

Cross-country comparison of intergenerational poverty association in Europe

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Motivation (1)

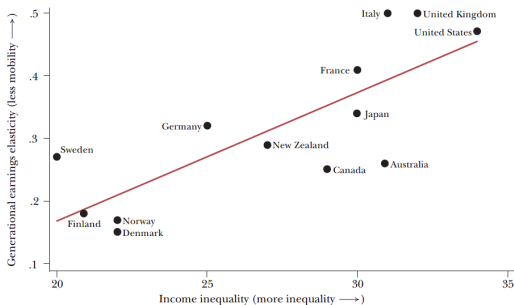
- Much of the economics and sociology literature on background transmission focuses on intergenerational mobility in terms of income (Econ) or class (Soc)
- Literature on the channels through which poverty in childhood may affect the risk of being poor in adulthood (Bellani and Bia, 2019; Duncan et al., 2012)
- Only a handful of contributions have sought to assess the actual extent of persistence in poverty condition
- Exceptions are the papers by Vauhkonen et al. (2017), Bukodi and Goldthorpe (2013) and Whelan et al. (2013). The latter use EU-SILC retrospective questions (2005 wave) for studying the association between current income poverty condition and social vulnerability and parental socio-economic background
- Recent pre-print by Parolin et al. (2023) on intergenerational income poverty association in rich countries (US, UK, DK, DE, AU)

Motivation (2)

- Comparative studies: in terms of class mobility, Bukodi et al. (2020). In terms of income mobility major example is Corak (2013)'s Great Gatsby Curve. In terms of multidimensional poverty, Alkire et al. (2014).

Figure 1

The Great Gatsby Curve: More Inequality is Associated with Less Mobility across the Generations



Research question(s)

- By using the 2019 European Union Statistics of Income and Living Conditions (EU-SILC) dataset, our work examines the intergenerational transmission of poverty using a multidimensional approach, including both material and cultural factors.
- Q1: How strong is the intergenerational poverty association in Europe?
- Q2: What is the country ranking in terms of intergenerational poverty association?
- Q3: Does the strength of intergenerational transmission reflect the size of the parental poverty or other macro factors?
- ...

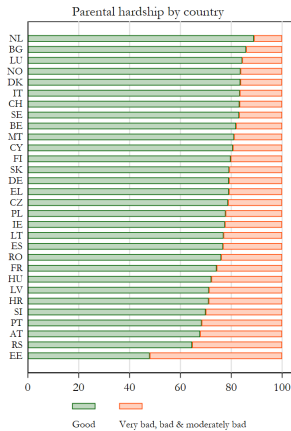
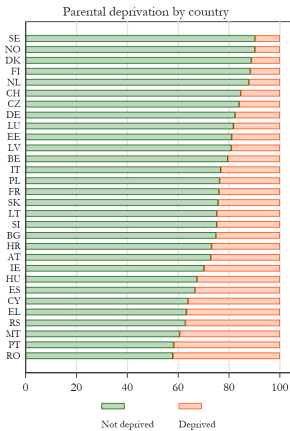
Data - EU-SILC

- EU-SILC 2019, retrospective module; 30 European countries
- **Nordic**: Denmark, Estonia, Finland, Lithuania, Latvia, Sweden, Ireland, Norway. **Western**: Austria, Belgium, France, Germany, Luxembourg, Netherlands, Switzerland. **Eastern**: Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovakia. **Southern**: Croatia, Cyprus, Italy, Greece, Malta, Portugal, Slovenia, Serbia, Spain
- Retrospective questions are asked of respondents between 25 and 59 years old referring to the conditions of their father or mother or more generically their household when they were around 14 years old
- Keep only migrants who moved to the country before age 16, to be sure that the retrospective information does not refer to another country (1.7% dropped)

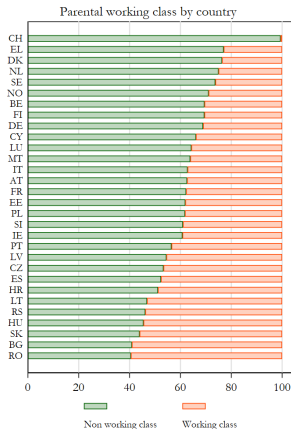
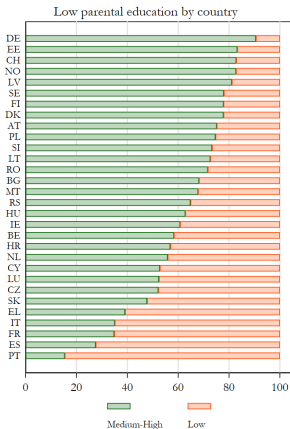
Data - EU-SILC, retrospective variables

- (1) Financial hardship: We categorize the parental household as being in bad financial conditions if they reply saying very bad, bad or moderately bad to the original question
- (2) Basic needs: Basic school needs/ meal/ holidays. If any of these needs is not met by the parental household, it is categorized as “deprived”
- (3) Education: Highest educational level achieved between respondents’ father and mother. Low educated: less than upper secondary education
- (4) Social class: Extended ESEC (European Socio-economic Classification; Rose and Harrison (2014)). Working class are those occupied in lower sales and service, lower technical and routine, as well as the unemployed and domestic work

Parental dimensions (1)



Parental dimensions (2)



Poverty indicators (1) -description

- Given the missing information on parental income, we work on various combinations of the retrospective dimensions
- *Narrow* parental poverty indicator: we consider as parental poverty all households who declare their parental household to be both deprived of basic needs or in a state of financial hardship
- *Broad* parental poverty indicator: builds on the narrow one by combining those narrowly poor with parental households who are either deprived or in financial hardship and low educated or part of the working class.
- Current poverty: with the same narrow/broad distinction in mind, we propose two poverty indicators.
 - *Narrow*: income-based at-risk-of-poverty, AROP
 - *Broad*: risk of poverty or social exclusion, AROPE

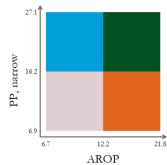
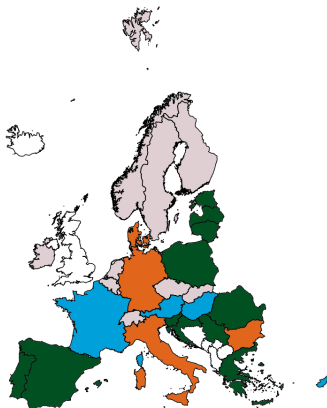
Poverty indicators (2) - statistics

- BN: basic needs; H: hardship; E: (low) education; WC: (low) working class. SMD: Severely materially and socially deprived.

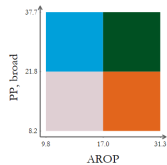
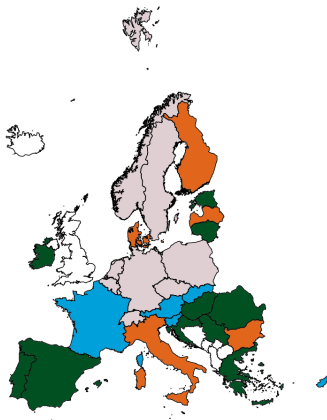
Generation	Indicator	Acronym	Definition
Parental	Narrow	P_N	BN & H
Parental	Broad	P_B	$P_N + (\text{BN \& H or E \& WC})$
Current	Narrow	AROP	60% median equivalised household income
Current	Broad	AROPE	either AROP, SMD or low-work intensity

	Poverty rate		Gender (Female)	Age group				Obs.
	Parental	Current		25-34	35-44	45-54	55-59	
Narrow	15.9 (6.9-27.1)	13.6 (6.7-21.8)	50.7	24.5	29.2	31.8	14.6	202,407
Broad	20.8 (8.2-37.7)	18.8 (9.8-31.3)	50.7	24.7	29.4	31.6	14.3	191,930

Poverty across generations, European map (1)



Poverty across generations, European map (2)



Intergenerational poverty association (IgPA) - measurement

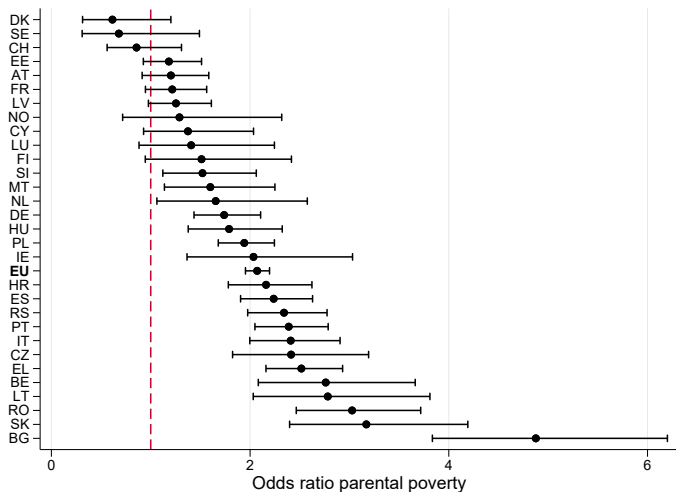
- The IgPA is measured through a logistic model to explain the probability of being poor in 2019. Given the current poverty status $P_{i,t}$ and parental poverty $P_{i,t-1}$, our logistic model is specified as follows:

$$P_{i,t} = \frac{\exp(\alpha + \beta P_{i,t-1})}{1 + \exp(\alpha + \beta P_{i,t-1})} \quad (1)$$

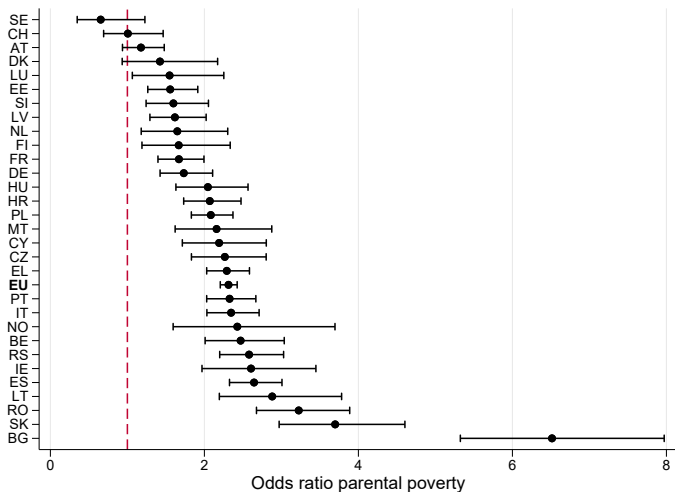
Estimating equation 1 we obtain the odds ratio, $e^{\hat{\beta}}$.

- We present results for *narrow* and *broad* IgPA
- As a secondary measure of IgPA, we compute the marginal effect (ME) of growing in a parental poor household on the probability of being currently poor

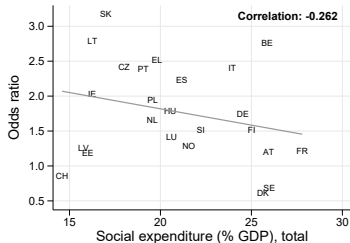
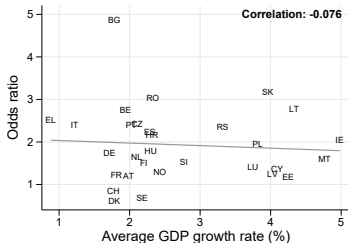
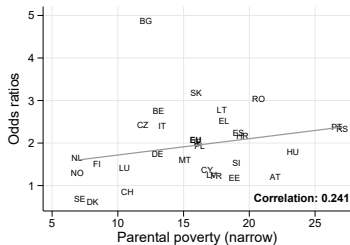
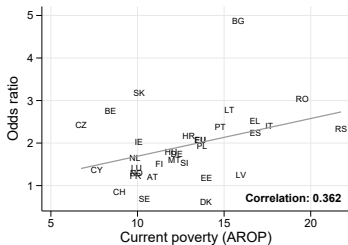
Narrow IgPA - Country rankings



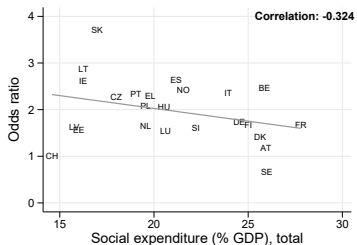
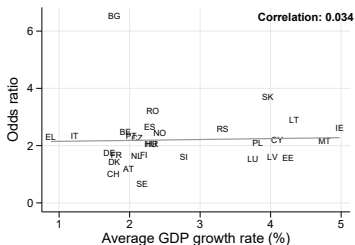
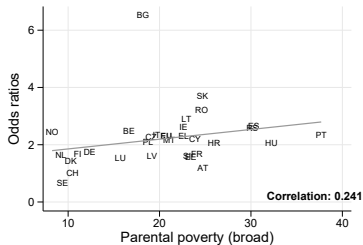
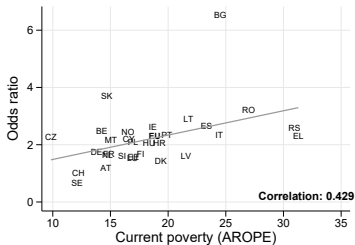
Broad IgPA - Country rankings



Narrow IgPA correlations

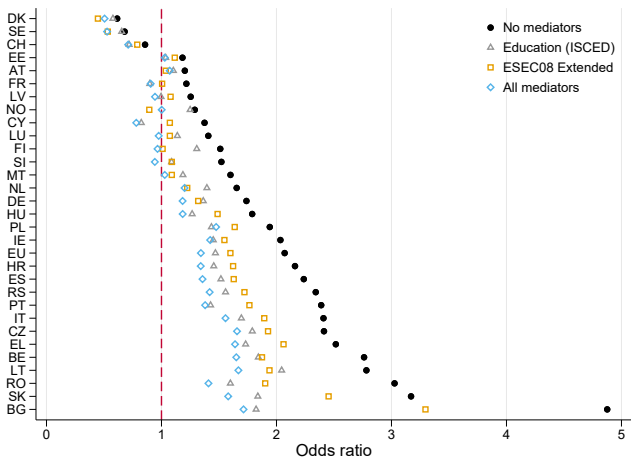


Broad IgPA correlations



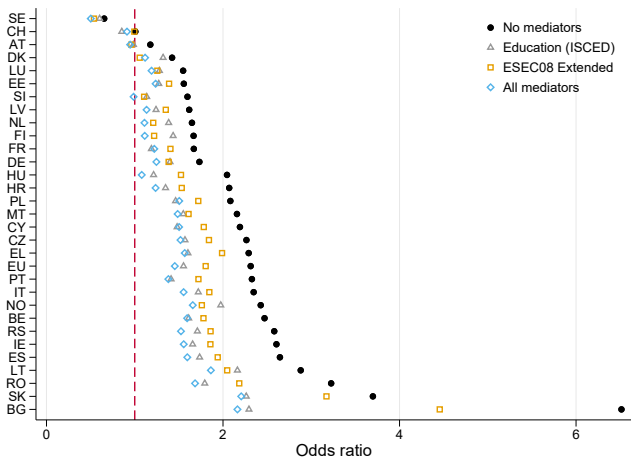
Narrow IgPA, micro-mediating factors

Figure: Relative importance of mediators (Narrow)



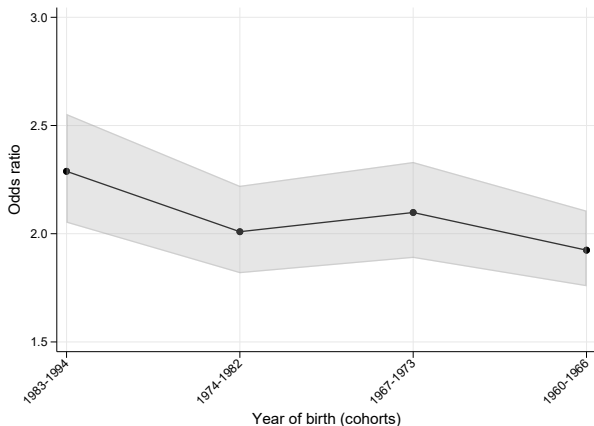
Broad IgPA, micro-mediating factors

Figure: Relative importance of mediators (Broad)



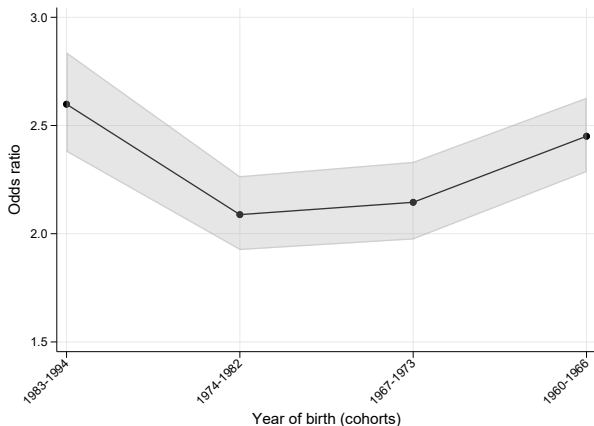
Narrow IgPA, cohort analysis - EU level

Figure: Odds ratios by age cohort (Narrow)

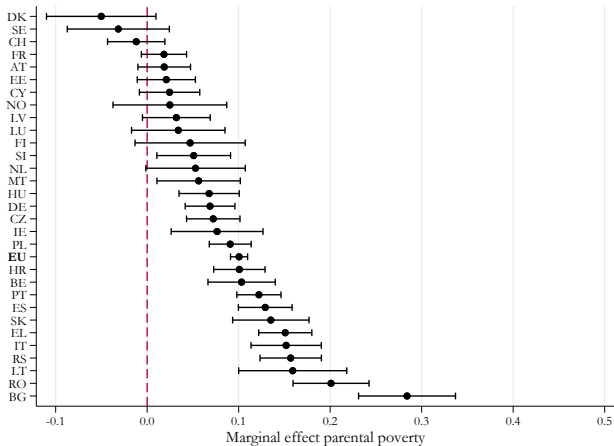


Broad IgPA, cohort analysis - EU level

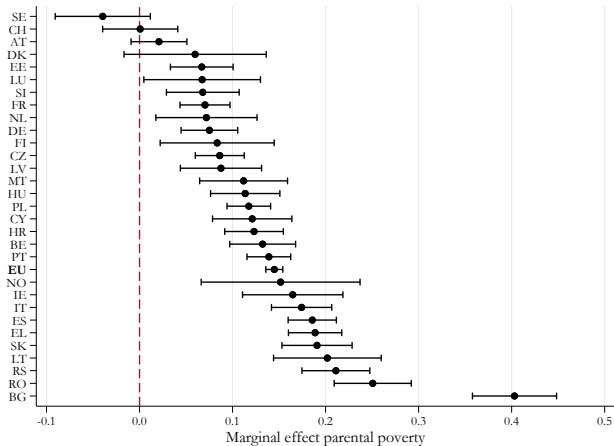
Figure: Odds ratios by age cohort (Broad)



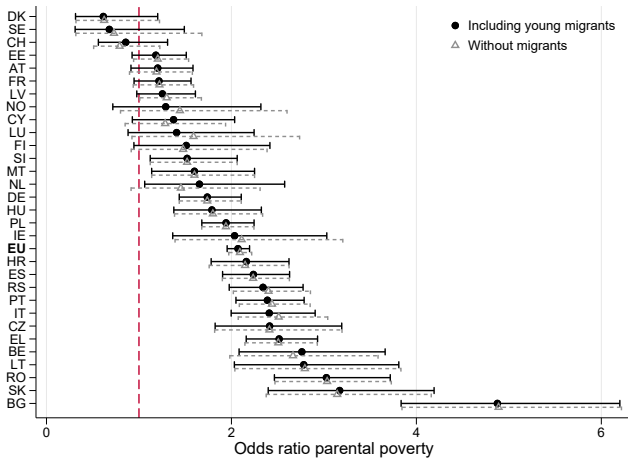
Different IgPA measurement, MEs (1) - narrow



Different IgPA measurement, MEs (2) - broad



Back-up: Country rankings with migrants, narrow IgPA



Conclusions

- We find significant differences across countries as well as a positive correlation between parental poverty condition and intergenerational poverty association, independently on the measurement adopted.
- Persistence is shown to differ substantially across cohorts, with younger individuals that are more penalized. Finally, the educational status is a strong mediator when understanding the association between poverty of the parents and their offspring.
- The findings shed light on the degree of persistence in poverty across generations and provide insights into the level of inequality of opportunity and the effectiveness of welfare states.
- Understanding the dynamics of intergenerational poverty can inform policies aimed at mitigating poverty and promoting social mobility within these countries

Further developments

- Deepen the mediating analysis and mechanisms that guide the transmission of poverty across generations
- Adopt a multidimensional latent class approach
- Include other retrospective EU-SILC waves, 2011 and 2005
- Focus on cross-country anti-poverty policies comparison
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References

- Alkire, S., Apablaza, M., and Jung, E. (2014). Multidimensional poverty measurement for eu-silc countries. *OPHI Research in Progress*, 3(66).
- Bellani, L. and Bia, M. (2019). The long-run effect of childhood poverty and the mediating role of education. *Journal of the Royal Statistical Society Series A: Statistics in Society*, 182(1):37–68.
- Bukodi, E. and Goldthorpe, J. H. (2013). Decomposing 'social origins': The effects of parents' class, status, and education on the educational attainment of their children. *European sociological review*, 29(5):1024–1039.
- Bukodi, E., Paskov, M., and Nolan, B. (2020). Intergenerational class mobility in europe: a new account. *Social Forces*, 98(3):941–972.
- Corak, M. (2013). Income inequality, equality of opportunity, and intergenerational mobility. *Journal of Economic Perspectives*, 27(3):79–102.
- Duncan, G. J., Magnuson, K., Kalil, A., and Ziol-Guest, K. (2012). The importance of early childhood poverty. *Social Indicators Research*, 108:87–98.
- Rose, D. and Harrison, E. (2014). *Social class in Europe: An introduction to the European socio-economic classification*, volume 10. Routledge.
- Vauhkonen, T., Kallio, J., Kauppinen, T. M., and Erola, J. (2017). Intergenerational accumulation of social disadvantages across generations in young adulthood. *Research in social stratification and mobility*, 48:42–52.
- Whelan, C. T., Nolan, B., and Maître, B. (2013). Analysing intergenerational influences on income poverty and economic vulnerability with eu-silc. *European Societies*, 15(1):82–105.

Thank you!

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