs a continuous index constructed as the sum of all financial hardship responses together with those to the three basic need questions, thus having values from 0 to 8, and indexed so that it ranges from 0 to 1 where the average is seen to be 0.25. Table F.1 reports the results for

⁸ For example, Brunori et al. (2023) highlights this same problem for Sweden when measuring inequality of opportunity.

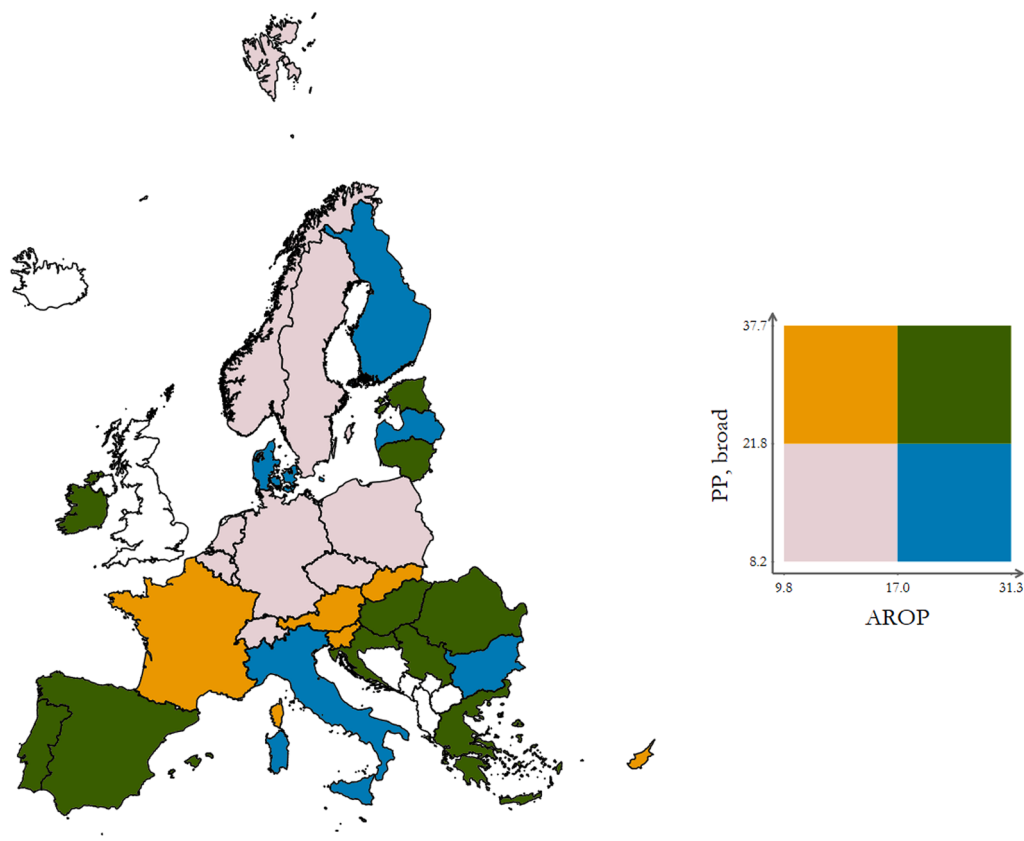


Fig. 4. Broad parental and current poverty, geographical map of Europe. **Note:** We group countries into four categories based on whether they report above- or below-average poverty rates in the current and the parental generations, based on our broad definitions of poverty (see Table 1). **Source:** Authors' elaborations based on EU-SILC 2019.

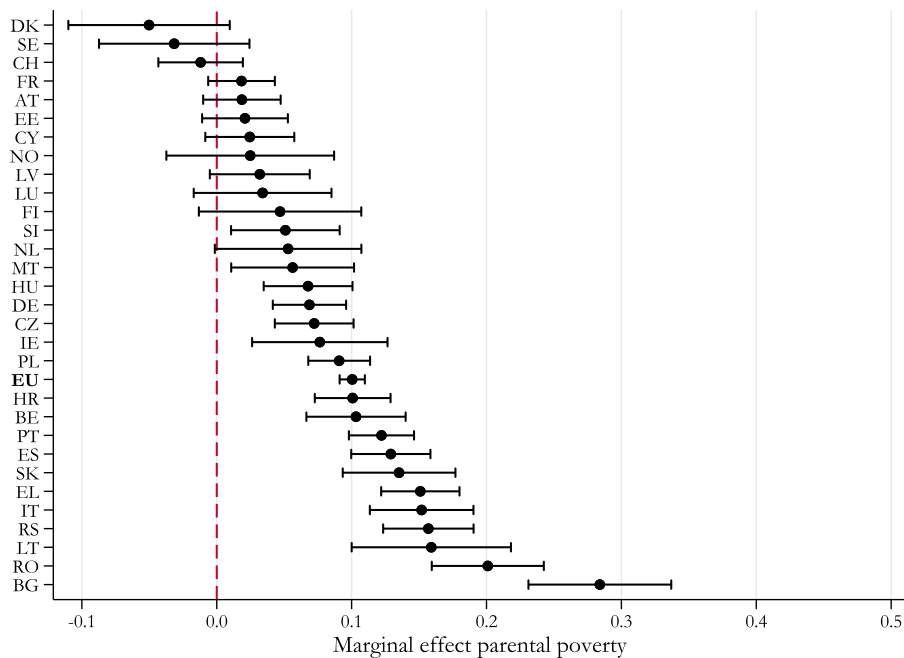


Fig. 5. Intergenerational poverty association country rankings (narrow measure). **Note:** Marginal effects estimated using a logistic regression between current and parental poverty under the narrow definitions of poverty (see Table 1). Countries are ranked from lowest to highest and include the 95 % confidence interval. Being a univariate logit regression, we can also interpret these coefficients and that of a linear probability model. We include an estimate for the pooled sample labelled 'EU' for convenience. **Source:** Authors' elaborations based on EU-SILC 2019.

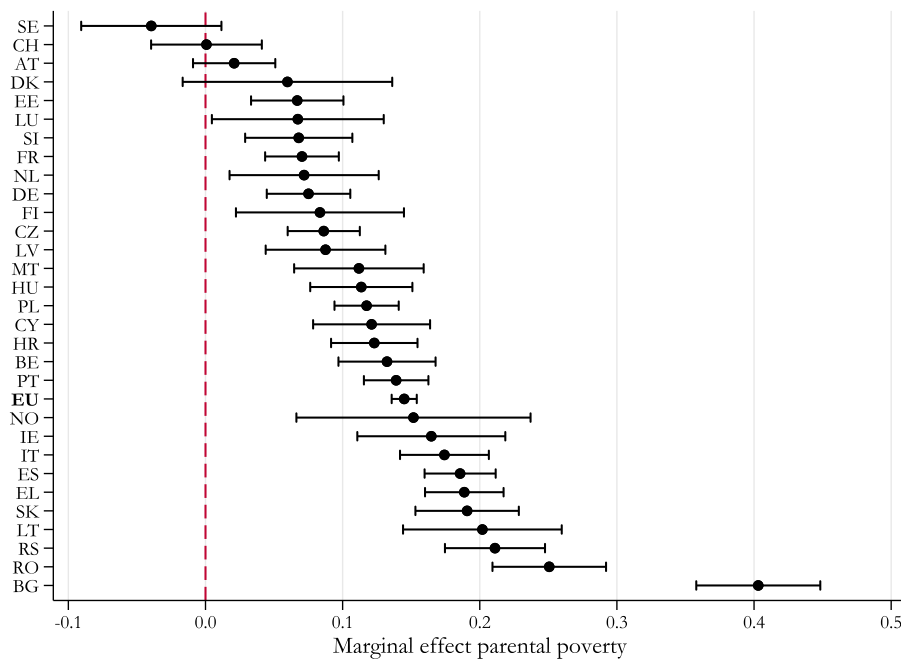


Fig. 6. Intergenerational poverty association country rankings (broad measure). **Note:** Marginal effects estimated using a logistic regression between current and parental poverty under the narrow definitions of poverty (see Table 1). Countries are ranked from lowest to highest and include the 95 % confidence interval. Being a univariate logit regression, we can also interpret these coefficients and that of a linear probability model. We include an estimate for the pooled sample labelled 'EU' for convenience. **Source:** Authors' elaborations based on EU-SILC 2019.

both in terms of country rankings. The results are relatively consistent across definitions, with Appendix Table K.1 showing the rank correlations at 0.97, reinforcing the conclusion that our core results on cross-country variation are quite robust.

As a final robustness check, what if we employed an alternative summary measure of the strength of association between current and parental poverty rather than the estimated marginal effects? We noted earlier that analysis of intergenerational mobility in terms of social class often focuses on odds ratios. Appendix G presents estimated odds ratios by country for the likelihood of current poverty for someone growing up in a poor household versus someone who did not, for both our narrow and broad measures of poverty. For both the choice between marginal effects and odds ratios as measure of association makes little difference to how countries are ranked; Appendix Table K.1 shows the correlations to be 0.97 for the narrow poverty measures and 0.94 with the broad ones (though 6 countries do change rank by more than 2 positions with the broad measures).

Returning to our poverty measures, concerns may well remain that the information available on the parental household could be used to construct alternative poverty measures we have not included in these robustness checks. While this is indeed the case, we have presented a considerable range of variants underpinned by clearly articulated rationales, on which future research using the same information in different ways can build. A more fundamental critique would be that income plays a central role in our measures of current poverty but does not feature at all in those for parental poverty. No information on income in the parental household was sought in the data source we rely on, nor would it have been reasonable to try to do so with the retrospective mode of data collection it employed, so anyone relying on this source does not have the option of including it. It is worth emphasising though that poverty is not the same as low income, and exclusion due to lack of resources can in principle be validly captured in other ways, as amply illustrated by the profusion of poverty measures in the literature that assign a more modest role or occasionally no role to income, emphasizing other dimensions/indicators of inclusion (Alkire & Foster, 2011; Bourguignon & Chakravarty, 2003).

More broadly, the fact that we employ quite different poverty

measures for parental versus current households may well give rise to the reaction/concern that we are simply 'not measuring the same thing'. However, poverty measures in the literature vary widely depending inter alia on the different settings and contexts involved as well as the information available. It is not obvious that poverty a generation or two ago would necessarily be best measured in exactly the same way as poverty currently, it could in principle be more satisfactory to find different ways to capture the same underlying concept. Finally, some may feel that the information available from the EU-SILC module about parental households is simply not adequate to allow poverty to be measured. In that case a broad-ranging comparative exercise such as the one undertaken here will not be possible in the foreseeable future. We would emphasise however that poverty is a particularly challenging concept to capture empirically and always measured with error, the issue is one of degree rather than kind. The patterns we report from the EU-SILC data using the range of measures we develop are sufficiently systematic and consistent to suggest that the information about parental households, while limited, does provide a basis for the assessment of differences in the strength of intergenerational poverty transmission across the very wide range of countries it covers.

6. The pattern of variation in poverty persistence across countries

6.1. Intergenerational poverty persistence and country clusters

With the results we have presented so far, the question we can now pose is whether the pattern of variation they show in the extent of intergenerational poverty persistence across these thirty countries is generally in line with prior expectations. The initial difficulty in addressing this question is that the very limited literature on the specific topic of intergenerational persistence of poverty does not provide a particularly clear basis for such expectations.

From our review of this literature in Section 2 we see that some of the previous studies highlighted differences across countries grouped in terms of geography and/or welfare regime, although this was not consistent across them. While some studies found a relatively low level

of intergenerational association in Scandinavian countries and a relatively high degree of association in Mediterranean, Central and Eastern European countries, others presented a less consistent picture (and some of the former focused on country clusters rather than individual countries so differences between countries in a particular cluster were not assessed).

If we look at the cross-country pattern of marginal effects we presented in Figs. 5 and 6 through a geographic or welfare regime lens, we see first that Scandinavian countries mostly have particularly low marginal effects as might be expected. With the narrow poverty measures in Fig. 5 the marginal effects for Denmark, Sweden, Norway and Finland are not significantly different from 0, though in the case of Norway, this reflects a particularly large confidence interval/small sample. With the broad poverty measures in Fig. 6 these countries are less distinctive, with Sweden and Denmark still around 0 but Finland and especially Norway now significantly above it.

Beyond that, the four countries with the highest marginal effects with both narrow and broad poverty measures - namely Bulgaria, Lithuania, Romania and Slovakia - are from the Baltics, central or eastern Europe. However, other countries from these groupings are to be seen at various positions in the country ranking. The other Baltic countries, Estonia and Latvia, are in the lowest one-third. Few central or Eastern European countries are towards the top but Hungary, Poland, and Slovenia are around the middle.

Turning to the Southern/Mediterranean countries, these are in the bottom half as might be expected but not consistently right at the bottom as some previous studies suggested. Among 'continental' countries Switzerland and France have relatively low marginal effects, Germany is closer to the middle as in the Netherlands with the broad poverty measures (being higher ranked with the narrow ones), and Belgium has a relatively large marginal effect, especially for the narrow poverty measures. With the United Kingdom no longer included in EU-SILC Ireland is the only representative of the 'Anglo-Saxon/liberal' regime, and is about the middle of the country ranking with the narrow measures but fares worse with the broad measures.

Seen in this light our results on the face of it cannot be simply framed in a strict clustering of countries in geographical or welfare regime terms, though that framing does represent a starting point. It is also worth highlighting that the confidence intervals around our point estimates of marginal effects mean that in our rank-ordering many countries have estimates that are not significantly different from one another in conventional statistical terms, with confidence intervals overlapping.

It is interesting in that context to note a contrast with the findings of Bukodi et al. (2020) with respect to intergenerational social mobility in terms of social class across most of the same European countries. Measured by odds ratios capturing relative mobility rates, they saw European countries as falling into three "high fluidity" groups, namely five post-Soviet countries (Estonia, Latvia, Russia, Lithuania and Ukraine), four other post-socialist countries (Romania, Slovakia, Slovenia and Czechia) and a West-Nordic group (the Nordic countries together with the UK, France and Ireland), and three "low fluidity" groups comprising six West-Central European countries (the Netherlands, Switzerland, Belgium, Austria, Germany and Luxembourg), five Southern European nations (Italy, Greece, Cyprus, Spain and Portugal) and three further post-socialist societies (Bulgaria, Hungary and Poland). Within each of these six groups, a high degree of commonality in terms of relative mobility was seen. The patterns of poverty persistence we have presented, by contrast, do not appear to fit neatly into such distinct and internally homogeneous country groupings.

6.2. Is there a 'Great Gatsby Curve' for poverty?

In both recent research and debate about intergenerational mobility, a significant role has been played by the 'Great Gatsby Curve', which plots the relationship between intergenerational earnings/income mobility and levels of income inequality and underpins the claim that

higher inequality is associated with lower mobility (Corak, 2013). The causal processes seen as underpinning such a relationship are many and various (see for example Di Prete, 2020; Durlauf et al., 2022), and the claim has given rise to much debate. In that context, it is important to assess whether there is an analogous relationship for poverty, between intergenerational poverty persistence and levels of poverty.

Fig. 7 reports the correlations and linear fit between our estimated marginal effects for the narrow poverty measures and both parental (on the left-hand side) and current (on the right-hand side) poverty rates. The estimated marginal effects are seen to be positively associated with both. European countries with a higher poverty rate, whether current or parental, tend to show higher levels of intergenerational persistence of poverty than those with lower poverty rates.

It is not always clear in the literature on the Great Gatsby Curve whether it is inequality in the current or parental generation that is to be seen as most relevant, with the former initially used but some subsequent studies arguing that the latter is more relevant to the underlying mechanisms that are posited to be at work. It is of interest that here the correlation of the country's marginal effect with its current poverty rate is higher than with parental poverty: the (Pearson) correlation between marginal effects and the parental poverty rate is 0.35, whereas with the current poverty rate it is 0.58.

We then examine the same relationships when our broad poverty measures are used instead. Fig. 8 shows that the correlation with parental poverty is the same as was seen with the narrow poverty measures, with a coefficient of 0.35. However, the correlation with current poverty is now rather higher than with the narrow poverty measures at 0.68. While there are of course still countries at a similar level of current poverty displaying quite different strengths of poverty persistence - for example, Austria versus Slovakia - and Bulgaria is an outlier, the relationship between current poverty level and intergenerational transmission of poverty is marked.

Given the interest in this 'Great Gatsby Curve' analogue, it is worth assessing whether a similar picture emerges when we use an alternative measure of strength of intergenerational persistence, so we again assess this by substituting estimated odds ratios for marginal effects. As shown in the graphs presented in Appendix H the results are indeed very similar. The correlation between estimated odds ratios and current poverty rates with our narrow poverty measures is 0.36, while with the parental poverty rate, it is 0.24. With the broad poverty measures the corresponding figures are 0.24 and 0.42. In all four instances, these correlations are somewhat lower than the corresponding figures with marginal effects. This has parallels with the realisation in the literature on the Great Gatsby Curve itself that the measure of intergenerational mobility employed can significantly affect the strength of the relationships seen (comparing for example the intergenerational elasticity versus measures of rank mobility, see Corak et al., 2014). However, it is also worth noting that the relationship between persistence and parental poverty is again very much the same whether narrow or broad poverty measures are employed, the correlation with current poverty is greater with the broad than the narrow measure, and the relationship with current poverty is stronger than with parental poverty irrespective of the poverty measures employed.

6.3. Intergenerational poverty persistence and other country-level characteristics

We can also probe the pattern of cross-country variation in poverty persistence further by bringing other features of individual countries into the picture to see if distinct patterns emerge. We examine the correlation between the estimated marginal effects and both GDP growth and social expenditure as a share of GDP. For GDP growth World Bank data is averaged over the period from 1980 to 2019 (or back to the earliest available year in a few cases where this is after 1980). Social expenditure data from the OECD database is also averaged over that period; sufficient data was not available on six of our thirty countries to

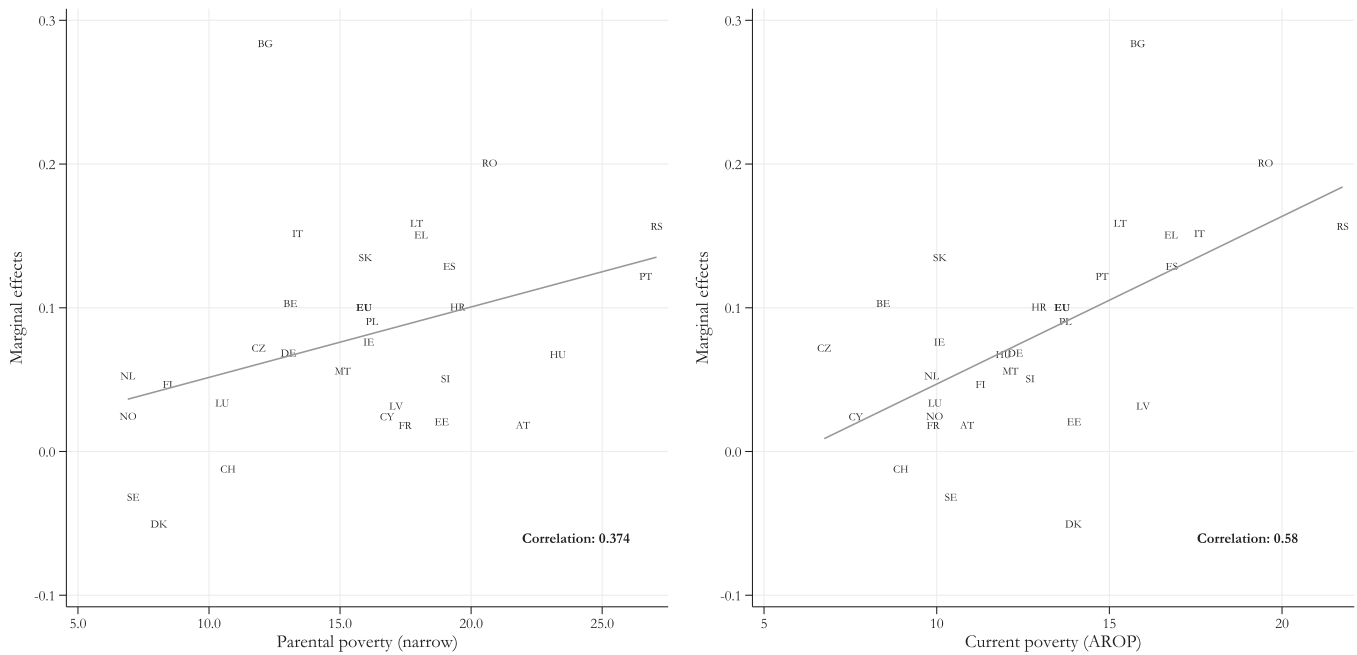


Fig. 7. Association between poverty transmission and poverty (current and parental), narrow indicators. **Note:** Marginal effects estimated using a logistic regression between current and parental poverty under the narrow definitions of poverty (see Table 1). We include an estimate for the pooled sample labelled 'EU' for convenience. Linear fit and the Pearson correlation between each pair of variables are also reported. **Source:** Authors' elaborations based on EU-SILC 2019.

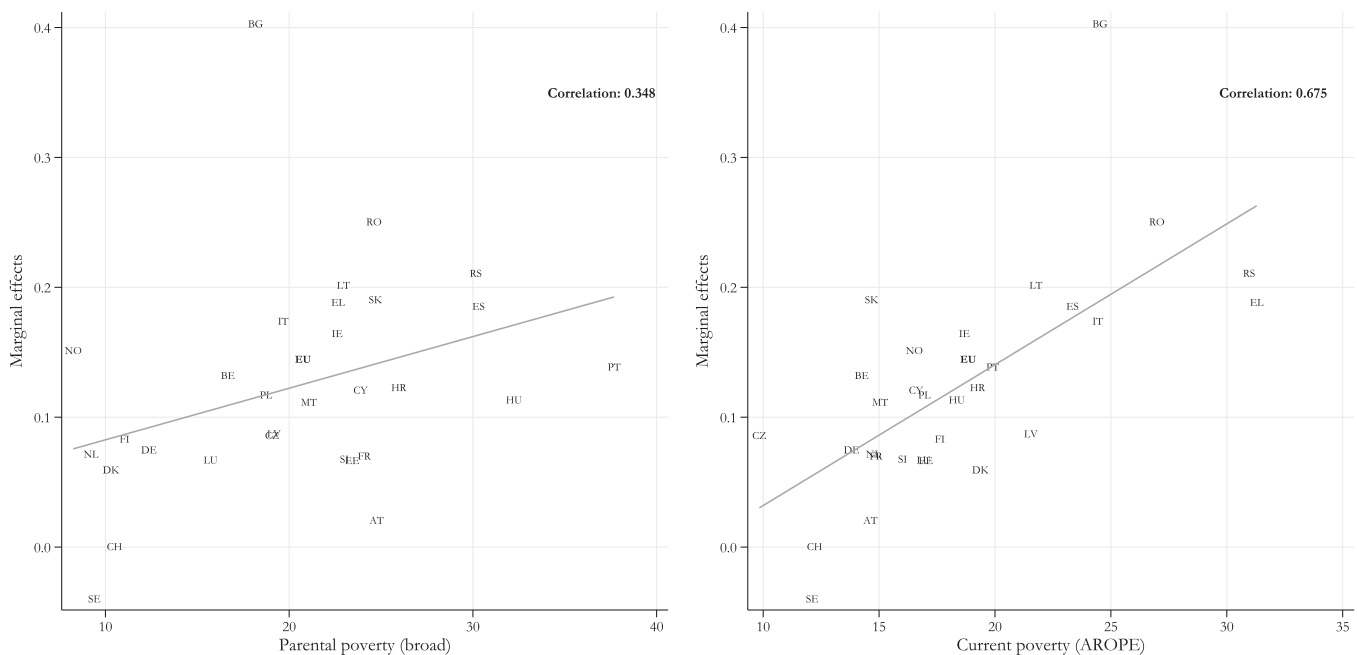


Fig. 8. Association between poverty transmission and poverty (current and parental), broad indicators. **Note:** Marginal effects estimated using a logistic regression between current and parental poverty under the narrow definitions of poverty (see Table 1). We include an estimate for the pooled sample labelled 'EU' for convenience. Linear fit and the Pearson correlation between each pair of variables are also reported. **Source:** Authors' elaborations based on EU-SILC 2019.

allow them to be included.

Fig. 9 focuses on the narrow poverty measures and shows that with these there is little correlation between the strength of intergenerational poverty persistence and GDP growth. European countries that have grown the fastest in the last three or four decades, such as Ireland, Malta or the Baltic countries, vary in their degree of intergenerational persistence of poverty. While this relationship includes complex channels of influence (including most obviously between growth and the evolution of the current poverty rate) that require in-depth investigation, on the

face of it higher economic growth rates do not appear to be accompanied by lower poverty persistence over this period. (It should be noted that distinguishing different decades shows some instability in estimates of this relationship, as shown in the results presented in Appendix I.).

On the other hand, this Figure also shows that the correlation between poverty persistence with the narrow poverty measures and social spending over the period is negative, with a correlation of -0.26 . Countries where social spending is larger relative to national income tend to see lower levels of poverty persistence. Only twenty-four of the

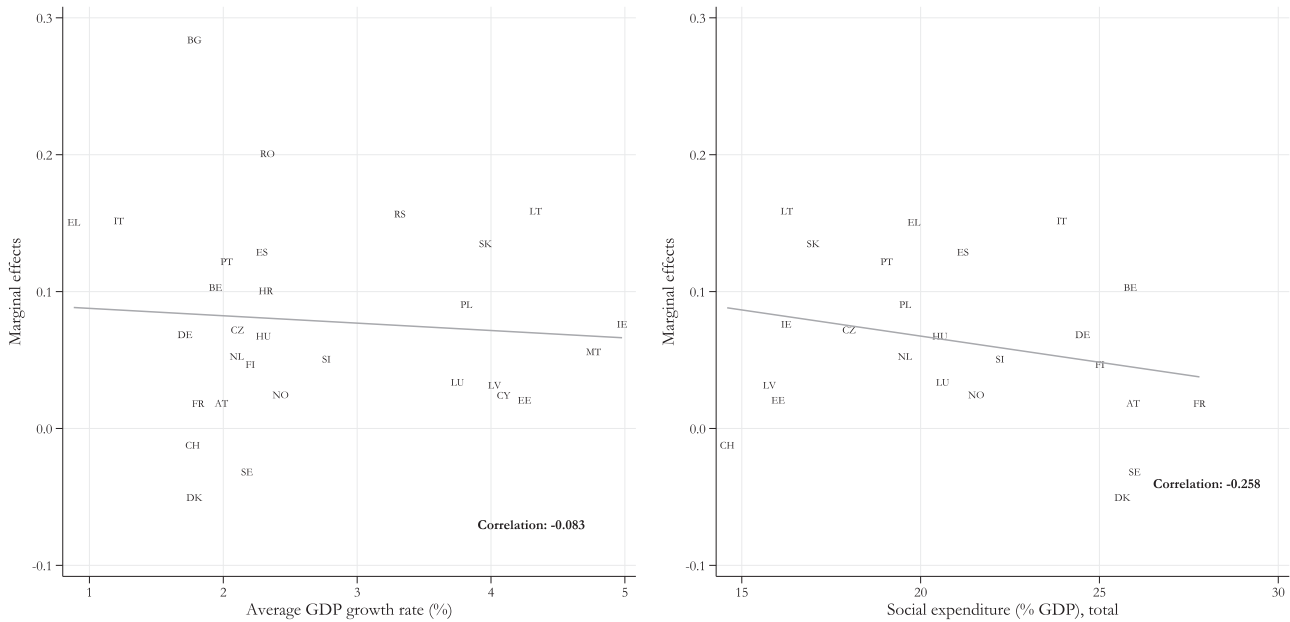


Fig. 9. Association between poverty transmission and other macroeconomic outcomes (Narrow). **Note:** Marginal effects estimated using a logistic regression between current and parental poverty under the narrow definitions of poverty (see Table 1). We include an estimate for the pooled sample labelled ‘EU’ for convenience. Linear fit and the Pearson correlation between each pair of variables are also reported. The right-hand panel includes fewer countries as social expenditure data is not available to all. **Source:** Authors’ elaborations based on EU-SILC 2019, World Bank and OECD data.

thirty countries could be included due to missing social expenditure data, and the level of social expenditure could be expected to have an impact on transmission both via its effects on the level of current poverty and more directly, this is clearly potentially relevant from a policy point of view. There is however still very substantial variation in the marginal effects across countries with similar levels of social spending. Among countries where the average social protection spending is 25 % of GDP or higher, for example, Sweden and Austria have very low estimated

marginal effects, Denmark and France have higher effects, and Belgium has quite a high marginal effect. At the other end of the social expenditure spectrum among countries with the lowest levels of spending relative to GDP we see Switzerland with a very low effect, Latvia and Estonia a good deal higher, Ireland higher again, and Lithuania and Slovakia even higher. This is consistent with the weak relationship between the strength of poverty persistence and the welfare regime noted above.

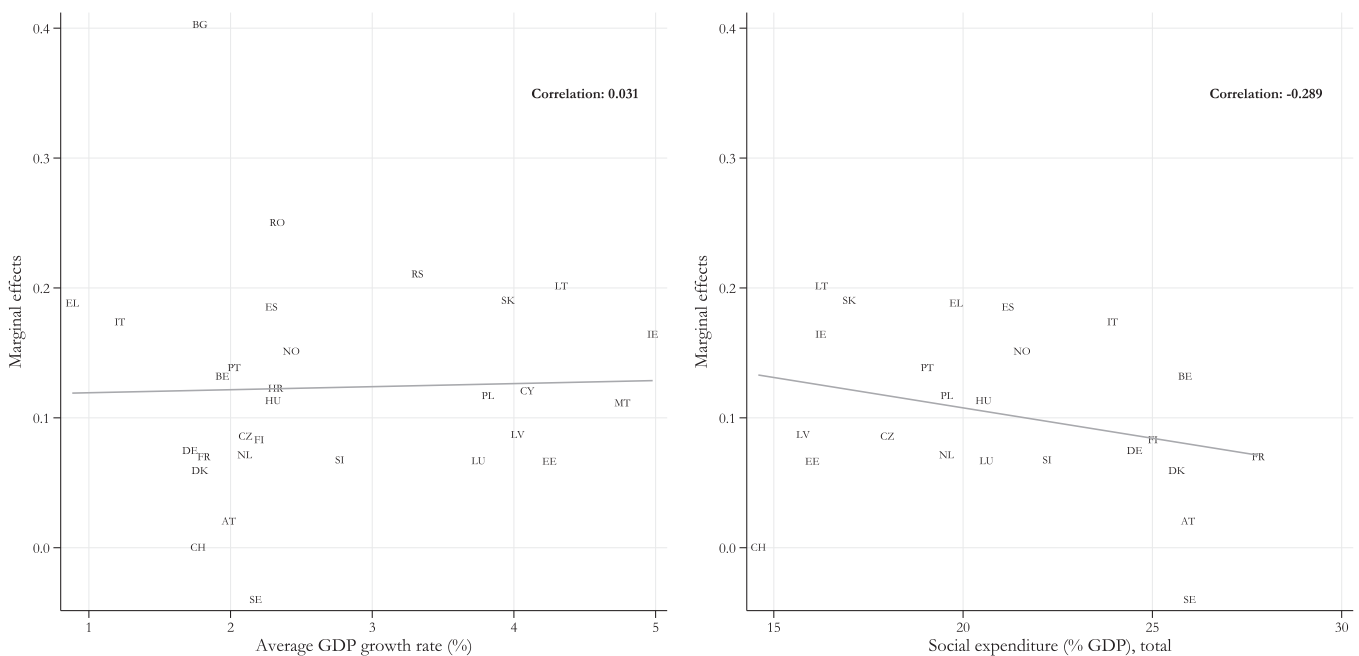


Fig. 10. Association between poverty transmission and other macroeconomic outcomes (Broad). **Note:** Marginal effects estimated using a logistic regression between current and parental poverty under the narrow definitions of poverty (see Table 1). We include an estimate for the pooled countries as social expenditure data is not available to all. **Source:** Authors’ elaborations based on EU-SILC 2019, World Bank and OECD data.

Once again these patterns are similar when the broad rather than narrow poverty measures are employed for each generation. As Fig. 10 shows, the correlation between the odds ratios and average GDP growth is again very low, while the negative correlation with average social protection expenditure is modestly higher than it was with the narrow poverty measures at -0.29 .

7. The role of mediators in shaping intergenerational poverty persistence

We now employ mediation analysis to explore the nature of the linkage between poverty when growing up and current poverty. We extend the logistic regression estimation model relating current to parental poverty by adding key factors that one might expect to play a mediating role, namely the education and occupational social class attained by the respondent or herself. The extent to which these are seen to reduce the marginal effects reported above indicates their relative importance in accounting for the association between poverty among parents and their offspring.⁹

The full results of this analysis are presented in tabular form in Table J.2 in Appendix J, while Figs. 11 and 12 illustrate their central implications using the narrow and broad measures of poverty respectively. This is done by showing the estimated average marginal effects for each country and for the entire sample when no mediators, own education level, own ESEC category, and both education and ESEC are included in the logistic regression. We see that across the entire sample (labelled 'EU' for convenience although not all 30 countries are currently member states) entering either own educational attainment level or occupational class has very much the same impact in reducing the estimated marginal effect of parental poverty by close to half. Including both these mediators is seen to account for approaching two-thirds of the marginal effect of parental poverty at the European level, with either the narrow or broad poverty measures.

In terms of the combined effects of including both mediators the countries with the lowest marginal effects such as Denmark and Austria see almost no change in those effects. As the unadjusted marginal effects increase the joint effect of including the mediators generally increases in both absolute and proportionate terms. Adding these two variables is seen to reduce the initial estimated marginal effects of parental poverty very substantially in the countries where those initial effects are highest, with education often though not always playing a more substantial role than occupational class.

The general salience of own education as a mediator is consistent with for example the findings from the mediation analysis in Parolin et al. (2023) for the five countries they study, as well as in Serafino and Tonkin (2014) and with previous EU-SILC intergenerational modules. Comparing education and occupational social class, we see however that there is substantial variation across our thirty countries in which plays the larger role. In Finland, the Netherlands and Norway occupational social class plays a larger role than education, for example, whereas education plays a very substantial mediating role in Bulgaria and Romania. Social class, on the other hand, plays little or no role above and beyond that of education in countries like France, Poland, and Cyprus.

8. Conclusions

The influence of poverty in childhood on adulthood outcomes has been extensively studied, but little is known about how the strength of intergenerational persistence in poverty itself varies across countries. Here we have been able to assess the intergenerational transmission of

poverty in a comparative analysis of 30 European countries using data from the 2019 ad hoc module of the EU-SILC. This has allowed us to capture the variation across these countries in the strength of the association between current poverty and poverty in childhood.

In this exercise we measured current poverty using the indicators at the core of the EU's social inclusion process, which focuses on household disposable income vis-a-vis a relative income threshold ('at risk of poverty/AROP') and that indicator together with ones of severe material deprivation and household worklessness ('at risk of poverty or social exclusion/AROPE'). A central challenge we faced was finding the most satisfactory way to employ the retrospective information obtained in the EU-SILC module to produce proxy measures of poverty for the parental household when the respondent was young. No information was available on the income of the household at that point. Instead, the information available included the respondent's retrospective reports on whether the household could meet specific basic needs and experienced financial hardship, together with parental education and occupation. Employing this information we developed a 'narrow' proxy measure for poverty where both inability to meet basic needs and financial difficulties were reported, and a 'broad' measure where one of these was reported together with low parental education or a working class parental occupation (including unemployed).

The strength of the association between current poverty and these measures of parental poverty was assessed by estimating odds ratios and marginal effects in logistic regression models. These showed generally similar patterns so the cross-country variation in poverty persistence was investigated primarily with respect to odds ratios. While some relationship with standard geographical or welfare regime clustering of countries was seen, there was also substantial variation in the strength of intergenerational poverty association within such groupings. That association tended to be stronger where current or parental poverty was higher, in an analogue of the Great Gatsby Curve with respect to income inequality. It tended to be weaker where average social protection spending relative to GDP since 1980 was higher, though there was still substantial variation in poverty persistence among countries with similar levels of social spending.

Mediation analysis highlighted the role of own education as well as occupation in underpinning the observed relationship between current and parental poverty. Once again, though, the degree of heterogeneity across countries was notable.

We carried out a variety of robustness checks to assess whether our central findings still held when elements of the construction of the poverty measures were varied, as well as some other analytical choices in terms of samples and models employed. These were generally reassuring in terms of robustness. Employing different poverty measures for parental versus current households may be questioned, and some may feel that the information available about parental households is not adequate for measuring poverty. We would argue that the same underlying concept can be captured in different ways, that poverty is invariably measured with error, and that the patterns and relationships we find are sufficiently systematic and consistent to suggest that they do reflect differences in the strength of intergenerational poverty transmission across the wide range of countries covered.

These patterns can serve as a basis for further investigation to identify differences in institutions and policies as well as in socio-economic conditions that underlie the variation identified. Such research could include further examination of what underpins the differences between patterns found with the 'narrow' versus 'broad' poverty measures employed here. Other ways to employ the data provided by the EU-SILC module are also worth exploring, including ways to incorporate all the available data into the measurement model with minimal restrictions imposed, such as via latent class analysis or approaches that do not involve a binary poor/not poor dichotomy but instead use a more finely graded set of categories or 'fuzzy' poverty measurement approaches. Other priorities include further investigation into mechanisms underpinning the poverty-related variant of the Great

⁹ We also investigated the potential role of household composition but this did not appear to play a significant role and so is not included in the results presented.

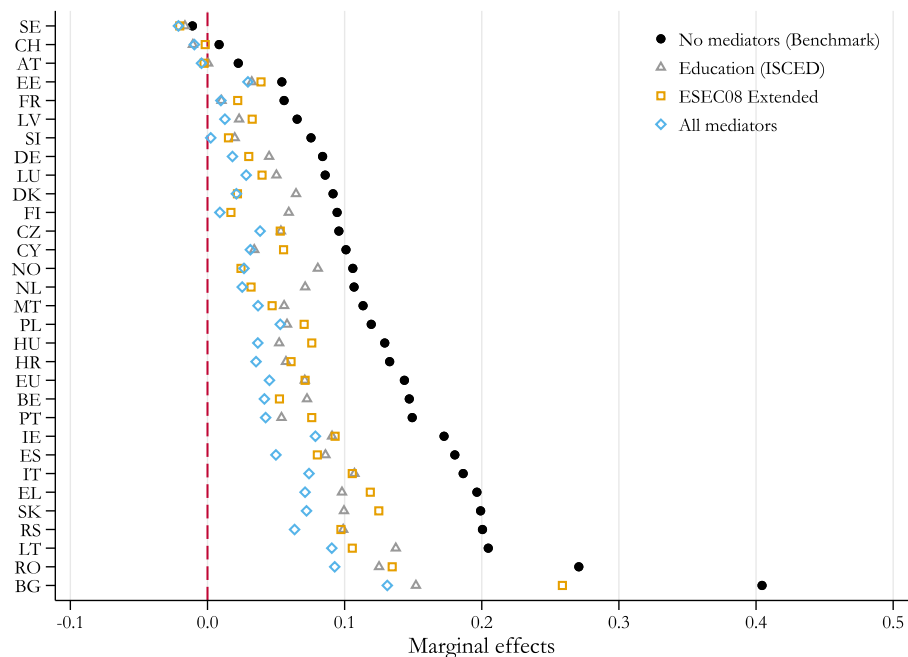


Fig. 11. Relative importance of mediators (Narrow). **Note:** Benchmark marginal effects (labelled as ‘No mediators’) are reported in Fig. 5. For each new dot, we include an additional control variable and report the resulting marginal effects. We control for education (grey triangle), occupation (yellow square), and both education and occupation (blue diamond). The relative importance of each of these variables is represented by the change in the marginal effects. We include an estimate for the pooled sample labelled ‘EU’ for convenience. **Source:** Authors’ elaborations based on EU-SILC 2019.

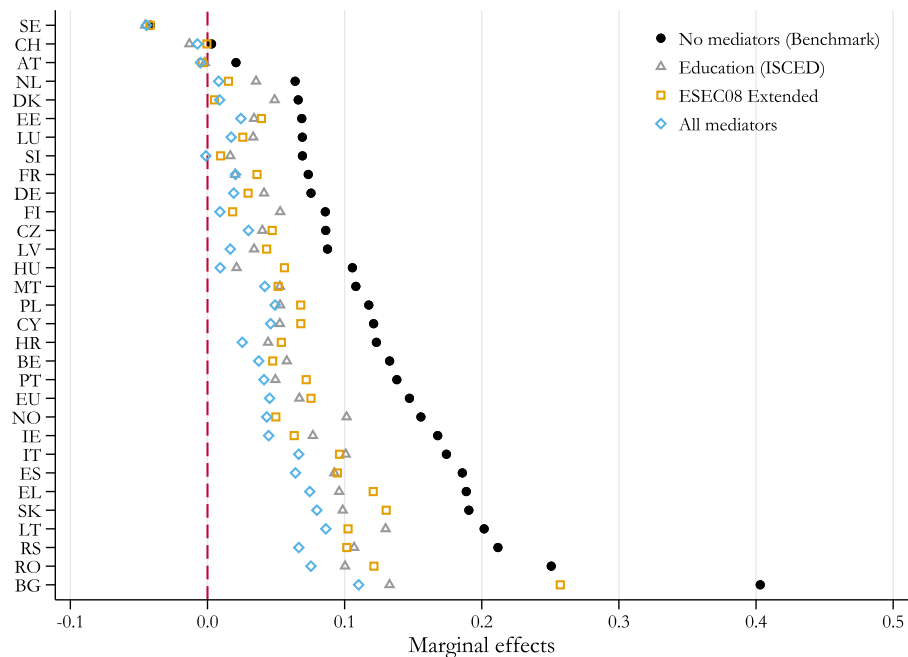


Fig. 12. Relative importance of mediators (Broad). **Note:** Benchmark marginal effects (labelled as ‘No mediators’) are reported in Fig. 6. For each new dot, we include an additional control variable and report the resulting marginal effects. We control for education (grey triangle), occupation (yellow square), and both education and occupation (blue diamond). The relative importance of each of these variables is represented by the change in the marginal effects. We include an estimate for the pooled sample labelled ‘EU’ for convenience. **Source:** Authors’ elaborations based on EU-SILC 2019.

Gatsby Curve we have identified and the extent to which these are distinctive to poverty rather than broader intergenerational transmission of advantage and disadvantage.

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CRediT authorship contribution statement

Brian Nolan: Writing – review & editing, Writing – original draft, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization. **Rafael Carranza:** Writing – review & editing,

Writing – original draft, Methodology, Investigation, Formal analysis, Conceptualization. **Michele Bavaro:** Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization.

Declaration of Competing Interest

I declare on behalf of myself and my co-authors Michele Bavaro and Rafael Carranza that there are no conflicts of interest to declare

Appendix A. Missing Values and Descriptives on Poverty Dimensions/Measures and Demographics by Country

Table A.1

Incidence of missing values by parental retrospective dimension.

Country	Basic Needs	Hardship	Education	Social class	P_B	P_N
AT	8.84	9.13	9.47	9.48	10.12	9.18
BE	1.85	2.15	4.28	2.94	4.73	2.15
BG	4.09	6.23	6.48	11.15	12.48	6.23
CH	18.63	19.13	20.61	22.75	24.66	19.14
CY	3.21	3.44	3.80	3.58	4.03	3.44
CZ	2.56	2.56	3.79	5.05	5.52	2.56
DE	9.64	11.91	18.54	13.14	21.28	11.94
DK	3.53	5.00	7.51	5.55	10.55	5.33
EE	6.38	6.87	8.46	9.26	10.65	6.87
EL	2.35	2.66	3.52	4.33	5.09	2.66
ES	4.79	4.82	5.49	5.33	5.76	4.82
FI	2.41	5.29	3.14	4.56	7.89	5.29
FR	4.58	6.70	11.81	11.33	18.79	6.76
HR	2.57	3.87	4.03	5.74	6.74	3.87
HU	18.17	18.58	18.90	22.73	22.93	18.58
IE	8.05	9.22	12.23	10.84	14.07	9.35
IT	7.80	8.29	9.46	9.42	10.72	8.38
LT	5.38	8.89	16.03	20.29	23.91	8.89
LU	1.64	5.08	5.06	17.11	21.48	5.08
LV	12.89	15.78	18.64	21.78	24.95	15.78
MT	2.21	3.13	2.97	3.06	4.60	3.13
NL	1.23	3.85	9.93	3.47	12.98	3.85
NO	0.61	1.05	9.94	6.61	15.39	1.05
PL	25.26	26.87	26.63	28.42	30.57	26.97
PT	1.41	2.18	4.38	2.42	5.01	2.19
RO	0.99	2.91	4.20	8.07	9.60	2.91
RS	2.42	2.77	3.10	10.18	10.48	2.77
SE	6.00	6.68	9.22	8.59	11.41	6.68
SI	0.98	2.31	2.42	2.14	3.52	2.31
SK	5.04	6.99	6.77	8.93	11.01	7.02
EU	8.12	9.45	12.21	11.62	15.37	9.49

Note: Parental characteristics include unsatisfied basic needs, financial hardship, low education and working class status. P_B represents our *broad* measure of parental poverty, while P_N is the *narrow* measure of parental poverty. Data for the full sample. **Source:** Authors' elaborations based on EU-SILC 2019

Table A.2

Descriptive statistics on parental retrospective dimensions, *narrow* parental and current poverty, and demographics, by country.

Country	BN	H	E	WC	P_N	AROP	25–34	35–44	45–54	55–59	Female	Obs.
AT	29.70	32.21	24.86	37.38	21.97	10.88	26.92	26.73	31.29	15.06	50.21	4822
BE	20.82	18.14	41.59	30.54	13.11	8.45	27.70	26.90	29.90	15.50	48.54	5346
BG	25.84	14.15	31.53	59.04	12.15	15.82	25.62	30.61	29.74	14.03	48.94	6721
CH	18.97	16.76	17.01	0.61	10.72	8.96	27.54	27.84	29.35	15.27	51.13	4939
CY	37.18	19.39	47.25	33.92	16.79	7.66	34.64	26.97	25.34	13.05	49.57	3506
CZ	16.40	21.28	47.79	46.66	11.90	6.74	26.37	32.54	28.77	12.32	50.57	7359
DE	19.30	20.91	9.23	30.60	13.03	12.28	24.46	28.84	33.44	13.26	51.98	8854
DK	11.65	16.26	22.10	23.59	8.09	13.96	26.48	27.36	29.45	16.70	49.80	2339
EE	20.26	52.07	16.74	37.99	18.88	13.98	29.65	30.08	27.39	12.88	49.57	5895
EL	37.60	20.94	60.86	22.99	18.09	16.78	21.38	30.64	32.24	15.74	50.33	14590
ES	35.00	23.24	72.42	47.60	19.17	16.81	20.03	30.12	34.14	15.71	49.39	15227
FI	12.00	20.23	22.16	30.41	8.42	11.27	30.39	27.29	26.30	16.03	47.39	4421
FR	25.22	25.72	64.82	37.35	17.48	9.90	25.49	29.29	30.46	14.77	51.37	9448
HR	27.44	28.90	42.98	48.89	19.49	12.96	27.22	30.19	28.20	14.39	49.15	7012
HU	39.79	27.84	37.15	54.46	23.31	11.94	18.68	28.71	36.11	16.50	53.98	4830
IE	32.12	22.54	39.10	39.33	16.09	10.08	24.52	26.83	32.59	16.06	52.52	2895
IT	25.17	16.63	64.84	37.19	13.37	17.60	20.90	26.42	35.44	17.24	49.55	15038
LT	26.40	23.05	27.25	52.97	17.92	15.31	27.20	26.14	30.66	16.00	53.10	4258
LU	18.64	15.66	47.14	35.35	10.51	9.95	35.69	23.08	26.51	14.72	51.30	2463
LV	22.19	28.78	18.73	45.17	17.14	15.98	27.90	28.34	28.12	15.65	51.41	3919
MT	40.22	18.91	32.06	36.01	15.10	12.14	34.91	30.56	23.45	11.09	47.65	3951
NL	12.22	11.08	43.93	24.69	6.90	9.86	31.69	25.77	28.24	14.30	48.40	5540

(continued on next page)

Table A.2 (continued)

Country	BN	H	E	WC	P_N	AROP	25–34	35–44	45–54	55–59	Female	Obs.
NO	9.77	16.37	17.23	28.83	6.91	9.94	30.76	26.35	27.79	15.10	47.16	2995
PL	31.62	22.21	25.14	38.11	16.22	13.72	26.35	33.05	27.07	13.52	54.03	16249
PT	42.32	31.66	84.57	43.60	26.66	14.79	22.85	30.88	31.47	14.80	52.58	12745
RO	42.53	23.95	27.97	59.34	20.71	19.52	25.87	31.47	31.71	10.96	48.71	7479
RS	38.16	35.40	35.12	53.86	27.08	21.76	27.85	29.95	28.21	13.98	49.31	6633
SE	10.18	16.90	21.91	26.16	7.11	10.41	34.92	24.94	28.70	11.45	45.73	2207
SI	24.95	30.07	26.42	38.86	19.03	12.71	22.90	33.62	27.19	16.29	49.89	4486
SK	25.56	20.82	51.82	55.66	15.97	10.09	27.20	33.14	26.99	12.67	49.57	6240

Note: Parental characteristics include unsatisfied basic needs (BN), financial hardship (H), low education (E) or working class status (WC). P_N is the *narrow* measure of parental poverty, while AROP is the At Risk Of Poverty rate for respondents. The following four columns represent four age groups, the share of women in the sample and the number of observations for each country, excluding all missing values. **Source:** Authors' elaborations based on EU-SILC 2019.

Table A.3

Descriptive statistics on parental retrospective dimensions, *broad* parental and current poverty, and demographics, by country.

Country	BN	H	E	WC	P_B	AROPE	25–34	35–44	45–54	55–59	Female	Obs.
AT	29.52	31.93	24.78	37.31	24.75	14.62	26.90	26.63	31.35	15.12	50.34	4780
BE	20.16	17.63	41.52	30.43	16.66	14.25	28.02	26.91	29.68	15.40	48.47	5208
BG	24.73	13.23	31.14	58.93	18.17	24.53	25.64	30.85	29.58	13.93	49.09	6310
CH	18.76	16.55	16.96	0.61	10.49	12.22	27.07	28.04	29.37	15.51	50.88	4615
CY	37.20	19.26	47.25	33.88	23.88	16.59	34.55	27.03	25.38	13.05	49.57	3489
CZ	16.47	21.13	47.78	46.59	19.07	9.83	26.44	32.53	28.75	12.29	50.59	7149
DE	16.93	18.79	9.12	28.77	12.37	13.81	25.04	28.81	33.44	12.70	51.68	7892
DK	11.32	15.91	21.94	22.48	10.30	19.37	27.32	27.86	29.08	15.74	49.63	2213
EE	20.02	51.61	16.76	37.64	23.43	17.01	29.53	29.63	27.74	13.10	49.91	5674
EL	37.74	20.96	61.05	23.07	22.66	31.29	21.39	30.59	32.32	15.70	50.33	14207
ES	34.86	23.06	72.41	47.68	30.31	23.34	19.95	30.08	34.23	15.73	49.31	15083
FI	11.63	20.07	22.28	30.38	11.04	17.62	31.18	27.83	24.76	16.22	47.54	4288
FR	24.82	25.27	64.00	36.50	24.09	14.87	26.18	30.06	29.43	14.33	51.60	8103
HR	27.47	28.55	43.17	48.92	25.97	19.25	27.40	30.22	27.92	14.45	49.18	6801
HU	39.67	27.72	37.31	54.48	32.24	18.36	18.80	28.46	36.01	16.73	53.49	4594
IE	31.90	22.06	38.95	39.33	22.62	18.68	24.84	26.80	32.46	15.90	53.11	2743
IT	25.26	16.54	64.91	37.24	19.67	24.43	20.98	26.34	35.38	17.30	49.48	14665
LT	27.34	23.77	27.58	52.19	22.95	21.76	26.42	26.61	30.77	16.20	53.60	3588
LU	18.42	15.10	47.14	34.99	15.72	16.92	34.68	22.53	27.30	15.49	52.23	2066
LV	21.33	27.81	19.12	44.91	19.17	21.55	27.68	28.15	28.28	15.89	51.98	3528
MT	40.06	18.67	32.19	36.12	21.07	15.04	34.80	30.56	23.54	11.11	47.74	3897
NL	11.55	10.37	43.79	23.84	9.21	14.75	31.45	25.31	28.67	14.57	48.58	5071
NO	9.02	15.75	17.24	27.86	8.25	16.52	34.17	28.45	26.85	10.53	47.33	2554
PL	31.43	22.01	25.17	38.03	18.74	16.95	26.52	32.86	27.13	13.49	54.26	15475
PT	42.34	31.53	84.55	43.64	37.69	19.90	22.94	30.88	31.36	14.81	52.68	12371
RO	42.66	23.47	27.84	59.32	24.62	26.98	26.53	32.01	31.83	9.64	48.68	7004
RS	36.95	33.46	31.69	53.84	30.16	30.96	28.82	30.39	27.86	12.93	48.95	6019
SE	10.09	16.76	22.18	25.64	9.40	12.11	34.15	25.43	28.80	11.62	45.59	2126
SI	24.54	29.68	26.39	38.84	23.01	16.02	23.01	33.52	27.28	16.18	50.01	4435
SK	25.24	20.57	51.74	55.63	24.69	14.68	27.66	33.17	26.66	12.50	49.44	5982

Note: Parental characteristics include unsatisfied basic needs (BN), financial hardship (H), low education (E), or working class status (WC). P_B is the *broad* measure of parental poverty while AROPE is the 'At risk of poverty or social exclusion' rate for the respondents. The following four columns represent four age groups, the share of women in the sample, and the number of observations for each country, excluding all missing values. **Source:** Authors' elaborations based on EU-SILC 2019.

B. Incidence of Parental Household Dimensions, EU Level

Table B.1

Unconditional and conditional incidences of retrospective parental dimensions, EU level.

	%	(% BN)	(% H)	(% BN&H)	(% E)	(% WC)	(% E&WC)
BN	26.3	–	–	–	40.0	38.6	44.7
H	21.4	–	–	–	30.6	30.6	35.0
E	42.8	65.0	61.3	68.1	–	–	–
WC	38.2	56.0	54.6	58.2	–	–	–
BN&H	15.4	–	–	–	24.5	23.5	28.3
E&WC	23.2	39.4	38.0	42.7	–	–	–

Note: Parental characteristics include unsatisfied basic needs (BN), financial hardship (H), low education (E) or working class status (WC). Conditional incidences report the average of each specific dimension for the subsample that is also deprived in another dimension. **Source:** Authors' elaborations based on EU-SILC 2019

C. Estimated Marginal Effects by Country Controlling for Age

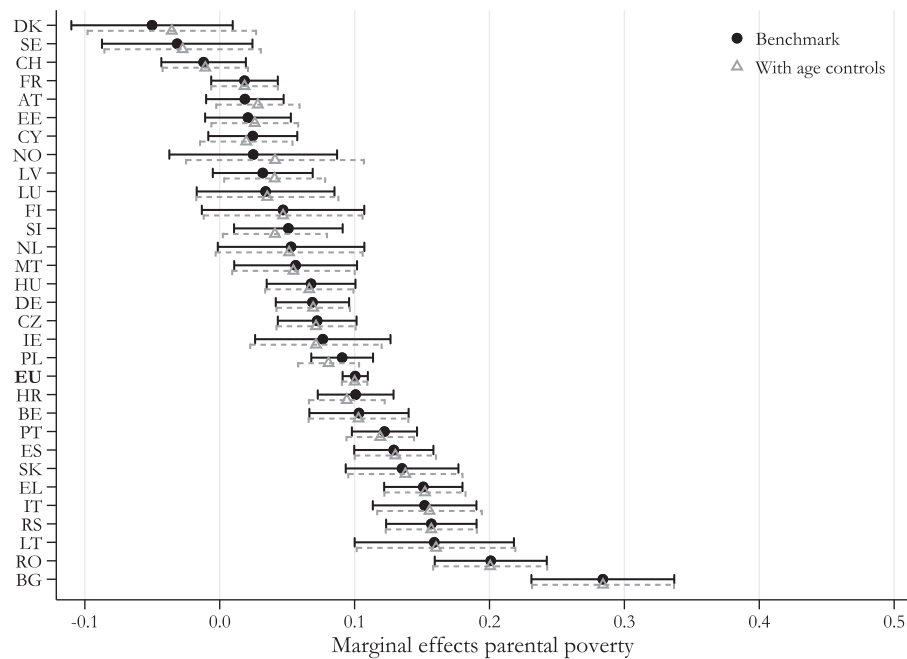


Fig. C.1. Marginal effects country ranking controlling by age (narrow). **Note:** We repeat the analysis of Fig. 5 controlling by age (grey triangle). We also include the 95% confidence intervals. Here we report the marginal effects for our narrow definition of poverty (see Table 1. **Source:** Authors' elaborations based on EU-SILC 2019.

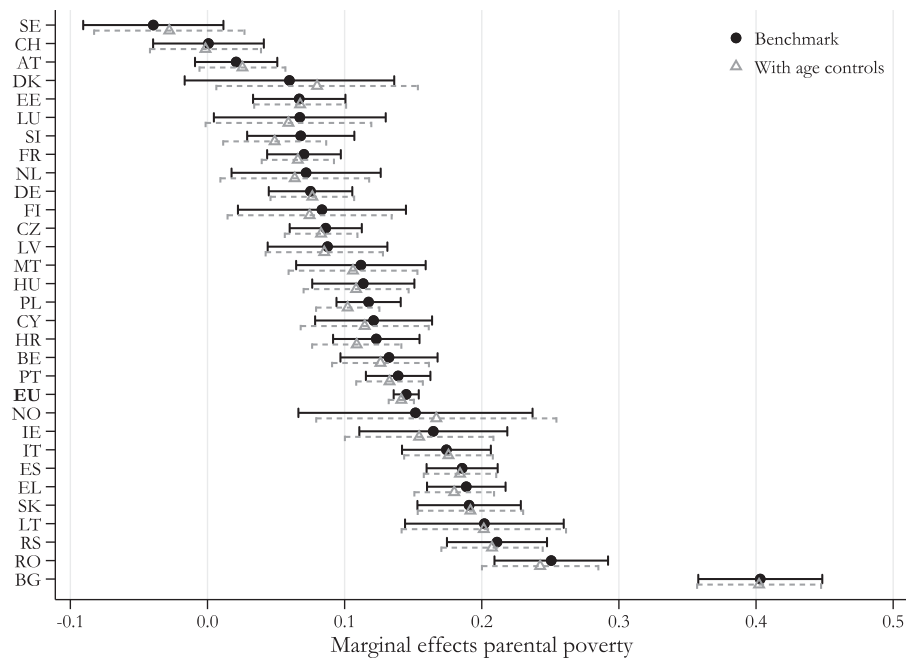


Fig. C.2. Marginal effects country ranking controlling by age (broad). **Note:** We repeat the analysis of Fig. 6 excluding migrants (grey triangle). We also include the 95% confidence intervals. Here we report the marginal effects for our broad definition of poverty (see Table 1. **Source:** Authors' elaborations based on EU-SILC 2019.

D. Results for Different Samples With/Without Migrants

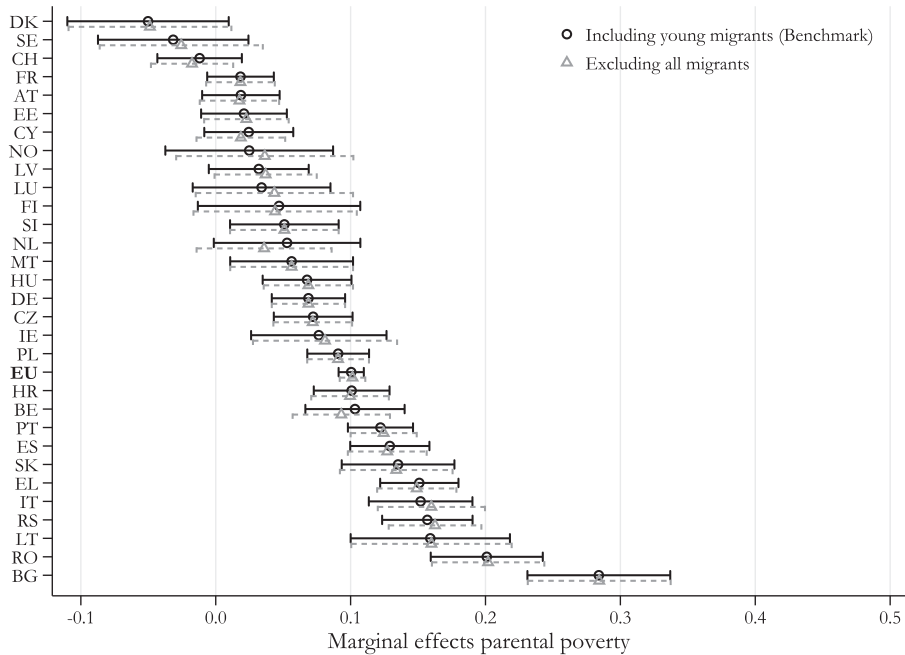


Fig. D.1. Intergenerational poverty association (narrow) for different migrant sample. **Note:** We repeat the analysis of Fig. 6 excluding migrants (grey triangle). We also include the 95% confidence intervals. We do this to account for parental characteristics of those born in another country might capture different patterns to those with parents born in that country. **Source:** Authors' elaborations based on EU-SILC 2019.

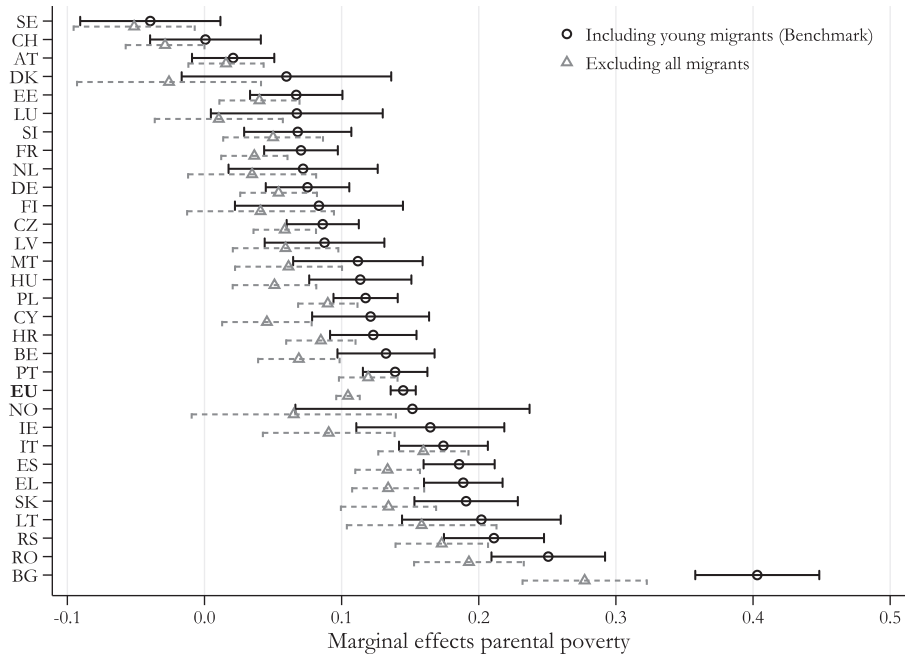


Fig. D.2. Intergenerational poverty association (broad) for different migrant sample. **Note:** We repeat the analysis of Fig. 6 excluding migrants (grey triangle). We also include the 95% confidence intervals. We do this to account for parental characteristics of those born in another country might capture different patterns to those with parents born in that country. **Source:** Authors' elaborations based on EU-SILC 2019.

E. Results for Different versus Common Samples in Terms of Information on Poverty Measures

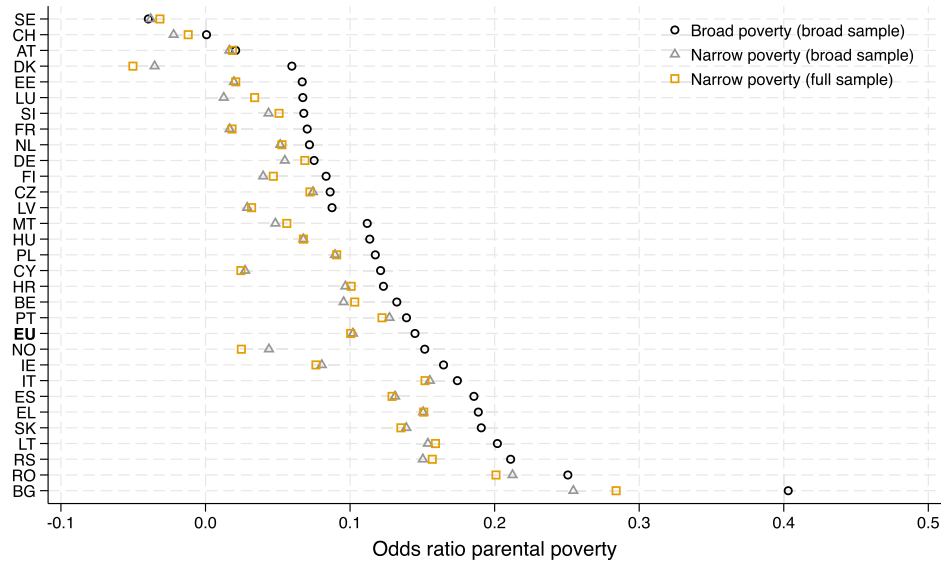


Fig. E.1. Point estimates for marginal effects with a common sample for both narrow and broad poverty definitions. **Note:** Marginal effects estimates for the narrow and broad definition of poverty (see Table 1. We note in the paper that these estimates use a different underlying sample as the latter one includes a larger number of missing values. To assess the relevance of the subsample, we report the narrow poverty measure using the same sample as in the broad measure (grey triangles). Differences between narrow poverty (full sample, in yellow triangle) and narrow poverty (broad sample, grey triangle) give us insights regarding the relevance of the sample. Differences between broad poverty (full sample, in black squares) and narrow poverty (broad sample, grey triangle) give us insights into the role of the additional variables included in our broad measure of poverty. **Source:** Authors' elaborations based on EU-SILC 2019.

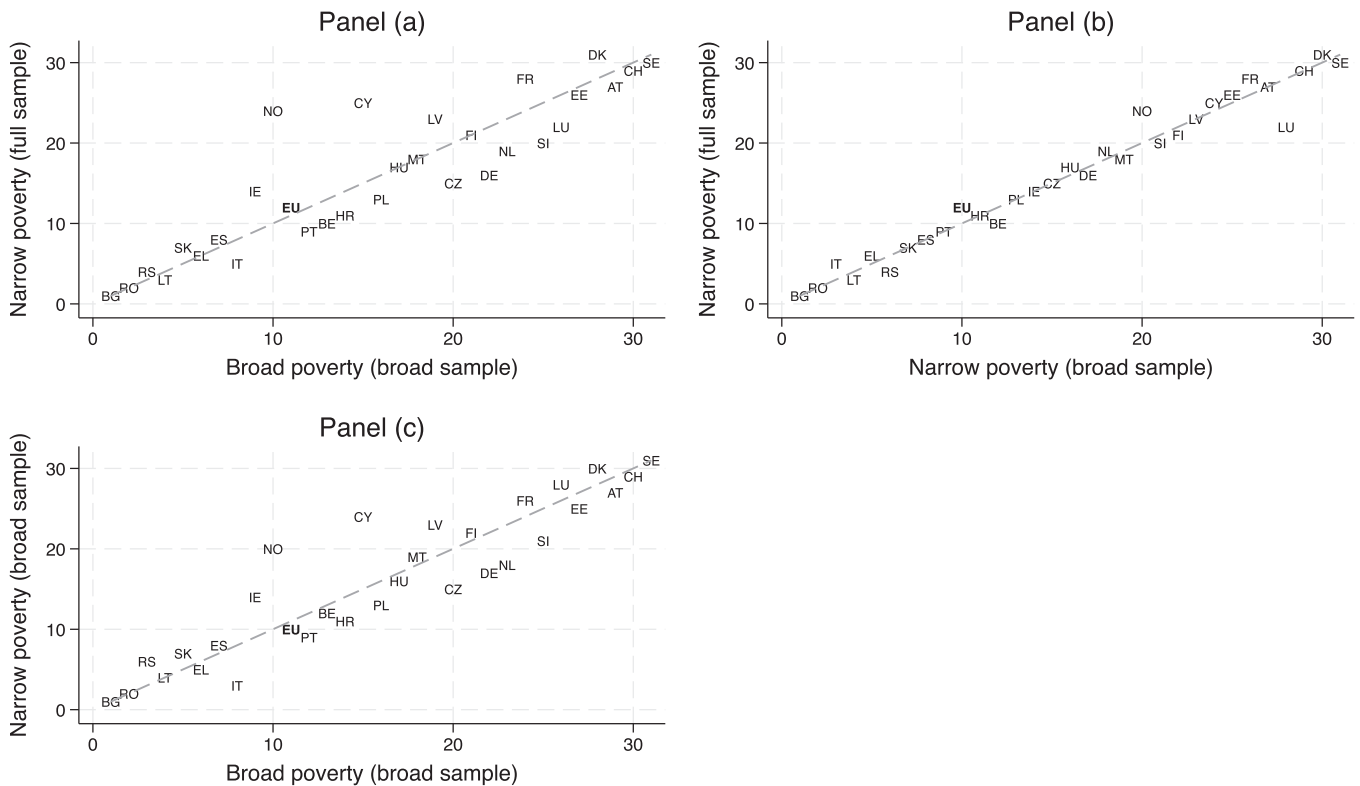


Fig. E.2. Association in the country ranking for different definitions of poverty and samples. **Note:** Figures report the association in the country ranking for the intergenerational persistence of poverty measured under different definitions of poverty (see Table 1. Country rankings go from 1 (highest persistence) to 31 (highest persistence) and they include our pooled sample estimate, labeled 'EU' for simplicity. Panel (a) reports our benchmark estimates – narrow and broad – accounting for differences in both our sample and our definition of poverty. Panel (b) compares the same measure, narrow poverty, under the two samples thus holding constant the poverty definition. Panel (c) compares the broad and narrow definitions under a common sample. **Source:** Authors' elaborations based on EU-SILC 2019.

F. Results for Variants of Current and Parental Poverty Measures

To create a continuous index of parental poverty we add all categories instead of treating them as binary outcomes. Concretely, we take the two variables we use for the narrow definition of poverty, financial hardship and basic needs. The former is comprised of five categories while the latter includes three yes/no questions. By adding them we create a variable that ranges from 0, someone with no basic needs and the best financial condition when growing up, to 8, someone with all three basic needs and the worst financial condition when growing up. By dividing this variable by 8 we construct a 0 to 1 index with a median of 0.25 and a mean of 0.3. We treat this variable as continuous estimating the intergenerational transmission of poverty.

Table F.1
Country rankings under alternative definitions of parental poverty.

Country	Benchmark (narrow)	Alternative hardship	Continuous poverty
BG	1	1	1
RO	2	2	2
LT	3	6	8
RS	4	5	3
IT	5	4	4
EL	6	3	7
SK	7	7	9
ES	8	10	5
PT	9	8	6
BE	10	9	13
HR	11	11	12
EU	12	13	11
PL	13	15	10
IE	14	14	14
CZ	15	12	18
DE	16	17	17
HU	17	16	15
MT	18	19	16
NL	19	25	20
SI	20	20	19
FI	21	22	23
LU	22	18	21
LV	23	23	25
NO	24	24	28
CY	25	26	24
EE	26	21	22
AT	27	30	27
FR	28	27	26
CH	29	28	29
SE	30	29	30
DK	31	31	31

Note: Countries are ranked from highest to lowest intergenerational poverty transmission. Each column represents a different definition of parental poverty. The benchmark column ranks countries according to our narrow definition of parental poverty, as shown in Fig. 5. The 'alternative hardship' column ranks countries based on parental poverty where financial hardship when growing up is excludes those reporting 'moderately bad'. The last column uses a continuous index for parental poverty, adding up all possible outcomes for financial hardship and basic needs when growing up.

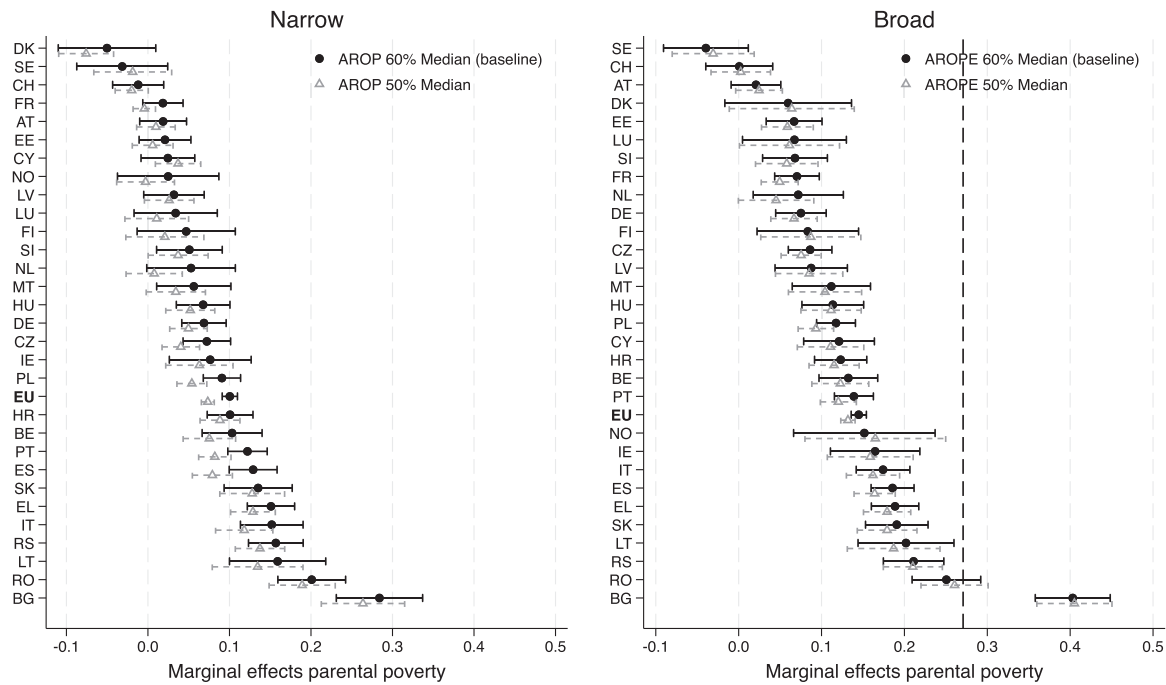


Fig. F.1. Association between poverty transmission and poverty with current poverty set at 50% of median. **Note:** Marginal effects estimated using a logistic regression between current and parental poverty under the narrow definitions of poverty (see Table 1). Countries are ranked from lowest to highest and include the 95% confidence interval. Being a univariate logit regression, we can also interpret these coefficients and that of a linear probability model. We include an estimate for the pooled sample labelled ‘EU’ for convenience. **Source:** Authors’ elaborations based on EU-SILC 2019.

G. Poverty Transmission Measured Via Odds Ratios

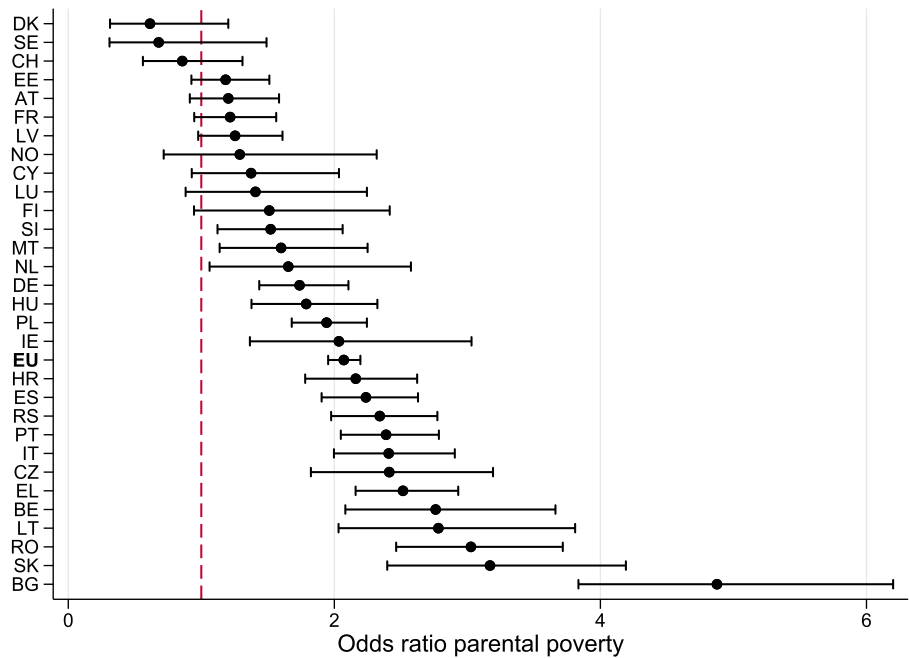


Fig. G.1. Intergenerational poverty measured with odds ratios (narrow). **Note:** Countries are ranked from lowest to highest odds ratios and include the 95% confidence interval computed as $\exp(\beta \pm z \cdot s / \sqrt{n})$. **Source:** Authors’ elaborations based on EU-SILC 2019.

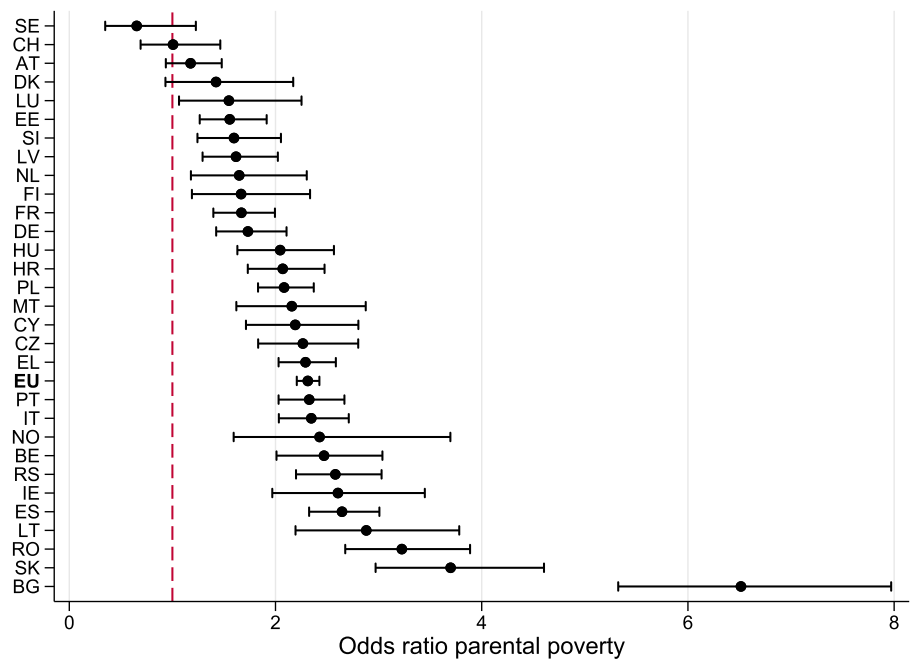


Fig. G.2. Intergenerational poverty measured with odds ratios (broad). **Note:** Countries are ranked from lowest to highest odds ratios and include the 95% confidence interval computed as $\exp(\beta \pm z \cdot s / \sqrt{n})$. **Source:** Authors' elaborations based on EU-SILC 2019.

H. Odds Ratios and Poverty Levels

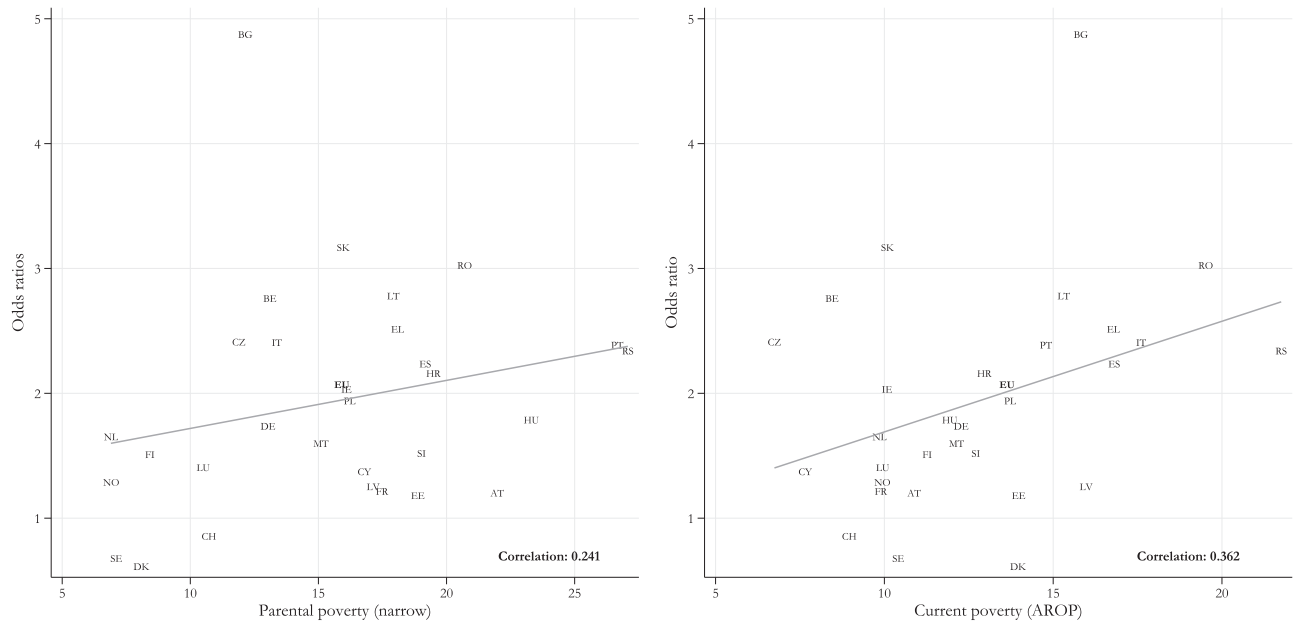


Fig. H.1. Association between poverty transmission and poverty measured with odds ratios, narrow indicators. **Note:** Odds ratios are reported in Fig. G.1. We include an estimate for the pooled sample labelled 'EU' for convenience. Linear fit and the Pearson correlation between each pair of variables are also reported. **Source:** Authors' elaborations based on EU-SILC 2019.

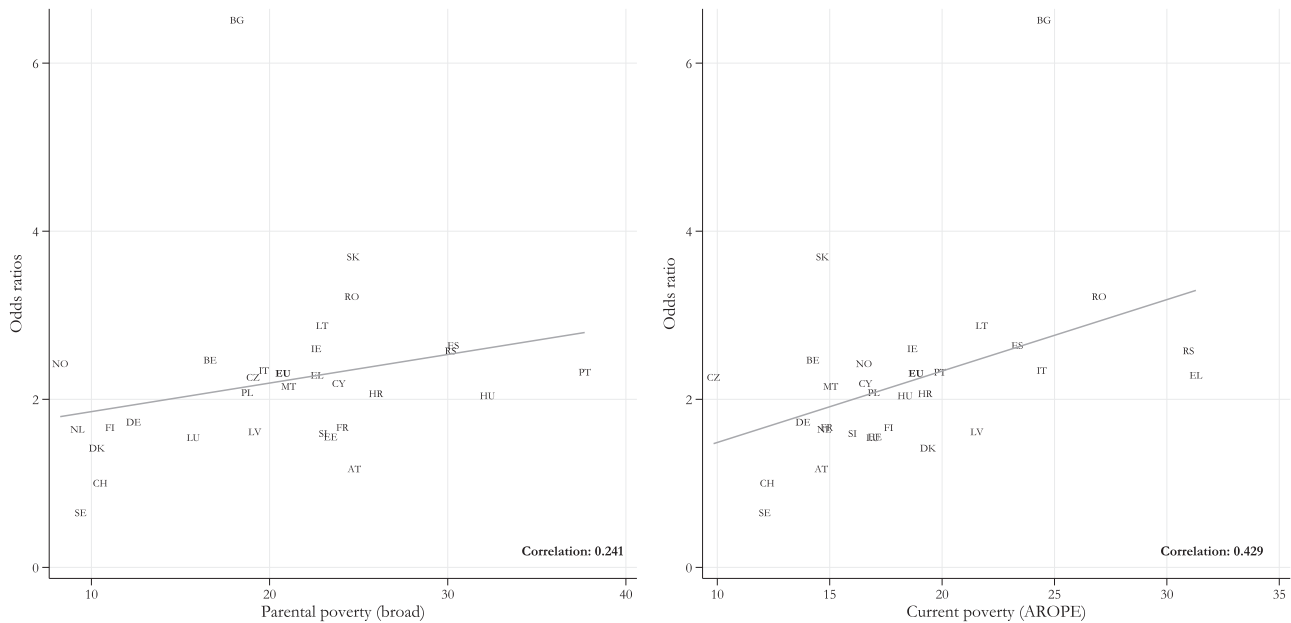


Fig. H.2. Association between poverty transmission and poverty measured with odds ratios, broad indicators. **Note:** Odds ratios and are reported in Fig. G.2. We include an estimate for the pooled sample labelled 'EU' for convenience. Linear fit and the Pearson correlation between each pair of variables are also reported. **Source:** Authors' elaborations based on EU-SILC 2019.

I. Poverty Transmission and GDP Growth by Decade

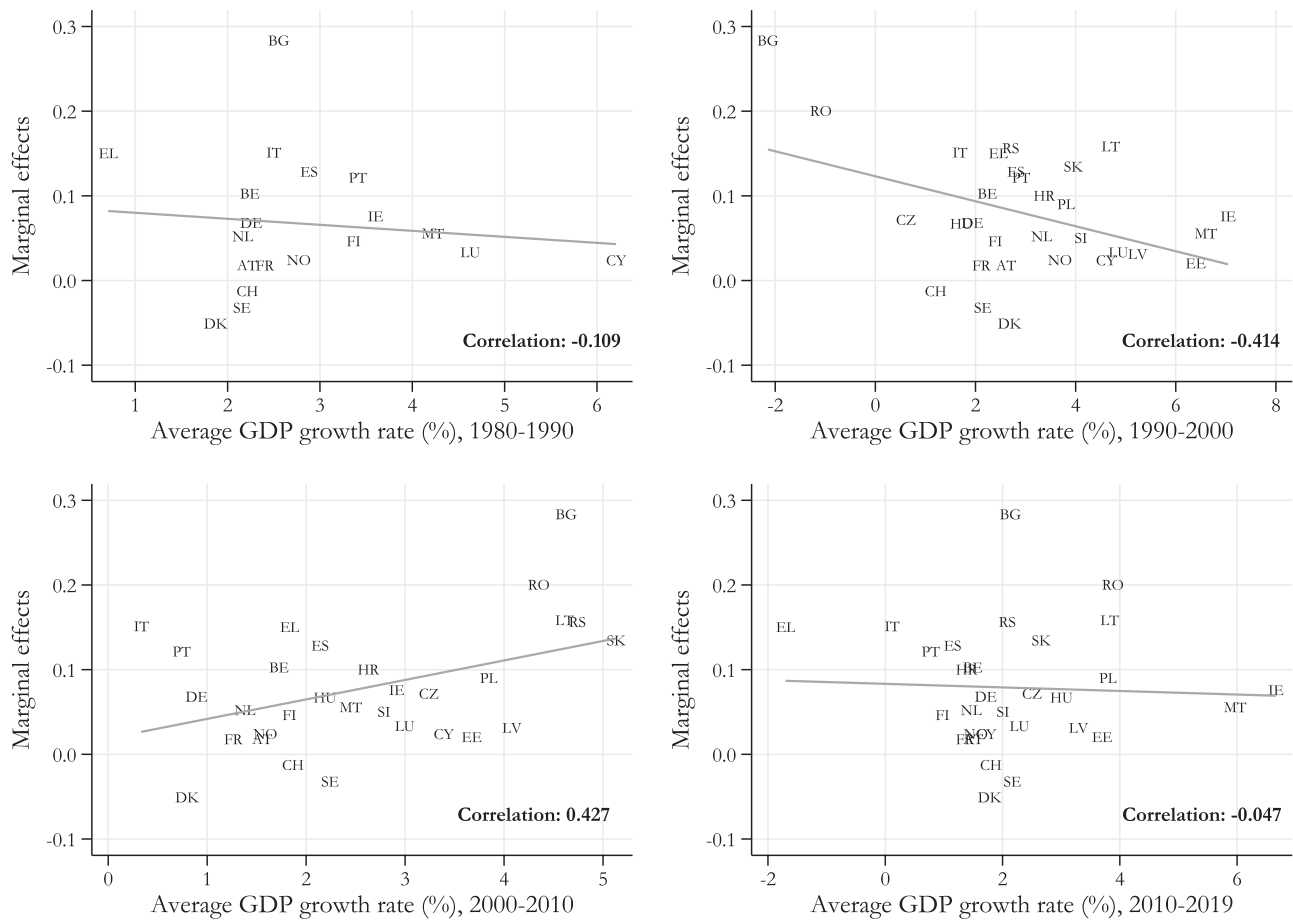


Fig. I.1. Association between poverty transmission and other macroeconomic outcomes and GDP growth by decades (Narrow). **Note:** Marginal effects estimated using a logistic regression between current and parental poverty under the narrow definitions of poverty (see Table 1). We include an estimate for the pooled sample

labelled 'EU' for convenience. Linear fit and the Pearson correlation between each pair of variables are also reported. The right-hand panel includes fewer countries as social expenditure data is not available to all. **Source:** Authors' elaborations based on EU-SILC 2019, World Bank and OECD data..

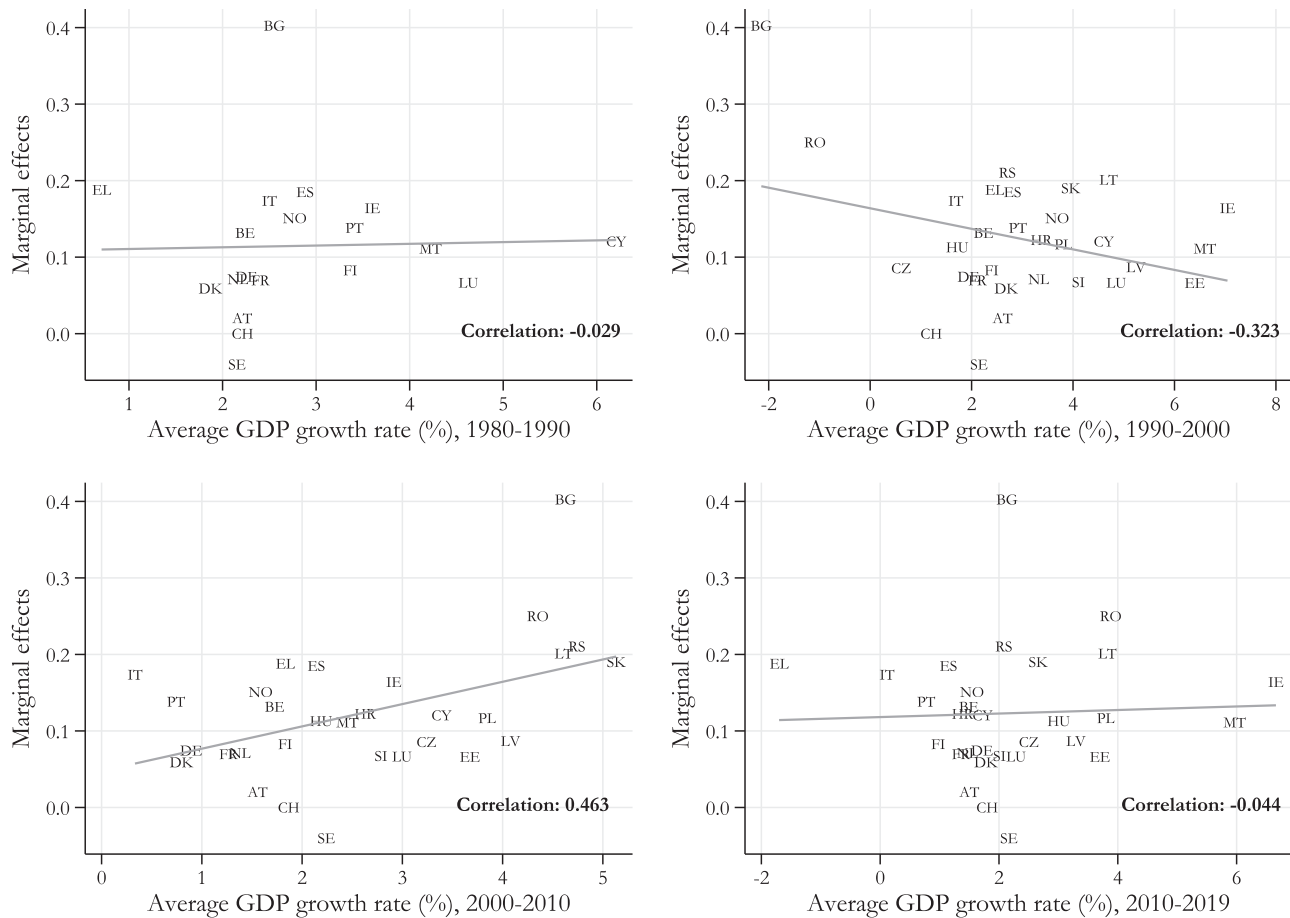


Fig. I.2. Association between poverty transmission and other macroeconomic outcomes and GDP growth by decades (Broad). **Note:** Marginal effects estimated using a logistic regression between current and parental poverty under the narrow definitions of poverty (see Table 1). We include an estimate for the pooled sample labelled 'EU' for convenience. Linear fit and the Pearson correlation between each pair of variables are also reported. The right-hand panel includes fewer countries as social expenditure data is not available to all. **Source:** Authors' elaborations based on EU-SILC 2019, World Bank and OECD data.

J. Marginal Effects and Mediation Results by Country

Table J.1

Marginal effects between current and parental poverty – Benchmark estimates.

Country	Narrow poverty		Broad poverty	
	ME	s.e.	ME	s.e.
AT	0.018	(0.014)	0.020	(0.015)
BE	0.103	(0.018)	0.132	(0.018)
BG	0.284	(0.027)	0.403	(0.023)
CH	-0.011	(0.015)	0.000	(0.020)
CY	0.024	(0.016)	0.121	(0.021)
CZ	0.072	(0.014)	0.086	(0.013)
DE	0.068	(0.013)	0.075	(0.015)
DK	-0.050	(0.030)	0.059	(0.038)
EE	0.020	(0.016)	0.066	(0.017)
EL	0.150	(0.014)	0.188	(0.014)
ES	0.129	(0.014)	0.185	(0.013)
FI	0.046	(0.030)	0.083	(0.031)
FR	0.018	(0.012)	0.070	(0.013)
HR	0.100	(0.014)	0.123	(0.016)
HU	0.067	(0.016)	0.113	(0.019)
IE	0.076	(0.025)	0.164	(0.027)
IT	0.151	(0.019)	0.174	(0.016)
LT	0.159	(0.030)	0.201	(0.029)

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Table J.1 (continued)

Country	Narrow poverty		Broad poverty	
	ME	s.e.	ME	s.e.
LU	0.033	(0.026)	0.067	(0.031)
LV	0.031	(0.018)	0.087	(0.022)
MT	0.056	(0.023)	0.111	(0.024)
NL	0.052	(0.027)	0.071	(0.027)
NO	0.024	(0.031)	0.151	(0.043)
PL	0.090	(0.011)	0.117	(0.011)
PT	0.122	(0.012)	0.139	(0.011)
RO	0.200	(0.021)	0.250	(0.021)
RS	0.156	(0.017)	0.211	(0.018)
SE	−0.031	(0.028)	−0.039	(0.026)
SI	0.050	(0.020)	0.067	(0.019)
SK	0.135	(0.021)	0.190	(0.019)
EU	0.100	(0.004)	0.144	(0.004)

Source: Authors' elaborations based on EU-SILC 2019.

Table J.2

Odds ratios between current and parental poverty including mediators.

Country	Narrow poverty			Broad poverty		
	Schooling	Occupation	Both mediators	Schooling	Occupation	Both mediators
AT	0.000 (0.015)	−0.002 (0.013)	−0.004 (0.014)	−0.001 (0.014)	−0.003 (0.012)	−0.005 (0.013)
BE	0.072 (0.016)	0.052 (0.013)	0.041 (0.013)	0.057 (0.014)	0.047 (0.012)	0.037 (0.012)
BG	0.152 (0.023)	0.258 (0.023)	0.131 (0.021)	0.132 (0.020)	0.257 (0.020)	0.110 (0.018)
CH	−0.0010 (0.018)	−0.001 (0.015)	−0.009 (0.016)	−0.013 (0.019)	−0.000 (0.016)	−0.007 (0.016)
CY	0.034 (0.021)	0.055 (0.018)	0.031 (0.018)	0.052 (0.019)	0.068 (0.016)	0.046 (0.016)
CZ	0.053 (0.014)	0.053 (0.013)	0.038 (0.012)	0.040 (0.011)	0.047 (0.010)	0.029 (0.009)
DE	0.044 (0.013)	0.030 (0.011)	0.018 (0.010)	0.041 (0.014)	0.029 (0.011)	0.019 (0.011)
DK	0.064 (0.036)	0.021 (0.023)	0.021 (0.023)	0.048 (0.036)	0.005 (0.021)	0.008 (0.021)
EE	0.032 (0.016)	0.039 (0.016)	0.029 (0.015)	0.033 (0.015)	0.039 (0.014)	0.024 (0.014)
EL	0.098 (0.014)	0.118 (0.013)	0.071 (0.013)	0.096 (0.013)	0.120 (0.012)	0.074 (0.011)
ES	0.086 (0.014)	0.080 (0.012)	0.049 (0.012)	0.092 (0.012)	0.094 (0.010)	0.064 (0.010)
FI	0.059 (0.031)	0.017 (0.019)	0.009 (0.019)	0.053 (0.027)	0.018 (0.017)	0.009 (0.017)
FR	0.010 (0.014)	0.022 (0.013)	0.009 (0.012)	0.020 (0.013)	0.036 (0.011)	0.020 (0.011)
HR	0.057 (0.016)	0.060 (0.014)	0.035 (0.013)	0.044 (0.014)	0.053 (0.013)	0.025 (0.012)
HU	0.052 (0.018)	0.076 (0.019)	0.036 (0.017)	0.021 (0.017)	0.056 (0.017)	0.009 (0.016)
IE	0.090 (0.028)	0.093 (0.024)	0.078 (0.024)	0.076 (0.024)	0.063 (0.021)	0.044 (0.021)
IT	0.107 (0.018)	0.105 (0.015)	0.074 (0.015)	0.100 (0.015)	0.096 (0.013)	0.066 (0.013)
LT	0.137 (0.027)	0.105 (0.024)	0.090 (0.024)	0.129 (0.026)	0.102 (0.022)	0.086 (0.022)
LU	0.050 (0.032)	0.039 (0.023)	0.028 (0.023)	0.033 (0.029)	0.025 (0.021)	0.017 (0.021)
LV	0.023 (0.019)	0.032 (0.020)	0.012 (0.019)	0.033 (0.019)	0.043 (0.019)	0.016 (0.018)
MT	0.055 (0.023)	0.047 (0.020)	0.036 (0.019)	0.052 (0.019)	0.051 (0.018)	0.041 (0.017)
NL	0.071 (0.031)	0.031 (0.023)	0.025 (0.023)	0.035 (0.025)	0.015 (0.020)	0.008 (0.019)
NO	0.080 (0.037)	0.024 (0.025)	0.026 (0.025)	0.101 (0.037)	0.049 (0.026)	0.043 (0.026)
PL	0.057 (0.010)	0.070 (0.010)	0.053 (0.009)	0.052 (0.010)	0.067 (0.009)	0.049 (0.009)
PT	0.053 (0.011)	0.076 (0.010)	0.042 (0.010)	0.049 (0.010)	0.072 (0.010)	0.041 (0.010)
RO	0.125	0.134	0.092	0.100	0.121	0.075

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Table J.2 (continued)

Country	Narrow poverty			Broad poverty		
	Schooling	Occupation	Both mediators	Schooling	Occupation	Both mediators
RS	(0.018)	(0.017)	(0.017)	(0.018)	(0.016)	(0.016)
	0.098	0.097	0.063	0.106	0.101	0.066
	(0.018)	(0.016)	(0.016)	(0.018)	(0.016)	(0.016)
SE	−0.016	−0.020	−0.021	−0.045	−0.041	−0.044
	(0.033)	(0.023)	(0.024)	(0.026)	(0.021)	(0.022)
SI	0.019	0.015	0.002	0.016	0.009	−.001
	(0.017)	(0.014)	(0.014)	(0.017)	(0.013)	(0.013)
SK	0.099	0.124	0.072	0.098	0.130	0.079
	(0.018)	(0.017)	(0.015)	(0.015)	(0.014)	(0.013)
EU	0.070	0.071	0.045	0.066	0.075	0.045
	(0.004)	(0.004)	(0.003)	(0.004)	(0.003)	(0.003)

Note: For measure of poverty, whether narrow or broad, we include an additional control variable and report the resulting marginal effects. We control for education in the first column, occupation in the second column, and both education and occupation in the last column. The relative importance of each of these variables is represented by the change in the marginal effects. We include an estimate for the pooled sample labeled ‘EU’ for convenience. **Source:** Authors’ elaborations based on EU-SILC 2019.

K. Correlations and changes in ranking across different specifications

Table K.1

Assessment of alternative specifications.

	Baseline	Age controls	Non-migrant sample	Common sample	50% of median	Different hardship	Continuous hardship	Odds ratios
Narrow								
Correlation (level)	1.00	1.00	1.00	0.99	0.98	0.98	0.96	0.95
Correlation (rank)	1.00	0.99	0.99	0.98	0.97	0.97	0.97	0.97
Change more than 2 positions	–	1	0	1	3	3	3	4
Broad								
Correlation (level)	1.00	1.00	0.96	–	0.99	–	–	0.94
Correlation (rank)	1.00	0.98	0.96	–	0.98	–	–	0.94
Change more than 2 positions	–	2	5	–	2	–	–	6

Note: This table presents an assessment of the relationship between our benchmark estimates and the different robustness checks across the 30 countries. Results are presented separately for our narrow and broad measures of the intergenerational transmission of poverty, and for each case we present three different outcomes. First, we report the correlation across coefficients, whether marginal effects or odds ratios. Second, we present the correlation across country rankings. Lastly, we present the number of countries that changed their ranking by more than two positions.

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