## The need and capacity for resilience in European labour markets

An inequalities in resilience framework

## **rEUsilience Working Paper Series: 19**

#### **Authors:**

Rense Nieuwenhuis Max Thaning Alzbeta Bartova Lovisa Backman

June 2025



This project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement No Project 101060410 and Innovate UK, the UK's Innovation Agency. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or Innovate UK.





Risks, Resources and Inequalities: Increasing Resilience in European Families

**Title:** The need and capacity for resilience in European labour markets: An inequalities in resilience framework

Date: June 2025

Responsible organisation: Stockholm University

Author(s): Rense Nieuwenhuis, Max Thaning, Alzbeta Bartova & Lovisa Backman

**Citation:** Nieuwenhuis, R., Thaning, M., Bartova, A., & Backman, L. (2025). The need and capacity for resilience in European labour markets: An inequalities in resilience framework. rEUsilience Working paper series 19, DOI: <a href="https://doi.org/10.31235/osf.io/k8x2v\_v2">https://doi.org/10.31235/osf.io/k8x2v\_v2</a>

Acknowledgements:



This project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement No Project 101060410 and Innovate UK, the UK's Innovation Agency. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or Innovate UK.

## Contents

Abstract	ł
Introduction	5
The use of resilience by the European Union6	5
Background and Question: Strengths and Weaknesses of Resilience	3
Inequalities in resilience framework10	)
Hypotheses11	L
Data and Methods14	1
Data14	1
Operationalizations	5
Analytical Method	3
Results	9
Conclusion28	3
References	)

## Abstract

# 

Resilience has become a prominent concept in EU social and economic policy, positioned as a response to megatrends such as technological change, labour market deregulation and demographic shifts. This article critically examines how resilience is conceptualised in EU policy, arguing that it insufficiently accounts for structural inequalities in individuals' capacities to adapt to risks. Building on cumulative inequality theory and the prevalences and penalties framework, we propose an "inequalities in resilience" framework that distinguishes between the need for resilience-measured by exposure to labour market risks-and the capacity for resiliencemeasured by the ability to avoid poverty when risks materialise. Using EI-SILC data for 30 countries, 2010–2020, encompassing 3,103,097 individuals, we find that groups with greater need for resilience, particularly those with lower educational attainment and single-parent households, show lower capacity for resilience. This pattern shows a high degree of consistency across different risks and poverty indicators, and national contexts. We conclude that resiliencefocused policy must integrate prevention and resource-based interventions while recognising the compounded, path-dependent, and status-based nature of inequality. Addressing these layered disadvantages requires coordinated, inclusive policy designs that go beyond individual adaptation to tackle the structural roots of disadvantage.



## Introduction

# 

As the concept of "resilience" is increasingly prominent in the policy discourse of the EU and its member states, the conceptual focus in this article is on how the EU considers the importance of structural inequalities in its use of the concept of resilience with respect to its (potential) implications for social and economic issues. The High-Level Group on the Future of Social Protection and the Welfare State in the European Union argued for the need to foster resilience, in particular to be able to respond to large-scale societal megatrends – including trends in employment and labour income inequalities (European Commission, 2023). Labour market transformations described as the new 'world of work' are often linked to developments that include de-industrialization, technological change and automation, international competition, and de-regulation (Iversen & Soskice, 2019; Kalleberg, 2009; Taylor-Gooby, 2005). Consequences of these transformations include increased dualization between labour market insiders and outsiders (Rueda, 2005), more workers facing precarious employment conditions (Kalleberg, 2009), low-wage work and in-work poverty (Lohmann & Marx, 2018), and more workers experiencing temporary contracts (Latner, 2022).

As detailed below, the concept of resilience as it is used by the EU refers to the capacity to adapt to or to absorb the consequences of uncertain labour market conditions – as well as other challenges. We review the literature that argues that while the concept of resilience has a number of attractive features, the concept is also widely considered to have a number of problematic aspects. Notably, we argue, the use of resilience by the EU does not differentiate between the *need* of individuals and families to respond to the challenges posed by changing labour markets, and their *capacity* to do so. We formulate the *inequalities in resilience framework*, and empirically test hypotheses about cumulative inequality: educational groups and family types that are most likely to experience labour market risks have the least capacity to avoid poverty when they do, while those educational groups and families who experience those risks.



The term resilience has been used by EU institutions in high-level and public-facing contexts, in

relation to a wide range of policy areas that include but are not limited to social and economic issues. In 2015, a conference on 'Building a resilient Europe in a globalised world' was organised by the European Commission's Directorate-General Joint Research Centre<sup>1</sup>. A 'Strategic Approach to Resilience in the EU's External Action' was introduced in 2017 by the High Representative of the Union for Foreign Affairs and Security Policy (2017), the 2022-2023 Council Presidency (held by France, Czechia and Sweden) committed to foster resilience across a broad array of areas including 'resilient payment systems', 'resilient transport systems, 'climate resilience, 'cyber resilience', and 'resilient value chains' (Council of the European Union, 2021), and the 'Directive on the Resilience of Critical Entities' (European Parliament & Councial of the European Union, 2022) requires to establish national strategies for enhancing the resilience of essential services related to for instance energy, transport, health, and drinking water.

The application of the concept of resilience specifically to social and economic issues can be traced back, at least, to the 2013 Commission Recommendation on Investing in Children (European Commission, 2013). This recommendation stated that prevention of disadvantage is best achieved through integrated strategies that "*help children live up to their full potential and contribute to their resilience*" (p.1). The explicit adoption of resilience as a key policy priority of the European Union, however, is a more recent development and parallels the development of the COVID-19 pandemic. The 2020 strategic foresight report focused on "*charting the course towards a more resilient Europe*", and in which resilience was coined as the "*new compass for EU policies*" (European Commission, 2020). Social and economic resilience was explicitly included in the 2021 implementation of the Recovery and Resilience Facility (RRF), and in the 2023 report by the High-Level Group on the Future of Social Protection of the Welfare State that argues that "*the challenges resulting from both the long-term megatrends and the emerging crises reinforce the need to foster social resilience and solidarity at all levels, national, European, and maybe even global*" (European Commission, 2023, p. 10).

In the EU policy context, resilience is generally conceptualised in broad terms, in relation to the capacity to cope with shocks or challenges, to recovery, and more recently also in relation to a forward-looking perspective focused on transitions and improvement. The Strategic Foresight

https://ec.europa.eu/regional\_policy/en/newsroom/news/2015/09/how-to-build-a-resilient-europe-in-aglobalised-world (last accessed 19 May 2025)





Communication defined resilience as "the ability not only to withstand and cope with challenges but also to undergo transitions in a sustainable, fair, and democratic manner" (European Commission, 2020, p. 6). The High-Level Group on the Future of Social Protection and of the Welfare State in the European Union (European Commission, 2023) did not explicitly define resilience, but their focus was on (recommending) policies that strengthen the position of individuals and families in the context of contemporary megatrends, such as diversifying inequalities and the changing nature of work. However, as we will argue in the next section, the lack of explicit or specific definitions of the concept of resilience results in applications that overlook structural, group-level inequalities in people's need and capacity for resilience.



# Background and Question: Strengths and Weaknesses of Resilience

Having outlined the use of resilience in the EU policy context above, this section reviews the academic literature on resilience, in particular focusing on the strengths and weaknesses of the concept.

A useful starting point is that most conceptualisations of resilience pertain to the relationship between risks and adverse circumstances on the one hand, and outcomes associated with those risks on the other hand (Mohaupt, 2009). The concept is often focused specifically on the wellbeing among those who experienced risks: well-being despite adversity (cf. Masten, 1994). In other words, resilience does not merely focus on the level of well-being among a population (of individuals, families, etc.), but explicitly on the relationship between risk exposure and aspects of well-being among those who experienced the risk.

Among the *strengths* of the resilience concept is that it, based on the commonly used moniker "well-being despite adversity" (cf. Masten, 1994), explicitly and analytically places well-being in relation to experiencing a risk ('adversity'). Moreover, many conceptualizations of resilience acknowledge adaptive functioning that individuals and families demonstrate to respond to adverse situations. Resilience is thus understood as "*a dynamic process whereby individuals show adaptive functioning in the face of significant adversity*" (Schoon, 2009, p. 8). In that, the concept of resilience moves beyond the deficit model of poverty that only focuses on what people lack (Frankenhuis & Nettle, 2020) and focuses on what people do: the agency and effort exerted by individuals and families to maintain or even improve their well-being in the face of risks. Further, resilience expands the studied time horizon from only focusing on people's current well-being, to also include a perspective that acknowledges people's (anticipation of) future developments (Boumis et al., 2023; Wildavsky, 1988). This introduces an important distinction between processes leading up to risk exposure, and the capacity to cope with risks once they occurred.

Important *weaknesses* of the concept of resilience in policy making are rooted in the normative concerns that it might overly emphasise (the potential for) agency – with the risk of 'blaming the victim' – and that as the concept of resilience originates in macro-level analyses of systems (e.g. eco-systems) it has been questioned whether it can effectively be applied to address social problems that have macro-micro level interactions (Hall & Lamont, 2013; Olsson et al., 2015). This is particularly relevant of the EU's application of resilience against social and economic issues, in which the concern is not only about societal resilience against a macro-level shock (e.g.





economic stability in times of changing labour markets) but also about the economic inequality among individuals and families (e.g. capacity to compensate for job-loss in the family).

Recent reviews of the use of the concept of resilience pointed out that structural, group-level inequalities in resilience have largely been ignored (Bawati et al., 2025; Dagdeviren et al., 2020), arguing that analyses of resilience should integrally consider inequalities between individuals and families in the extent to which they are exposed to socio-economic risks, as well as in their capacity to avoid negative outcomes if they are exposed (Calado et al., 2022). We address this gap conceptually and empirically by formulating the inequalities in resilience framework that explicitly considers structural group-level inequalities in individuals' and families' need and capacity for resilience. Our framework posits that the inequalities in the need for resilience refer to those who are exposed to risks, and the inequalities in the capacity for resilience refer to those who are exposed to these risks yet avoid negative outcomes. Building on core insights from sociology, we further argue that it should further be considered to what extent there is cumulative inequality (Blau & Duncan, 1967; DiPrete & Eirich, 2006; Merton, 1988), in the sense that those groups who are more likely to be exposed to risks, in fact are the ones with the least capacity to respond to these risks (and, conversely, groups who have the best capacity to cope with risks being the least exposed to those risks). Therefore, in this study we address the question: To what extent can differences in poverty between groups be explained by cumulative (dis)advantage in (a.) the need for resilience against labour market risks and (b.) capacity to avoid poverty among those exposed, in European countries between 2010 and 2020? We consider these inequalities separately for groups defined by their different levels of education and by the family composition of the household they live in, with the former being a more explicitly hierarchical form of inequality and the latter bringing in focus the potential accumulation and sharing of resources among household members. We consider all combinations between three labour market risks (unemployment, low-wage work, and low work intensity) in relation to three poverty-related outcomes (at-risk-of-poverty, the poverty gap, and severe material deprivation).



## Inequalities in resilience framework

Processes of cumulative advantage and disadvantage have been studied in myriad ways. A pathdependent version of cumulative advantage can be traced back to Merton, and takes the form that an initial advantage is associated with higher rates of return (DiPrete & Eirich, 2006; Merton, 1988). A status-dependent version of cumulative disadvantage can be traced back to Blau and Duncan (Blau & Duncan, 1967; DiPrete & Eirich, 2006), in which group membership (in their example, race) is simultaneously associated with lower endowments (such as level of education) and lower returns to those endowments (such as wage). A third form, compounded disadvantage, is based on the accumulating of multiple disadvantages across life-domains resulting a situation that is particularly difficult to overcome (Desmond & Western, 2018; Wolff & De-Shalit, 2007). The inequality in resilience framework we formulate here is based on a status-dependent version of cumulative advantage and disadvantage, which we relate to the prevalences and penalties framework (Brady et al., 2017).

The prevalences and penalties framework (Brady et al., 2017) postulates that rates of poverty are not only a function of how common risk factors are (the prevalence), but also how strongly these risk factors relate to poverty (the penalty). Although originally developed to analyse poverty, we apply the framework more generally to aspects of cumulative inequality by considering how prevalent risks are as an indicator of the need for resilience, as well as how strongly these risks relate to outcomes as an indicator of the capacity for resilience.

While the prevalences and penalties framework was originally formulated to analyse population-level poverty rates (Brady et al., 2017), we extend the framework here by introducing group membership. Conceptually, the introduction of groups considers inequality as originating and maintained through durable group-based configurations of resources, opportunities, and constraints, and that inequality generating processes as exploitation, social closure and claims-making operate through groups and social categories (Tilly, 2009; Tomaskovic-Devey & Avent-Holt, 2019). Empirically, the focus on group differences entails an examination of whether poverty differences between groups can be attributed to either differences in their need for resilience (how prevalent labour market risks are across these groups), differences between groups in capacity for resilience (how strongly they are penalised for experiencing labour market risks), or by a combination of both.

In sum, the inequalities in resilience framework focuses on whether groups are advantaged or disadvantaged compared to each other, because of differences in their need for resilience, their capacity for resilience, or a combination thereof. This allows for distinguishing between four



forms of inequality, as stylized in Figure 1. These are described here in terms of risks and penalties, but the same logic can be applied to (a lack of) endowments and returns to those. If a group has lower poverty because they have low need for resilience (lower prevalence of labour market risks) while they also have how capacity to avoid poverty among those who are exposed to a labour market risks (lower penalty), we consider this a form of *cumulative advantage*. In contrast, it reflects *cumulative disadvantage* when a group has higher poverty because they have a high need for resilience yet a low capacity for resilience against labour market risks. In addition to these two main forms of cumulative inequality, the logic allows for groups in which a high capacity for resilience (low penalty) *offsets* the consequences of a high need for resilience (high prevalence of risks), and groups in this a low need to be resilience (low prevalence of risks) *offsets* their low capacity (high penalty) to be resilient.

Figure 1 Inequalities in Resilience Framework



high risks / low endowments

Advantage low risks / high endowments

## **Need for resilience**

### **Hypotheses**

Next, we apply the inequalities in resilience framework to differences in poverty between groups categorised by their level of education, and by the type of family they live in. Education is a key dimension of inequality and stratification in contemporary societies, is to a large extent hierarchical, and reflects inequalities that are generally shaped early in one's life-course. A



higher level of education is often referred to as human capital, which allow individuals to command better positions in the labour market. In particular, in the new world of work, characterised by tertiarisation of employment and skill-biased technological change, lower educated individuals are more exposed to risks of unemployment (Bonoli, 2005; Brzinsky-Fay, 2017). Among the employed, lower educated individuals are more likely to have low-wage work (Bernstein, 2016), or to (involuntarily) have a lower work intensity (Green & Livanos, 2017). When it comes to the capacity to cope with labour market risks, it should be expected that the higher educated are less penalised when exposed to labour market risks. Higher educated individuals who become unemployed are likely to have had longer working histories at higher wages, and therefore are more likely to qualify for unemployment benefits (rather than to have to resort to much lower-paid social assistance). Among the unemployed, the higher educated may further be less at risk of material deprivation because of their on-average higher earnings and savings prior to becoming unemployed. Among those with a low work intensity, higher educated are likely to have a higher wage and therefore less likely to be poor. Based on these considerations, we formulate our education hypothesis: Part of the poverty differences between educational groups are associated with (a.) cumulative disadvantage of lower educated individuals having a higher need for resilience against labour market risks and lower capacity to do so, and with (b.) cumulative advantage of higher educated individuals having both lower need for resilience against labour market risks and greater capacity to do so.

Next, we turn to the need and capacity of different family types to be resilient against labour market risks. Family types are less inherently hierarchical compared to educational groups, but a perspective on families brings into focus differential configurations of (potentially) multiple individuals (Widmer, 2010), and that family members can share resources (albeit imperfectly (Bennett, 2013), for instance to compensate for individual income loss. Family further necessitates a gender perspective (Daly, 2020). Single parents are more likely to be unemployed compared to couples (with and without children), in part because of the increased constraints that care for children poses for them as it often cannot be shared among parents (Heidenreich, 2015). Single adults without children were also found to be more likely to be unemployed (ibid.). For the same reason, couples are less likely to have a low-work intensity and to be employed in low-wage work. Among those who experience labour market risks, single adults and single parents will be penalised to a greater extent than couples. The main reason is that singles cannot share income, smooth income loss, or rely on the income of a partner like couples can (Alm et al., 2020; Choi & Valladares-Esteban, 2020). Due to their disproportionate care responsibilities, single parents (often mothers) are less likely to qualify for unemployment benefits and thus have to resort to second-tier social assistance (Lewis, 1992). We formulate the family hypothesis: Part of the poverty differences between family types are associated with (a.) cumulative disadvantage of single adults and single parents having a higher need for resilience against labour market risks and a lower capacity to do so, and with (b.) cumulative advantage of couples (with and without children) having both a lower need for resilience against labour market risks and greater capacity to do so.

The situation of multi-generational families, common in some parts of Europe, should be recognized (Hogendoorn & Härkönen, 2023). While we empirically examine multi-generational



households, we do not formulate hypotheses on this family type because there is not clear expectation about the direction of the association. On the one hand, it could be argued that the presence of grandparents represents a resource if they can provide care for young children in the household, or if they bring in pension income (Verbist et al., 2020), yet it can also be the case that they require care which poses further constraints to labour market participation, and a larger household means that limited income due to unemployment, low-wage work or a low work intensity needs to be shared among more individuals.



## **Data and Methods**



To test our hypotheses, we have used pooled cross-sectional data from the EU Statistics on Income and Living Conditions (EU-SILC), and applied multigroup Kitagawa-Blinder-Oaxaca decompositions (available soon). The data, operationalisations, and analytical method are described in this section.

#### Data

EU-SILC is a repeated cross-sectional household survey that collects data on income, poverty, social exclusion and living conditions in EU and EEA member states since 2004. EU-SILC aims to provide nationally representative samples on an annual basis. Each member of a household who is at least sixteen years old fills in a questionnaire.

We pooled the data for the period from 2010 to 2020, which provides sufficient statistical power for the detailed analyses that follow. This selection further ensures that our results represent general patterns of inequality rather than reflect an idiosyncratic moment in time, avoids issues with incomplete data in some of the participating countries, and potential bias in relation to the COVID-19 pandemic.

Although some of our concepts are operationalised at the household level (see below) the unit of observation is always the individual. We selected the working age population, comprising of all individuals in the age between 20 and 60. In total, our data comprise 3,103,097 individuals across 30 European countries<sup>2</sup>.

<sup>&</sup>lt;sup>2</sup>Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.



### **Operationalizations**

For the purposes of our analyses, we operationalised 2 group variables (education and family type), and both hypotheses will be tested with unemployment, low work intensity and low-wage work as labour market risks, and with at-risk-of-poverty, the poverty gap, and material deprivation as poverty outcomes. Descriptive statistics are presented in Table 1.

- Education: based on the highest level of education completed. A distinction is made between three levels: Lower secondary or below (ISCED 2 or lower), Upper and post-secondary (ISCED 3 – 4), and Tertiary education (ISCED 5 and above). This is an individual-level variable.
- **Families-in-Household Type**: to classify different family types, we used the families-inhousehold (FHT) typology (Bartova et al., 2023). This typology uses information on family relations among household members to classify the family type, which is more precise than the household-type variable readily available in EU-SILC. The main criteria for our Families in Households Typology (FHT) are (1) cohabitation with a partner, (2) presence of dependent children, and (3) presence of grandparents. This allowed us to distinguish between six categories; single adults, couples without children, single parents, couples with children, single parents living with at least one grandparent, and couples with children living with at least one grandparent. In addition, there is an "other" category that was included in the analyses but not presented here. This category represents those households where we were not able to identify familial relations and complex households where we found both familial and non-familial relations.
- **Unemployment**: Not currently in work and actively looking for employment. This information is derived from the EU-SILC variable self-defined current economic status (pl031, category unemployed). This is measured at the individual level.
- Low-wage work: Employees with an hourly wage below two-thirds of median hourly wage. The EU-SILC is recording annual earnings (py010g, employee cash or near cash income, gross), which we first transformed into an hourly wage before we created a dichotomous variable indicating low-wage work. For this purpose, we only included individuals who were employed either full-time or part-time and excluded all self-employed respondents. To transform the annual earnings into hourly wage, we divided the income variable (py010g) by the total number of months a respondent spent at full-time or part time work as an employee (the sum of pl073 and pl074). This produced monthly earnings, which we converted into an hourly wage by dividing this value by the number of hours usually worked per week in main job (pl060) divided by four (weeks). This is an individual-level variable, and the associated analyses are perofmred only on a subset of the data of those individuals who are working.
- Low work intensity: The work intensity of a household is the ratio of the total number of months that all working-age household members have worked during the income reference year and the total number of months the same household members theoretically could have





worked in the same period. It is a measure of the extent to which the work potential of a household is measured. In the EU-SILC, work intensity (rx040) is measured on a scale between 0 (low, jobless households) and 1 (high, full potential is being used). We recoded this variable into a dichotomous indicator identifying high work intensity households as those whose work intensity is below the value of 0.2, which means that the working age adults in the households worked a working time equal to or more than 20% of their total work-time potential over the previous year. This is measured at the household level.

- At-risk-of-poverty (AROP): Person whose equivalised household income is below 60% of median equivalised household income in the country. This is based on poverty indicator variable (hx080), and corresponds to the official EU definition. This is an individual-level variable.
- **Poverty gap**: The distance between the household income and the country-level at-risk-ofpoverty threshold (among persons at risk of poverty). The value varies between 0 and 100 with higher values corresponding with deeper poverty. A value of 0.5 means that the household income of this individual is 50% below the poverty threshold. This is an individual-level variable.
- **Severe material deprivation**: Person who is severely materially deprived. This indicator was calculated using severely materially deprived household (rx060, category severely deprived). It is defined as the enforced inability to pay for at least 4 out of 9 items, including the ability to pay rent, mortgage or utility bills, to keep the home adequately warm, to face unexpected expenses, to eat meat or proteins regularly, to go on holiday, a television set, a washing machine, a car, and a telephone. This is an individual-level variable.



Variable	N	Mean	Std. Dev.	Min	Мах
Year	3103097	2015	3.1	2010	2020
Groups					
Education	3103097				
Lower secondary or below	582557	19%			
Tertiary	966572	31%			
Upper and post-secondary	1553968	50%			
Families in Household Typology (FHT)	3103097				
Couple with children	1730694	56%			
Couple with children, grandparents	132931	4%			
Couple, no children	482906	16%			
Other	147099	5%			
Single adult, no children	276392	9%			
Single parent	286316	9%			
Single parent, grandparents	46759	2%			
Labour Market Risks					
Unemployed	3103097				
No	2817058	91%			
Yes	286039	9%			
Low-wage work	1921220				
No	1583320	82%			
Yes	337900	18%	%		
Low work intensity	3103097				
No	2817949	91%			
Yes	285148	9%			
Poverty Outcomes					
At-Risk-of-Poverty (AROP)	3103097				
No	2664361	86%			
Yes	438736	14%			
Severe Material Deprivation	3103097				
No	2847066	92%			
Yes	256031	8%			
Poverty Gap	3103097	4.5	15	0	100

### Table 1 Descriptive Statistics



### **Analytical Method**

To analyse to what extent group-differences in poverty are associated with their need and capacity, respectively, to be resilient to labour market risks, we apply multi-group Kitagawa–Blinder-Oaxaca (mKBO) decomposition. Kitagawa-Blinder-Oaxaca (Kitagawa, 1955; Blinder, 1973; Oaxaca, 1973) decompositions are a common tool based on regression analyses to attribute group differences in a dependent variable to group-differences in independent variables (called the prevalence effect, corresponding to the need for resilience), and how strongly these independent variables relate to the dependent variable (called the penalty effect, corresponding to the capacity for resilience). While the conventional approach allows for comparing two groups to each other, we apply a generalization that compares multiple groups to the sample average (available soon).

The starting point of the mKBO approach is recording the overall expected value (prevalence) of the risk of interest (E[X]) and then estimating the sample average association (penalty) of that risk X, including a control for the given group variable ( $G_j$ ), and fixed effects for countries ( $C_k$ ):

$$Y_i = \alpha + \beta X_i + G_i + C_k + \epsilon_i$$

We subsequently observe the group-specific prevalences (E[X]|G = j) and estimate groupspecific penalties using equation 1, but subsetted for each group:

$$Y_i = \alpha_j + \beta_j X_i + C_i + \epsilon_i$$

Following these steps we can calculate the prevalence (E, or endowment) component, the penalty component (C, or coefficient), and the interaction residual term (I) component to decompose the differences in group outcomes (Y). These components are derived accordingly:

$$E_j = (E[X] - E[X_j])\beta_j \qquad 3$$

$$C_j = E(X_j)(\beta - \beta_j) \tag{4}$$

$$I_j = (E[X] - E[X_j])(\beta - \beta_j)$$
5

Following these expressions, we can define the R as the overall contribution for a particular risk in closing the sample average to group gaps in a particular outcome. We can thus arrive at a full decomposition of R by the following quantity:

$$R_j = E_j + C_j + I_j \tag{6}$$

It should be noted that equation 6 (and the preceding equations) are estimated separately for each combination of group, outcome [Y], and risk [X]). Furthermore, we will present EU-wide estimates as defined above, but also country-specific estimates. For the latter, the country-fixed-effects  $C_k$  are omitted. As a test statistics does not exist for this approach, 95% confidence intervals were determined by 1000 non-parametric bootstraps.



## Results

# 

The first results we present in Figure 2 focus on the association between unemployment and atrisk-of poverty across groups that are defined by their level of education, and by the family type. These results pertain to the EU-wide sample and are based on the mKBO decomposition, and are presented in four quadrants based on Figure 1. The lower-left (in red) represents cumulative disadvantage, and the top-right (in blue) represents cumulative advantage. Groups are positioned based on how their at-risk-of-poverty is affected by having above/below-average need for resilience against unemployment (the prevalence component, on the horizontal axis), and based on the capacity of these groups to be resilient to unemployment (the penalty component, on the vertical axis).

The panel on the left represents educational groups. The horizontal axis shows that people with lower secondary or lower education are disadvantaged by their need for resilience against unemployment: would they have had average unemployment rates, their at-risk-of-poverty rates would have been around 2 points lower. They are further disadvantaged by their capacity for resilience against unemployment (vertical axis): if their penalty would have been average, at-risk-of-poverty among the lower educated would have been around 0.35 points lower. The lower educated are thus situated in the lower-left corner of the figure, indicating their cumulative disadvantage in terms of both their need and capacity for resilience against unemployment (in terms of their poverty). Tertiary educated, in contrast, experience cumulative advantage: their at-risk-of-poverty is lower not only because they have less need for resilience against unemployment. In technical terms: if the prevalence of their unemployment would have been average, their at-risk-of-poverty rate would have been around 0.7 points higher (compared to what we observed), and if they would have an average penalisation of unemployment, their at-risk-of-poverty would have been around 0.4 points higher.





## Figure 2 Cumulative inequality in the association between unemployment and poverty, by education and family

Turning to the different family types in the panel on the right, a clear distinction that emerges that single parents and single adults without children experience cumulative disadvantage, whereas couples with and without children experience cumulative advantage. The disadvantaged at-risk-of poverty rates among single parents are particularly associated with their above-average need for resilience against unemployment (1.4 points), whereas the disadvantage of single adults without children is particularly related to them having less capacity for resilience against being unemployed (1.7 points). For multi-generational families we did not find cumulative advantage or disadvantage (as it is conceptualised here). Both couples with children who live with grandparents and in particular single parents who live with grandparents are disadvantaged by their greater need for resilience against unemployment (0.5 and 1.9 points, respectively), but this is offset by their capacity for resilience (0.8 and 0.6 points, respectively).

The results presented so far lend support for our two hypotheses, but only with respect to cumulative (dis)advantage in terms of unemployment and at-risk-of-poverty, and only for the EU average. In the results that follow, we first consider other dimensions of labour-market risks and other dimensions of poverty, and then we consider country-specific estimates.

We have performed the same analyses are described above for all combinations of labour market risks (low wage, low work intensity, and unemployment) and dimensions of poverty (at-risk-of-poverty, poverty gap, and material deprivation). The results for education groups are summarised in Figure 3. Panel A uses colour-code to classify whether there is cumulative advantage, cumulative disadvantage, or a form of offsetting for each combination of labour market risks and dimension of poverty. This classification is based on the logic as explained in Figure 1. Panel B shows the amount of poverty that is associated with the respective labour market risk (the R-term in Equation 6).



The results show that the finding in Figure 2 of cumulative disadvantage for lower secondary educated, and cumulative advantage for tertiary educated, largely generalises to other combinations of labour market risks and dimensions of poverty. The lower secondary educated are cumulatively disadvantaged in all dimensions, except for the combination of low work intensity and at-risk-of-poverty. With respect to being resilient to low work intensity, their higher need is partially offset by their greater capacity. In contrast, regarding almost all combinations of labour market risk and dimensions of poverty, tertiary educated experience cumulative advantage: They have less need for resilience against these risks, and if they do, have a greater capacity to it. The only exception is that the tertiary educated are penalised more than average by low-wage work in terms of their poverty gap, but this is offset by the fact that they experience low-wage-work less than average. Panel B of Figure 3 shows how much groups are advantaged or disadvantaged with respect to their need and capacity for resilience with respect to various labour market risks and dimensions of poverty (again, the R component as defined in Equation 6). Overall, these results show that lower secondary educated are disadvantaged consistently. Even though we saw (in Panel A) that that their higher need for resilience against low work intensity (with respect to AROP) was offset by a higher capacity to do, this was only a partial offsetting: if the lower secondary educated would have an average need and capacity for resilience against low work intensity, their poverty would have been more than 2 points lower. Similarly, the tertiary educated are advantaged (compared to the average) with respect to all labour market risks and dimensions of poverty, including with respect to low wage work in relation to the poverty gap.

## Figure 3 Cumulative (dis)advantage across dimensions of labour market risk and poverty, by education



In Figure 4 we turn to patterns of cumulative (dis)advantage by family type. Panel A shows that across family types, these patterns are – as expected – somewhat more varied than across the more hierarchical education groups. Single adults without children are cumulatively disadvantaged with respect to low work intensity and unemployment (on all dimensions of poverty), but their below-average need for resilience against low wage work (partially) offsets that they have less capacity for resilience against low-wage work. Nevertheless, Panel B shows that in terms of the *combination* of need and capacity for resilience, single adults without children are disadvantaged across all labour market risks and dimensions of poverty. Next, single parents experience cumulative disadvantage with respect to low wage work and unemployment (except in relation to the poverty gap, for which they are penalised less than average). Their higher need for resilience against low work intensity seems to be offset by better capacity to do

The need and capacity for resilience in European labour markets



across the different dimensions of poverty. The combined impact of need and capacity for resilience against labour market risks, however, represents a disadvantage for single parents across all dimensions of poverty (Panel B).

The comparison of single adults and single parents to couples with and without children renders a stark contrast. Whereas single adults and single parents were cumulatively disadvantaged in several dimensions, couples are mostly cumulatively advantaged. Across all combinations, couples without children have less need to be resislient to labour market risks, and those who do are have greater capacity to do so in terms of multiple dimensions of poverty. Almost the same holds for couples with children, although their lower capacity for resilience against low work intensity (in terms of at-risk-of-poverty and the poverty gap) is offset by a lower need to do so. The combined impact of need and capacity for resilience against labour market risks puts couples with and without children at an advantage across the different dimensions of poverty.

Multigenerational families present a more complex picture. The most common pattern is that of a higher capacity (partially) offsetting the elevated need for resilience against labour market risks among these families. This may reflect (intergenerational) sharing of resources among household members. In terms of low wage work and material deprivation, both single parents living with grandparents and couples with children living with grandparents are cumulatively diadvantaged. Couples with children living with grandparents, similarly to couples with children, are have less capacity for resilience against low work intensity, but this is offset by less need for resilience against this.

Up to this point, the presented results pertained to the overall pattern in the EU. Presenting the results by country in the same manner as above is not feasible, given the amount of data points that such an exercise would produce (3 risks \* 3 poverty dimensions \* 30 countries = 270 estimates for each group). Therefore, we proceed in two steps to present the country-specific esimates. First, in Table 2, we present how common the patterns of cumulative advantage, cumulative disadvantage, and the two offsetting patterns were across all combinitions of labour market risk and dimensions of poverty. We do so separately for education groups and family types. By education, it is clear that lower educated individuals are more likely to experience cumulative disadantage, followed by capacities offsetting needs. Tertiary educated individuals, in contrast, are more likely to be cumulatively advantaged and to see lower needs offsetting lower capacities. For different family types, the table shows that cumulative advantage is most common among couples (with and without children), whereas single adults and single parents are most likely to be cumulatively disadvantaged. Notably, single parents are disadvantaged by a higher need for resilience against labour market risks, but their capacity to do so partially offsets this disadvantage.



#### Figure 4 Cumulative (dis)advantage across dimensions of labour market risk and poverty, by family type



A. Classification of Cumulative (Dis)Advantage



	Cumulative advantage	Cumulative disadvantage	Capacity offsets Need	Need offsets Capacity
Education				
Lower secondary or below	0.0	75.2	24.8	0.0
Upper and post-secondary	30.7	28.1	29.6	11.5
Tertiary	74.4	0.0	0.0	25.6
Family in Household typology				
Single adult, no children	0.7	63.0	7.0	29.3
Single parent	0.0	56.7	42.2	1.1
Single parent, grandparents	9.6	23.7	63.3	0.4
Couple, no children	63.7	2.6	17.4	16.3
Couple with children	71.1	0.4	5.2	23.3
Couple with children, grandparents	22.2	14.8	46.7	12.6

Table 2 Patterns of cumulative (dis)advantage and offsetting, country-specific across labour market risks and poverty dimensions (cells show percentages, n=270 estimates per group)

To further highlight the differt combinations of labour market risks and poverty outcomes, next we show how much poverty is associated with either cumulative advantage or cumulative disadvantage. Thus, in Figure 5, we show the distribution of the total poverty association (the R component of Equation 6) only for those cases classified in Table 2 as cumulative advantage (blue) or as cumulative disadvantage (red). These results show that by and large the results presented above hold when examined within countries: When there are patterns of cumulative dis(advantage), tertiary educated are substantially more likely to have cumulative advantage (blue), whereas lower secondary educated are substantially more likely to have cumulative disadvantage (red). Upper and post-secondary educated are more diverse, and experience cumulative advantage in some countries, and cumulative disadvantage in others. More so, the cumulative advantage among tertiary educated is associated with substantial poverty advantages of up to 5 points, whereas the cumulative disadvantage among secondary educated is associated with poverty disadvantages of about 5 points – or in some cases even more. This overall pattern seems to be fairly consistent across measures of labour market risks and dimensions of poverty.





#### Figure 5 Distributions of Country-Specific Cumulative (dis)advantage across dimensions of labour market risk and poverty, by education

Tertiary

Tertiarv

-10

-5

ò

5

-10

Upper and post-secondary

Lower secondary or below

Upper and post-secondary Lower secondary or below

Finally, we turn to the distributions of country-specific estimates by family type, in Figure 6. Across countries, single adults, single parents, and single parents living with grandparents are considerably more likely to experience cumulative disadvantage, whereas couples with and without children are substantially more likely to experience cumulative advantage. Couples with children who live with grandparents show much more variation (to some extent single parenst living with grandparents do too, but there the cumulative disadvantage is more clearly the most common pattern).

-5

Ó

5 -10 -5

Poverty association (%-point, R component)

Ó

Taking together, the evidence presented in this section corroborates our two hypotheses, albeit with a number of exceptions. Overall, and as hypothesised, higher educated and couples (with and without children) are more likely to experience cumulative advantage, whereas lower educated and singles and single parents experience cumulative disadvantage to a much greater extent. This generally holds across a range of labour market risks and dimensions of poverty, although some combinations showed offsetting patterns, rather than cumulative inequality. Overall, the hypotheses were also corroborated in the the country-specific analyses, although naturally there was some more variation here.



26

5

0

-5 -10

Poverty Gap

## Figure 6 Distributions of Country-Specific Cumulative (dis)advantage across dimensions of labour market risk and poverty, by family type



## Conclusion

# 

Resilience is increasingly used in discourses on social inequality and social policy, not least by the European Commission. While the academic literature on resilience has started to recognise structural group differences in the capacity for resilience (Bawati et al., 2025; Dagdeviren et al., 2020; Hall & Lamont, 2013), we argued that this is largely absent in how resilience is used in these policy discourses. As the "new world of work" is considered one of the megatrends to be resilient against, the aim in this article was to examine inequalities in which groups need for resilience against labour market risks, in relation to inequalities in the capacity of groups to do so in terms of avoiding poverty.

We formulated the inequalities in resilience framework, combining insights from cumulative inequality theory (DiPrete & Eirich, 2006) and the prevalences and penalties framework (Brady et al., 2017), to simultaneously consider inequalities in the need and the capacity for resilience. We found support for the hypotheses we derived from this framework for inequalities between individuals with different levels of education, and individuals living in different types of households. In short, our findings suggest that those groups who have the greatest need for resilience against labour market risks, because they are more likely to be exposed to labour market risk, have the lowest capacity to do so. And those groups that have the least need for resilience against labour market risks, have the greatest capacity to. Despite some variation, this finding showed a substantial level of consistency across educational groups and family types, across different labour market risks and different dimensions of poverty, and both at the EU–level and within countries.

As the aim here was to demonstrate the generalizability of this lack of resilience across a range of outcomes, risks, groups, and countries, we did not empirically focus on the reasons for why some groups are more likely to be exposed to risk, and the reasons for why some groups have lower capacity to avoid poverty upon exposure. There is vast evidence that educational inequalities and inequalities by family type are interrelated and intersectional (McLanahan & Percheski, 2008; Moullin & Harkness, 2021; Verloo, 2006), and future work can be expected to fruitfully examine this interrelationship in relation to inequalities in resilience. The underlying mechanisms are likely to vary for different combinations of risks and outcomes, and to differ between groups defined by education and by family type, and would thus require a study tailored to each specific combination. Yet, the inequality in resilience framework theorised here, and in particular its foundation of cumulative inequality theory, suggests a number of avenues to further study these mechanisms. At the micro-level, the literature on resilience presumes



adaptive behaviour in response to risks, for instance by *absorbing* or *adapting* to risks (Donoghue & Edmiston, 2020). Here, we have argued for incorporating inequalities in resilience, meaning to consider that the resources necessary to respond to risks, and the constraints people experience in doing so, are socially unequal (cf. Dagdeviren et al., 2020). Moreover, from cumulative inequality theory we derived that these inequalities are interrelated – for which the results presented here provide initial evidence.

An implication of these findings is that policy initiatives that seek to promote resilience are faced with the challenge of overcoming cumulative inequality. At the least, this requires a combined effort of prevention, to reduce the need for resilience, and to resource individuals and families to increase their capacity for resilience. Yet, it is not immediately evident how to do so in the face of cumulative inequality. Above, we distinguished between three forms of cumulative inequality (path-dependent, status dependent, and compounded disadvantage) that provide different (but complementary) answers.

The presence of compounded disadvantages across life domains, would suggest the need for multiple policies / interventions to overcome hardships. The study of such policy interplay and complementarity seems to be (re-)emerging (Yerkes et al., 2022), yet this research also shows that more complex policy provision is associated with higher non-take-up (Dubois et al., 2015), and requires extensive coordination between programs (Minas et al., 2025).

The path-dependent form of cumulative inequality bears relevance to the timing of interventions. The importance of interventions early in the life-course is often brought up in this context, such as the benefits of enrolment in childcare (Gambaro et al., 2015), yet long-term benefits of childcare have also been found with respect to later-in-life risks of poverty or of youths not in education, employment or training (NEET) (Van Vugt et al., 2025; Zagel & Van Lancker, 2022). More generally, the distinction between life-course sensitive and life-course relevant institutions (Leisering, 2006) is relevant here, with the former being dependent on life-course events that took place prior to the policy intervention, whereas the latter can affect the future life-course.

We conclude with implications of the status-dependent form of cumulative inequality that was in focus here, which brings in focus the challenge of implementing social policies that reach the particularly vulnerable groups that are doubly disadvantaged. This relates to benefit levels of many income protection programs, such as social assistance, that are below commonly accepted poverty levels (Cantillon et al., 2017; Nelson, 2013; Taylor-Gooby et al., 2017). But just as important are the concerns that service-based policies tend to accrue in work-rich households and families – thus insufficiently reaching those who might need them most (Cantillon, 2011). In other words, in particular these in-kind services are associated with so-called Matthew effects (Van Lancker, 2023), a specific form of cumulative (dis)advantage (DiPrete & Eirich, 2006). Similarly, people with shorter work- and lower earning histories tend to be less eligible for insurance-based social policies (O'Brien et al., 2020), rendering these policies less effective in providing income protection particularly for those groups and families who are the most affected by the labour market risks in the new world of work.



## References

Alm, S., Nelson, K., & Nieuwenhuis, R. (2020). The Diminishing Power of One? Welfare State Retrenchment and Rising Poverty of Single-Adult Households in Sweden 1988–2011. *European Sociological Review*, *36*(2), 198–217. https://doi.org/10.1093/esr/jcz053

Bartova, A., Thaning, M., Van Lancker, W., Backman, L., & Nieuwenhuis, R. (2023). *Family Profiles: Risks, resources and inequalities* (Working Paper No. 1; rEUsilience Working Paper Series). SocArXiv. https://doi.org/10.31235/osf.io/7uaf6

Bawati, A., Nieuwenhuis, R., Uzunalioglu, M., & Thaning, M. (2025). Family and Social Resilience: A scoping review of the empirical literature. *Demographic Research*, *52*(27), 887–914. https://doi.org/10.4054/DemRes.2025.52.27

Bennett, F. (2013). Researching Within-Household Distribution: Overview, Developments, Debates, and Methodological Challenges: Researching Within-Household Distribution. *Journal of Marriage and Family*, *75*(3), 582–597. https://doi.org/10.1111/jomf.12020

Bernstein, J. (2016). Wages in the United States: Trends, Explanations, and Solutions. In I. Kirsch & H. Braun (Eds.), *The Dynamics of Opportunity in America* (pp. 167–195). Springer International Publishing. https://doi.org/10.1007/978-3-319-25991-8\_6

Blau, P. M., & Duncan, O. D. (with Tyree, A.). (1967). The American occupational structure. Wiley.

Blinder, A. S. (1973). Wage Discrimination: Reduced Form and Structural Estimates. *The Journal of Human Resources*, 8(4), 436. https://doi.org/10.2307/144855

Bonoli, G. (2005). The politics of the new social policies: Providing coverage against new social risks in mature welfare states. *Policy & Politics*, *33*(3), 431–449. https://doi.org/10.1332/0305573054325765

Boumis, J. K., Kuang, K., Wilson, S. R., Hintz, E. A., & Buzzanell, P. M. (2023). Family Communication Patterns Predict Anticipatory Resilience and the Enactment of Resilience Processes. *Journal of Family Communication*, 23(1), 22–40. https://doi.org/10.1080/15267431.2023.2172021

Brady, D., Finnigan, R. M., & Hübgen, S. (2017). Rethinking the Risks of Poverty: A Framework for Analyzing Prevalences and Penalties. *American Journal of Sociology*, *123*(3), 740–786. https://doi.org/10.1086/693678

Brzinsky-Fay, C. (2017). The interplay of educational and labour market institutions and links to relative youth unemployment. *Journal of European Social Policy*, *27*(4), 346–359. https://doi.org/10.1177/0958928717719198

Calado, A. D. D. C., Capucha, L. M. A., Gray, J., & Wódz, K. M. (2022). Fighting Poverty in Times of Crisis in Europe: Is Resilience a Hidden Resource for Social Policy? *Comparative Sociology*, *21*(4), 447–472. https://doi.org/10.1163/15691330-bja10058

Cantillon, B. (2011). The paradox of the social investment state: Growth, employment and poverty in the Lisbon era. *Journal of European Social Policy*, *21*(5), 432–449. https://doi.org/10.1177/0958928711418856

Cantillon, B., Chzhen, Y., Handa, S., & Nolan, B. (Eds.). (2017). *Children of austerity: Impact of the Great Recession on child poverty in rich countries* (First edition). United Nations Children's Fund ; Oxford University Press.

Choi, S., & Valladares-Esteban, A. (2020). On households and unemployment insurance. *Quantitative Economics*, *11*(1), 437–469. https://doi.org/10.3982/QE865

Council of the European Union. (2021). *Taking forward the Strategic Agenda 18-month Programme of the Council (1 January 2022—30 June 2023).* https://swedishpresidency.consilium.europa.eu/en/programme/the-trio-programme/

Dagdeviren, H., Capucha, L., Calado, A., Donoghue, M., & Estêvão, P. (2020). Structural Foundations of Social Resilience. *Social Policy and Society*, *19*(4), 539–552. https://doi.org/10.1017/S1474746420000032

Daly, M. (2020). *Gender inequality and welfare states in Europe*. Edward Elgar Publishing. https://doi.org/10.4337/9781788111263

Desmond, M., & Western, B. (2018). Poverty in America: New Directions and Debates. *Annual Review of Sociology*, *44*(1), 305–318. https://doi.org/10.1146/annurev-soc-060116-053411

DiPrete, T. A., & Eirich, G. M. (2006). Cumulative Advantage as a Mechanism for Inequality: A Review of Theoretical and Empirical Developments. *Annual Review of Sociology*, *32*(1), 271–297. https://doi.org/10.1146/annurev.soc.32.061604.123127

Donoghue, M., & Edmiston, D. (2020). Gritty citizens? Exploring the logic and limits of resilience in UK social policy during times of socio-material insecurity. *Critical Social Policy*, 40(1), 7–29. https://doi.org/10.1177/0261018319825547

Dubois, H., Ludwinek, A., & European Foundation for the Improvement of Living and Working Conditions (Eds.). (2015). *Access to social benefits: Reducing non-take-up*. Publications Office of the European Commission [u.a.].

European Commission. (2013). *Commission Recommendation: Investing in children: Breaking the cycle of disadvantage* (No. (2013/112/EU)). https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013H0112

European Commission. (2020). 2020 Strategic Foresight Report: Charting the Course Towards a More Resilient Europe. Publications Office. https://data.europa.eu/doi/10.2873/58081



European Commission. (2023). *The future of social protection and of the welfare state in the EU*. Publications Office. https://data.europa.eu/doi/10.2767/35425

European Parliament, & Councial of the European Union. (2022). *DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the resilience of critical entities and repealing Council Directive* 2008/114/EC. https://data.consilium.europa.eu/doc/document/PE-51-2022-INIT/en/pdf

Frankenhuis, W. E., & Nettle, D. (2020). The Strengths of People in Poverty. *Current Directions in Psychological Science*, *29*(1), 16–21. https://doi.org/10.1177/0963721419881154

Gambaro, L., Stewart, K., & Waldfogel, J. (2015). *An equal start?: Providing quality early education and care for disadvantaged children*. Policy Press.

Green, A., & Livanos, I. (2017). Involuntary non-standard employment in Europe. *European Urban and Regional Studies*, *24*(2), 175–192. https://doi.org/10.1177/0969776415622257

Hall, P. A., & Lamont, M. (2013). Introduction. In P. A. Hall & M. Lamont (Eds.), *Social Resilience in the Neo-Liberal Era* (pp. 1–32). Cambridge University Press. https://doi.org/10.1017/CBO9781139542425.003

Heidenreich, M. (2015). The end of the honeymoon: The increasing differentiation of (long-term) unemployment risks in Europe. *Journal of European Social Policy*, *25*(4), 393–413. https://doi.org/10.1177/0958928715594544

High Representative of the Union for Foreign Affairs and Security Policy. (2017). *A Strategic Approach to Resilience in the EU's external action* (No. SWD(2017) 226 final). European Commission.

https://www.eeas.europa.eu/sites/default/files/join\_2017\_21\_f1\_communication\_from\_com mission\_to\_inst\_en\_v7\_p1\_916039.pdf

Hogendoorn, B., & Härkönen, J. (2023). Single Motherhood and Multigenerational CoresidenceinEurope.PopulationandDevelopmentReview,padr.12540.https://doi.org/10.1111/padr.12540

Iversen, T., & Soskice, D. W. (2019). *Democracy and prosperity: Reinventing capitalism through a turbulent century*. Princeton University Press.

Kalleberg, A. L. (2009). Precarious Work, Insecure Workers: Employment Relations in Transition. *American Sociological Review*, 74(1), 1–22. https://doi.org/10.1177/000312240907400101

Kitagawa, E. M. (1955). Components of a Difference Between Two Rates. *Journal of the American Statistical Association*, *50*(272), 28.

Latner, J. P. (2022). Temporary employment in Europe: Stagnating rates and rising risks. *European Societies*, 24(4), 383–408. https://doi.org/10.1080/14616696.2022.2072930

Leisering, L. (2006). Government and the Life Course. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the life course* (1. softcover print). Springer.

Lewis, J. (1992). Gender and the Development of Welfare Regimes. *Journal of European Social Policy*, *2*(3), 159–173. https://doi.org/10.1177/095892879200200301

Lohmann, H., & Marx, I. (2018). *Handbook on In-Work Poverty*. Edward Elgar Publishing. https://doi.org/10.4337/9781784715632

Masten, A. S. (1994). Resilience in Individual Development: Successful Adaptation Despite Risk and Adversity. In M. C. Wang & E. W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp. 3–25). L. Erlbaum Associates.

McLanahan, S., & Percheski, C. (2008). Family Structure and the Reproduction of Inequalities.AnnualReviewofSociology,34(1),257–276.https://doi.org/10.1146/annurev.soc.34.040507.134549

Merton, R. K. (1988). The Matthew Effect in Science, II: Cumulative Advantage and the Symbolism of Intellectual Property. *Isis*, *79*(4), 606–623. https://doi.org/10.1086/354848

Minas, R., Korpi, T., & Andersson, L. (2025). Complementary policy fields in action: Local policies targeted at multi-problem NEETs. *Journal of European Social Policy*, 09589287251331575. https://doi.org/10.1177/09589287251331575

Mohaupt, S. (2009). Review Article: Resilience and Social Exclusion. *Social Policy and Society*, 8(1), 63–71. https://doi.org/10.1017/S1474746408004594

Moullin, S., & Harkness, S. (2021). The Single Motherhood Penalty as a Gender Penalty: Comment on Brady, Finnigan, and Hübgen. *American Journal of Sociology*, *127*(2), 621–636. https://doi.org/10.1086/717886

Nelson, K. (2013). Social Assistance and EU Poverty Thresholds 1990-2008. Are European Welfare Systems Providing Just and Fair Protection Against Low Income? *European Sociological Review*, *29*(2), 386–401. https://doi.org/10.1093/esr/jcr080

Oaxaca, R. (1973). Male-Female Wage Differentials in Urban Labor Markets. *Internatinoal Economic Review*, *14*(3), 693–709.

O'Brien, M., Connolly, S., Aldrich, M., Ward, K., & Uzunalioglu, M. (2020). *Eligibility for Parental Leave in EU Member States* (p. 34). EIGE.

Olsson, L., Jerneck, A., Thoren, H., Persson, J., & O'Byrne, D. (2015). Why resilience is unappealing to social science: Theoretical and empirical investigations of the scientific use of resilience. *Science Advances*, 1(4), e1400217. https://doi.org/10.1126/sciadv.1400217

Rueda, D. (2005). Insider–Outsider Politics in Industrialized Democracies: The Challenge to Social Democratic Parties. *American Political Science Review*, *99*(1), 61–74. https://doi.org/10.1017/S000305540505149X

Schoon, I. (2009). Risk and resilience: Definitions. In *Risk and Resilience: Adaptations in Changing Times* (pp. 5–17). Cambridge University Press. https://doi.org/10.1017/CB09780511490132

Taylor-Gooby, P. (2005). New Risks, New Welfare: The Transformation of the European Welfare State. In *New Risks, New Welfare: The Transformation of the European Welfare State*. Oxford University Press; edselc. https://doi.org/10.1093/019926726X.001.0001

Taylor-Gooby, P., Leruth, B., & Chung, H. (Eds.). (2017). *After austerity: Welfare state transformation in Europe after the Great Recession* (First edition). Oxford University Press.

Tilly, C. (2009). Durable inequality (Nachdr.). Univ. of California Press.

Tomaskovic-Devey, D., & Avent-Holt, D. R. (2019). *Relational inequalities: An organizational approach*. Oxford University Press.

Van Lancker, W. (2023). The Matthew Effect in Early Childhood Education and Care: How Family Policies May Amplify Inequalities. In M. Daly, B. Pfau-Effinger, N. Gilbert, & D. J. Besharov (Eds.), *The Oxford Handbook of Family Policy Over The Life Course* (p. 0). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780197518151.013.36

Van Vugt, L. L. J., Golsteyn, B. H. H., Levels, M., & Nieuwenhuis, R. (2025). The effect of public childcare on the risk that mothers become NEET. *Community, Work & Family*, 1–20. https://doi.org/10.1080/13668803.2025.2486123

Verbist, G., Diris, R., & Vandenbroucke, F. (2020). Solidarity between Generations in Extended Families: Old-Age Income as a Way Out of Child Poverty? *European Sociological Review*, *36*(2), 317–332. https://doi.org/10.1093/esr/jcz052

Verloo, M. (2006). Multiple Inequalities, Intersectionality and the European Union. *European Journal of Women's Studies*, *13*(3), 211–228. https://doi.org/10.1177/1350506806065753

Widmer, E. D. (2010). *Family configurations: A structural approach to family diversity*. Ashgate.

Wildavsky, A. B. (with Bowling Green State University). (1988). *Searching for safety*. Transaction Books.

Wolff, J., & De-Shalit, A. (2007). *Disadvantage*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199278268.001.0001

Yerkes, M. A., Nelson, K., & Nieuwenhuis, R. (2022). Where to from here? Social policy research in future European societies. In K. Nelson, R. Nieuwenhuis, & M. A. Yerkes (Eds.), *Social policy in changing European societies: Research agendas for the 21st century*. Edward Elgar Publishing.

Zagel, H., & Van Lancker, W. (2022). Family policies' long-term effects on poverty: A comparative analysis of single and partnered mothers. *Journal of European Social Policy*, 095892872110356. https://doi.org/10.1177/09589287211035690





### reusilience.eu



This project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement No Project 101060410 and Innovate UK, the UK's Innovation Agency. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or Innovate UK.

#### **Consortium Members**



Contact

Rense Nieuwenhuis, Stockholm University

rense.nieuwenhuis@sofi.su.se