

# REPORT

## Resilience in policy design: What makes policies resilience- enhancing?

January 2024

Arnstein Aassve  
Elena Bastianelli



Towards a Resilient Future of Europe

Document History		
Version	Date	Comments
1.0	31Jan2024	



**Funded by  
the European Union**

Grant Agreement n° 101094741

The FutuRes project has received funding from the European Union’s Horizon 2022 Research and Innovation Programme under Grant Agreement No 101094741.

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

# TABLE OF CONTENTS

**INTRODUCTION ..... 3**

**DEFINING RESILIENCE ..... 4**

**THEORETICAL FRAMEWORK: WHAT MAKES INDIVIDUALS RESILIENT?..... 6**

ECONOMIC, HUMAN AND SOCIAL CAPITAL..... 7

THE ROLE OF INSTITUTIONS ..... 9

**CASE STUDY: DETERMINANTS OF RESILIENCE DURING THE COVID-19 PANDEMIC..... 11**

**EXPERTS’ OPINIONS: INSIGHTS FROM THE FUTURES POLICY LAB ..... 14**

HIGH-LEVEL EXPERT WORKSHOP ..... 14

PUBLIC PANEL DISCUSSION: *WORK BETTER TO WORK LONGER?*..... 17

**CONCLUSIONS ..... 20**

**REFERENCES ..... 23**

# ***Resilience in policy design: What makes policies resilience-enhancing?***

## **Introduction**

Over the last two decades, industrialized nations have faced a series of crises, ranging from economic downturns, like the Great Recession, to the COVID-19 pandemic. These events have brought to light the vulnerability of western societies, prompting discussions among politicians, policymakers, and commentators regarding the urgent need to strengthen the resilience of individuals and societies (Anderson, 2015; Berkes, 2007; Duit et al., 2010; Saja et al., 2021).

Indeed, structural transitions, encompassing technological advancements, shifts in the labor market, globalization, and climate change, have presented a host of challenges, as job displacement, reduced socio-economic mobility, escalating inequality, population aging, and heightened political polarization. Furthermore, the increasing interconnectedness of societies and economic systems has heightened vulnerability to crises that can transcend geographical, cultural, infrastructural, administrative, and policy boundaries (Ansell et al., 2010; Goldin & Mariathasan, 2014). Altogether, these transformations have introduced an unprecedented level of uncertainty for societies and citizens, paving the way for new, intricate crisis threats. In response to these trends, policymakers and scholars are advocating for a shift beyond focusing solely on prevention and anticipation toward enhancing societal resilience (Aldrich, 2011; Duit, 2016).

Strengthening the resilience of member states' institutions and citizens has become a priority in the European Union. Indeed, to address the negative social and economic consequences of the COVID-19 pandemic, in February 2021 the European Commission established the Recovery and Resilience Facility (RRF), with the primary objective to assist member states in implementing ambitious reforms and investments to enhance the resilience of their economies and societies. This financial initiative, totaling over 700 billion Euros, constitutes approximately 90% of the European Union's recovery plan, NextGenerationEU, and is around five times the ordinary annual budget of the EU (Bekker, 2021; De La Porte & Jensen, 2021; Vanhercke & Verdun, 2022). Additionally, since 2021, the European Commission monitors the resilience of EU member states through resilience dashboards aimed at capturing vulnerabilities and capacities to cope with crises and

structural transitions (European Commission, 2023, 2021). The regulatory framework establishing the Recovery and Resilience Facility (Regulation (EU) 2021/241 of the European Parliament and of The Council of 12 February 2021) defines resilience as "*the ability to face economic, social, and environmental shocks or persistent structural changes in a fair, sustainable, and inclusive way*", emphasizing the centrality of the social dimension of resilience in European policymaking.

Yet, it remains unclear how to make policies effective in increasing individual and societal resilience. Thus, this report delves into the transformative potential of policies to enhance resilience. Our exploration begins by establishing a conceptual framework for resilience at both individual and institutional levels, specifically tailored for effective policy-making (Section 3). Clearly, in order to understand how policies can increase resilience, the first fundamental issue is to uncover the factors which make individuals more resilient to shocks. We adopt a perspective that conceptualizes resilience through an individual's life-course capitals, including human, social, economic, and institutional capitals. This allows for empirical testing of determinants at the individual level, with insights applicable to policymaking (Olsson et al., 2015). Building on this framework, in Section 4 are briefly presented the main findings of our case study. For this empirical analysis the shock posed by the COVID-19 pandemic is leveraged to assess individual and institutional factors contributing to individuals' resilience. Finally, in Section 6, are shared expert opinions and insights gathered from the High-level expert workshop and the Public Panel Discussion "Work better to work longer?" of the FutuRes Policy Lab, shedding light on the attributes that render policies resilience-enhancing, particularly focusing on the future of work. This comprehensive approach contributes to a nuanced understanding on resilience in policy design.

## Defining resilience

The word resilience originates from the Latin verb *resilire*, or to leap back. It is defined by English dictionaries as "the ability of a substance to return to its usual shape after being bent, stretched, or pressed" and, when referred to humans, as "*an ability to recover from or adjust easily to misfortune or change*" or being "*able to withstand or recover quickly from difficult conditions*" (Oxford English Dictionary, 2023; Collins Dictionary, 2023).

The concept of resilience has been employed in different disciplines with slightly diverse interpretations. The main substantial difference is that while in fields such as engineering and physics resilience refers to the ability to be robust and maintain stability (Alessi et al., 2020; Angeler & Allen, 2016; Duval et al., 2007), in disciplines such as psychology, social ecology, and social science, it empathizes the capacity of an individual or a system to adapt to a disturbance, also by changing the way it functions (Hoffman & Hancock, 2017; Walker, 2020). Thus, from these perspectives, resilience is not only about being persistent or robust to disturbance, but it is also about changing and adapting to that disturbance, through evolution and renewal. In some circumstances, stability (or failure to change) could, in fact, point to lack of resilience (Matzenberger, 2013; Norris et al., 2008). With this acceptance, resilience has also been defined as adaptive resilience or adaptive capacity (Angeler & Allen, 2016; Hoffman & Hancock, 2017), a dynamic process allowing for continuous development, an adaptive interplay between sustaining and developing with change (Folke, 2006). Thus, learning is a key element of resilience, to be able to better cope with a similar disturbance in the future (Matzenberger, 2013; Walker, 2020).

The resilience literature can be divided into two main levels of analysis: examining entire systems or focusing on individual actors within those systems. System-level resilience refers to a system's ability to withstand disturbance without shifting from desirable to undesirable stability domains. Social-ecology identifies seven key attributes contributing to a system's resilience: response diversity, exposure to disturbances, connectedness, responsiveness, readiness to transform, interaction between levels, and guidance over steering (Walker, 2020). Similarly, public administration identifies capacities such as social learning, knowledge sharing, stakeholder participation, multilevel governance, policy experiments, bridging organizations, leadership, and sense-making, to enhance the resilience of governing systems by increasing organizational, cultural, and institutional response diversity to cope with unexpected shocks (Christensen & Gazley, 2008).

At the micro-level, resilience has been applied to the study of individuals mostly in the field of psychology. Psychological resilience emphasizes the role of resilience as an attribute that allows individuals to make positive adaptations in response to major adversity (Bonanno, 2004; Fletcher & Sarkar, 2013; Luthar & Cicchetti, 2000). Importantly, there is an extensive debate on whether resilience is an inherent psychological trait or whether it develops according to contextual characteristics and over time. Most studies, however, tend to conceptualize it as a process (Atkinson et al., 2009; Fletcher & Sarkar, 2013; Leys

et al., 2020; Luthar & Cicchetti, 2000), by acknowledging that the role of protective factors may vary both contextually, from situation to situation, and over time, throughout a situation, and across an individuals' life-courses (Kwok et al., 2016; Rutter, 2000; Windle, 2011).

Social sciences posit that individual's traits and life chances and are strongly shaped by the context in which they are embedded (Beckert, 1996). Therefore, resilience is seen as an individual trait evolving in the active interaction with the social context, thus integrating the psychological and ecological perspectives (Ungar, 2012; Ungar et al., 2013). This interplay between psychological and ecological resilience is crucial to gain a more comprehensive understanding of resilience for policy-making. Indeed, from this perspective, whether a risk or a shock leads to negative outcomes is dependent on intervening forces at the levels of the individual, significant others, social contexts, and the mitigating role of welfare state policies and institutions (Shanahan et al., 2016). In sum, an individual's resilience is a complex construct of personal traits and accessible resources.

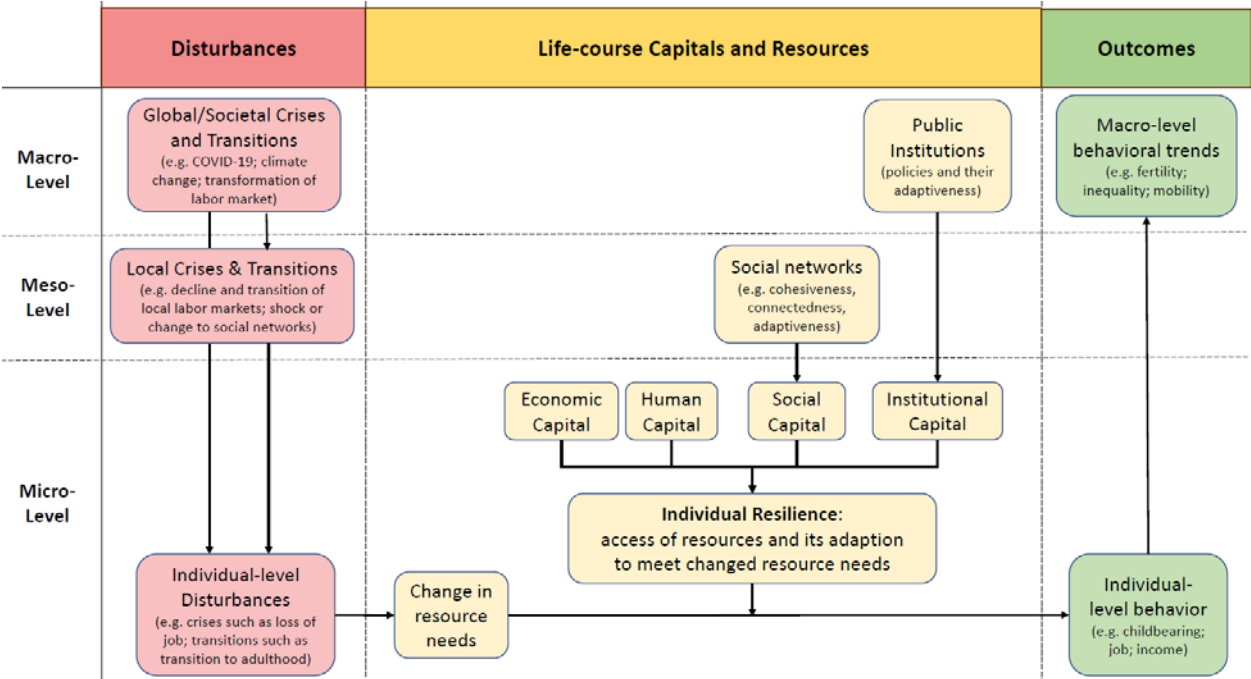
### **Theoretical Framework: What makes individuals resilient?**

Drawing on existent definitions of resilience, our multilevel theoretical framework conceptualizes resilience on the individual level, while explicitly considering the roles of meso- and macro-level factors. Thus, individual's resilience is defined as the ability to maintain desired *outcomes* by accessing *resources* through various *life course capitals* in order to meet changing resource needs or cope with reduced resources when facing *disturbances*. *Disturbances* for an individual can come from societal-level crises (the COVID-19 pandemic being the most recent example) but also from long-lasting structural changes (e.g. technological change and globalization), which can eventually materialize on the individual level as sudden crises (e.g. job loss) or as increased uncertainty and economic and social difficulties. *Resources* in various forms (e.g. money, time, information, mental support) can be accessed through different forms of *life-course capitals* including individual's economic, human, and social capital, welfare support, and services from public institutions. In times of crises or change, resource access can be lost and needs can change (e.g. lost income due to unemployment which needs to be compensated; information on new job opportunities; skill-adaption; mental support). The endowment of

different life-course capitals to access resources will thus be determinants for an individual’s resilience (e.g. own economic assets to be used as income compensation or for additional education and skill-adaption; social network to access information on job opportunities and mental support; or public institutions to access unemployment support).

Figure 1 illustrates the main features of this conceptualization. The framework splits the resilience process into three parts, disturbances, life-course capitals and resources, and behavioral outcomes (sorted by column and highlighted in red, yellow, and green), and in three level of analysis, macro, meso, and micro.

**Figure 1: determinants of resilience for individuals**



**Economic, human and social capital**

Individual resources, or “capitals” may serve to prevent, buffer, or positively respond, to the negative consequences of unexpected shocks.

**Economic capital.** First of all, the access to material and financial resources, i.e. the available *economic capital*, may be crucial. Economic capital includes all material resources, such as income and possessions, essential for covering basic needs, as shelter, food, health, security, and safety (Norris et al., 2008). An unexpected disturbance or crisis, as for instance, unemployment, divorce, sickness, a global financial crisis or a pandemic, may suddenly change or increase basic needs. Clearly, a higher economic capital provides



individuals with more financial assets to satisfy their needs also in face of unexpected shocks, increasing their resilience capabilities (Ferrer-i-Carbonell, 2005; Reeskens & Vandecasteele, 2017). Indeed, post-disaster research has shown that individuals with lower socio-economic status generally experience more adverse psychological consequences than those with higher socio-economic status (Norris et al. 2002). Similarly, studies on child and youth development have shown that those who have access to basic necessities typically demonstrate more resilience than those who have limited access to these resources (Ungar et al., 2019).

**Human capital.** The resilience of individuals is as well closely tied to their *human capital*, encompassing knowledge, skills, and experience (Anuradha et al., 2021). Human capital plays a crucial role in enabling individuals to reorganize, adapt to change, and learn, thereby enhancing their ability to cope with and recover from the impacts of unexpected crises or disasters (Liu et al., 2022). Moreover, individuals with higher human capital are better equipped to gather and interpret accurate information, reducing uncertainty and facilitating the management of life-transitions, such as relocating to a new city or starting a family, by adapting and learning within new environments (Liu et al., 2022). Nevertheless, human capital is pivotal in acquiring economic capital (Bourdieu, 1986). The conversion of human capital into economic capital becomes especially relevant during crises that directly impact economic capital while human capital remains relatively stable (Guiteras et al., 2015). Additionally, economic capital can be transformed into human capital, for example, through investments in education or skill training, or by acquiring better resources. This human capital, in turn, can be converted back into economic capital in the labor market, leading to a cyclical accumulation and reproduction of life-course capitals (Bourdieu, 1986). This accumulation significantly contributes to an individual's resilience, creating substantial differences in resilience levels among individuals.

**Social capital.** *Social capital*, defined as resources linked to a durable network of relationships (Bourdieu, 1985), plays a crucial role in resilience. Despite being dependent on the meso-level social network within which an individual is embedded, social capital is seen as a micro-level resource owned by individuals. Social capital includes two fundamental aspects, one structural of the social connections, and the other more cognitive, referring to subjective forms of exchange of social support (Blanchard and Horan, 1998). The mobilization of social capital can make people more resilient in several ways. On the one hand, bonding networks have been found to help those more deprived to

“get by” or “get ahead” by mobilizing resources or bridging networks (Narayan, 2002). On the other, social support provides individuals with assistance and social relationships perceived to be loving, caring, and readily available in times of need (Barrera, 1986; Norris et al., 2008). Moreover, high social support has been found to increase self-confidence, decrease the likelihood of engaging in risky behaviors, improve access to health care, and foster more effective coping strategies, such as active problem solving (Sippel et al., 2015). Altogether, the material and immaterial support provided by social capital may help buffer the stress associated with the difficult situation in question. Several empirical studies have highlighted the crucial role of social capital for resilience. For instance, larger social network and a higher quality of relationship with spouse, have been shown to predict fewer depressive symptoms and greater life satisfaction for old adults despite experiencing a significant number of adversities (Fuller-Iglesias et al., 2008). For children and youth, supportive and meaningful relationships with friends, family, teachers, and community members have been proved to provide important support during times of stress. Moreover, social connectedness has been found to buffer the negative well-being effects of financial stress (Richards, 2016), and to be linked to better health outcomes (Ferlander, 2007). Social capital can also convert into economic or human capital (Bourdieu, 1986; Coleman, 1988), influencing job searches and educational choices (Granovetter, 1973; Jackson, 2019). Similarly, economic and human capital can contribute to social capital. Socio-economically disadvantaged individuals may face challenges in building social networks due to lower affordability and potential exclusion from interactions beyond their socio-economic status (Weyers et al., 2008; Andres et al., 1995; Böhnke and Link, 2017; Hradil, 2001).

### **The role of institutions**

Institutions and policies play a crucial role in enhancing individuals' resilience through various avenues. We contend that institutions can contribute to individuals' resilience by providing institutional capital. This involves not only buffering the consequences of unexpected shocks but also endowing individuals with the essential economic, human, and social capitals through strategic social investment policies. Moreover, institutions themselves can become more resilient and efficient, further contributing to overall societal resilience.

**Institutional capital.** We term *institutional capital*, an individual's potential to access resources via public institutions. Indeed, institutions may in part prevent from adverse life events, but also mitigate from their negative consequences (DiPrete, 2002).

*Risk management.* Welfare states may directly support or compensate for the lack of specific capitals, for instance through unemployment benefits, or the provision of public services (Manca et al., 2017). Indeed, welfare systems are often defined “social safety net” for their nature of buffering social shocks (Jones et al., 2006). Leisering (2003) conceptualized risk management as a fundamental and distinct part of welfare states’ agency, comprising all measures of social assistance, social insurance, and social services meant to bridge life’s discontinuities and transitions. Risk management provisions and instruments mainly concern to risky events in a short-term perspective, e.g. unemployment benefits, but also regards the extent to which institutions and policies facilitate the opportunity for rapid recovery from adversity by “counter-mobility events” such as, for instance, reemployment after unemployment, or remarriage after family dissolution (DiPrete, 2002; Shanahan et al., 2016). Welfare regimes have been found to differ considerably in the risks they give priority to, and the way they protect from the incidence of risky life events, buffer their negative consequences, and balance prevention and mitigation (DiPrete 2002; Hofäcker et al. 2010). Moreover, risk management is said to “shape the expectations of the citizens and thus secure the unity of the life course as a whole” Leisering, 2003; Shanahan et al., 2016). Consequently, individuals in different countries and welfare systems may harbor distinct expectations and perceptions of security, influencing their capabilities for resilience. Evidence stemming from the Great Recession suggests that active and generous welfare states, particularly those in north-western Europe, were most successful in mitigating the impacts of the financial crisis. In contrast, welfare states in southern Europe, especially Greece and Italy, demonstrated less proficiency (Hemerijck & Huguenot-Noël, 2022). In line with these findings, a study examining country-level resilience to economic crises reported a strict correlation with social expenditure (Alessi et al., 2020).

*Social investment.* However, relying solely on risk management and short-term risk buffer strategies is insufficient for fostering individual resilience. Examining events like the Great Recession and the COVID-19 pandemic underscores the crucial role of the welfare state in strengthening economic resilience, particularly when it focuses on human capacity building and societal inclusiveness (Hemerijck & Huguenot-Noël, 2022). This implies that the

welfare state should not only engage in redistributive support but also participate in "social investment across the life cycle" to help individuals build or adapt various life-course capitals and creating equal opportunities (Hemerijck & Huguenot-Noël, 2022). Indeed, institutions may help individuals to achieve the necessary economic, human, and social capitals, for instance, by facilitating hiring processes with labor market reforms, increasing access to education through open educational policies, or facilitating social relations endorsing public social spaces.

**Resilience of institutions.** Furthermore, the resilience of a welfare state goes beyond the mere pooling of resources for future-oriented human capital development. The effectiveness of spending becomes crucial, considering that an individual's institutional capital benefits not only from the direct (benefits and services) but also the indirect (capital-building) support provided by the welfare system. The success of a government lies in the adaptability of its governance, encompassing the design and implementation of policies tailored to citizens' needs during disturbances. This adaptability directly impacts the resilience of public institutions. Therefore, conducting effective needs assessments and meticulously monitoring the requirements of individuals, including their economic, human, and social capitals, becomes fundamental in shaping the adaptive strategies of policies (Manca et al., 2017).

### **Case study: determinants of resilience during the Covid-19 pandemic**

In this section are briefly presented the key findings from our empirical analysis on the factors influencing resilience during the Covid-19 pandemic. The analysis delves into the multi-dimensional, multi-level, and interactive aspects of individual resilience, examining the varying significance of potential determinants and their interaction effects. This comprehensive approach aims to provide valuable insights for governments seeking to implement policies that effectively target diverse determinants.

Our empirical investigation focuses on citizens across the European Union throughout the COVID-19 pandemic, a period marked by significant societal upheaval and individual-level disturbances. The pandemic, aside from being a health emergency, triggered disruptions to individuals' economic and social lives due to factors such as income loss, job insecurity, and the interruption of social support networks. To address these disruptions, health-related and economic support policies were implemented. However, the impact of the

pandemic varied among individuals, partly due to differing policy responses across countries, with implications and responses evolving over the pandemic waves (Plach et al., 2023). In addition to the usual disparities in life-course capitals among individuals, the pandemic introduced substantial variations in economic, social, and institutional factors not only between countries and individuals but also within individuals over time. Consequently, this unique shock serves as an ideal setting to explore how variations in potential determinants are associated with differences in individual resilience. Preliminary evidence, derived from studies on diverse pandemic-related outcomes, suggests considerable heterogeneity in how disruptions manifested in behavior across societal groups and countries (Plach et al., 2023; Toffolutti et al., 2022). These studies highlight the substantial variation in resilience across countries, citizens, and time, emphasizing the need to understand and address the intricate interplay of economic, social, and institutional determinants in shaping individual resilience during unprecedented challenges like the COVID-19 pandemic.

**Data and methods.** To leverage the variation between countries, between individuals, and within individuals over time we employ panel data of 52,377 observations from 21,711 individuals in 23 countries from the Living, Working, COVID-19 (LWC) survey collected by Eurofound in five survey waves throughout the COVID-19 pandemic (Eurofound, 2022; Eurofound-ETF, 2022). The survey is unique as it includes a measure of individual resilience in a context of a major crisis. Furthermore, it provides a longitudinal and comparative perspective across a substantial number of countries. In alignment with insights from the psychology literature, our measurement of resilience relies on an index composed of two items: the ability to return to normalcy after a crisis and the capacity to navigate and address challenges. These items are drawn from validated and widely recognized scales such as the CD-RISC scales (Kuiper et al., 2019; Campbell-Sills and Stein, 2007; Vaishnavi et al., 2007; Connor and Davidson, 2003).

Besides this resilience measure, the LWC survey also includes several measures for individuals' life-course capitals: financial arrears, savings, and housing insecurity reflecting economic capital; educational level and health reflecting human capital; and social inclusion reflecting social capital. To measure institutional capital, we complement our data set with country-year-level data on public social expenditure per head at constant purchasing power parity (OECD, 2022) and government effectiveness – an index around the quality of public and civil service and of policy formulation and implementation and the

commitment to such policies (Kaufmann and Kraay, 2023; Kaufmann et al., 2011). We incorporate these two variables—public support and government effectiveness—in our analysis, contending that public support primarily mirrors how citizens' resilience may be enhanced through public institutions. In contrast, government effectiveness is more focused on the resilience of public institutions themselves, potentially playing a pivotal role in determining the extent to which citizens' resilience benefits from the allocated funds for welfare support.

Our empirical model encompasses these six measures of life-course capitals along with their interaction terms. To ensure robustness, we account for individual random-effects, control variables for age and gender, and country-group fixed-effects. The inclusion of country-group fixed-effects sheds light on significant variations in resilience among different welfare regimes, offering valuable insights into the distinctive characteristics of resilience across these groups.

**Main findings.** In a first descriptive analysis, we observed a trend of decreasing resilience across survey waves, reaching its lowest point in winter 2021. When examining country-groups that reflect different welfare regimes, we found that Southern Europe, Eastern Europe, and the Baltic countries exhibited lower resilience, while the Anglo-Saxon countries, Northern, Western, and Central Europe demonstrated higher levels of resilience. In our primary analysis, employing a diverse set of models, we observed results consistent with our expectations. All eight life-course capital variables displayed robust and positive associations with an individual's resilience. Within the realm of economic capital, factors such as economic liquidity, wealth, and insecurity proved relevant contributors to an individual's resilience. Additionally, both education and health, with the latter exhibiting the second-largest impact, emerged as significant determinants. Notably, social inclusion, despite measuring social capital at an extreme end, appeared to be a relatively more influential determinant. Turning to institutional capital, both the extent of public social spending and the government's effectiveness in allocating these funds appropriately exhibited positive associations with individual resilience. These associations held relatively consistently across different country-groups.

While the eight life-course capital variables explained substantial portions of the variation at the country-group and country levels, some differences persisted. This suggests that our measures may not perfectly encapsulate all theoretical constructs, leaving room for certain aspects of resilience to be potentially omitted. Consequently, this underscores the need

for future research efforts to delve deeper into these nuances and refine our understanding of resilience and its determinants.

### **Experts' opinions: insights from the FutuRes Policy Lab**

On 27 June 2023, the first event of the FutuRes Policy Lab took place online in the form of a High-Level Expert Workshop followed by a Public Panel Discussion. Each were attended by over 100 participants from different organizations and sectors. The event served to support FutuRes' "agenda-setting", as the project's research program gets started.

Participants from science, politics and civil society discussed factors for building societal "resilience" in Europe at the first FutuRes Policy Lab meeting. Their core takeaways:

- *Institutional and global aspects of resilience.* It is critical for research and policy to consider not only individual, but institutional resilience. This includes sustaining resilience outside Europe's borders.
- *Well-being.* Framing healthcare and labor policies around individual well-being has the potential to increase resilience of societies.
- *Inclusivity.* Because populations are diverse, factors of resilience are not the same for everyone – policies that build resilience must be inclusive.

Given low fertility and increased longevity, as well as enduring and inevitable future crises, whether related to public health, climate change or economic inflation, Europe needs to build individual and societal resilience. Policy agendas must therefore integrate research on how the diverse compositions of societies (by age, family arrangement, education, health and other demographic characteristics) impact economic security, well-being, social support and health care systems, and the labor force.

#### **High-level expert workshop**

The workshop started with seven eminent experts from selected policy sectors giving insights on their work related to resilience and aging societies. This was followed by focused discussions with all of the workshop participants in four break-out rooms. These were hosted by lead FutuRes researchers and focused on the sub-themes of the project: migration, fertility/childbearing, aging, and addressing resilience from the "life course approach".

## ***Experts***

Speakers: *Damian Boeselager* (Member of European Parliament); *Deša Srsen* (Cabinet of the European Commission's Vice-President); *Anna Kwiatkiewicz* (Senior Advisor, Business Europe); *Philip Haywood* (Policy Analyst and Senior Health Economist, OECD); *Marina Manke* (Chief of the Global Migration Data Analysis Centre, International Organization for Migration); *Holly Shorey* (Policy and Advocacy Officer, COFACE Families Europe); *Arnstein Aassve* (Principle Investigator, FutuRes Project).

Hosts of break-out rooms:

- a) Life-course approach: *Arnstein Aassve* (Professor in Demography, Bocconi University and Principle Investigator of the FutuRes Project)
- b) Fertility/childbearing: *Agnieszka Chłoń-Domińczak* (Director of the Institute of Statistics and Demography at WSE, Warsaw)
- c) Ageing: *Alexia Fürnkranz-Prskawetz* (Professor of Mathematical Economics, TU Vienna)
- d) Migration: *Jakub Bijak* (Professor of Statistical Demography, University of Southampton)

## ***Building on the concept of resilience***

- There are core foundations of resilience beyond individual psychological aspects. Resilience relates to the ability of people to exercise their rights and agency, as well as the capability of individuals and institutions to swiftly adjust to new realities.
- There are different levels of resilience and they are interdependent: individual choices, communities/families' resourcefulness and political/policy frameworks and decisions (i.e. a micro, meso and macro levels).

## ***Identified policy challenges:***

- *Long term-planning.* Even if it is easy to support “resilience-building” in theory, it is difficult to get political commitment because resilience implies long-term planning and resource allocation. Politicians must design mechanisms whereby long-term challenges feature on the political agenda.



- *Uncertainty.* The key challenge lies in the uncertainty of what types of crises we will encounter in the future, and for which we will need resilience. Still, there is a growing recognition in population research of the digital and green transitions that the concept of resilience must feature prominently.
- *Heterogenous societies.* Our societies are ageing not only in uncertain times, but also in very different economic, environmental, demographic and social situations compared across time and geography.

***Possible actions:***

Families and housing

- *Straighten families' resilience.* Families are an important and undervalued unit for resilience building. We need policies that complement the ability of families to combine both their risks and resources. Housing is also an important and related issue to resilience of individuals and families and this needs more attention.

Labor market and migrations

- *Encourage labor flexibility.* There are already acute labor shortages in different sectors in Europe. To encourage people to stay active in the work force for longer, we need to encourage more flexibility and intergenerational teams in work environments – both of these are important components for resilience in ageing societies.
- *A global approach to resilience.* When we think about resilience, we need to think not just about Europe alone. For example, making European health systems “resilient” by recruiting medical professionals from other regions may result in adverse effects on the resilience of the places where those doctors are coming from – we need to take a global approach.
- *Labor migrants.* Migration is not a long-term solution to structural labor market challenges posed by population ageing – resilient social security policies cannot simply rely on an ever-increasing number of immigrants to fill the skills and labor shortages. Resilient policy design must consider that migration can result in difficult-to-predict demographic changes in the short-term, in part because it interacts with many other processes, such as technological developments, job automation, and others.

- *Migrants' integration.* The recruitment of migrants from around the world to fill labor shortages will remain on the economic agenda in the foreseeable future. There must be inclusive policies that contribute to migrants' well-being and that give them the chance to feel at home and supported, for example, by having feasible opportunities to migrate with their families.

#### Health systems

- *People well-being.* The key to resilient health care systems is to start from an “individual/patient well-being perspective” instead of an economic/system perspective. This means we need policies, resources and institutional structures with the goal of increasing people's well-being first.
- *Prevention.* Preventive health care should be a priority for policies designed to enhance resilience.
- *Data collection and availability.* New frameworks, such as considering individual well-being and resilience in policy making, requires data and relevant information to reliability assess and to evaluate how things are working.

#### **Public Panel Discussion: *Work better to work longer?***

The public panel discussion specifically focused on the future of work and retirement in facing an increasingly aging population. Indeed, as the baby boomer generation retires, European pension systems are facing a crisis. Countries such as Germany and France have responded by raising the age of retirement. This expectation to work until an older age has been met with frustration by many. The premise of this panel was, is “how long should we work?” the right question? What if the question was “how can we work better, now?” In this online panel, five experts reflected on strategies for the future of work.

#### Speakers

Beatrice Covassi (Member of the European Parliament)

Jutta Allmendinger (President of the WZB Berlin Social Science Center)

Massimiliano Mascherini (Head of the Social Policy Department at Eurofound)

Ulrich Becker (Director of the Max Planck Institute for Social Law and Social Policy)

Arnstein Aassve (Professor in Demography at Bocconi University and Principle Investigator of the FutuRes Project)

## *Retirement age and quality of work*

There are ways to “fix” the pension dilemma besides raising the age of retirement, especially as few people are happily convinced by the economic argument to simply work for longer. Research shows that people’s decisions to stay in the labor force depend on factors such as their health, care responsibilities, work conditions and social networks. In the following are reported some crucial points identified by the speakers.

*"Let's think beyond retirement age!"*

- *Flexibility.* Increasing flexibility (such as the number of hours worked and optional periods of leave) are relatively “easy” policy fixes that could encourage more people to stay in the labor force longer.
- *Quality of work.* If we explore how to re-organize work lives to be compatible with well-being, this will in turn increase the resilience of individuals and societies. In other words, the quality of work (including support systems) should improve regardless of having to work longer.
- *Life-long learning.* Re-training at any age must become a feasible possibility socially and economically, and thus receive more commitment and investment from governments. This means that people should have the option (and even incentives) to leave their jobs and to start education for new professions throughout their lives. Older people who lose or can’t continue their jobs need particular support to re-enter the job market, as it tends to exclude older people. For example, research shows that increasing flexibility and care for women going through menopause, could help keep more women in the work force longer.
- *Coordinated policy strategies.* More attention could also be paid to coordinating policies and strategies. For example, matching labor skills gaps with education and migration policies. To illustrate: if there is a need to hire care professionals from other countries, then there needs to be sufficient housing available, and therefore, having sufficient skills and labor in the construction sector must also be considered.
- *Transparency and agency.* When it comes to retirement, people’s options should be transparent, predictable and flexible – i.e. in Norway one can use an online platform to see their projected pension based on their salary and their preferred number of years of working. This gives people agency to make decisions for their future.

- *Flexible retirement age.* In general, countries should move away fixed ages of retirement - just as there is no fixed age to enter the job market, there shouldn't be a fixed age to leave!

### ***Challenges and inequalities***

*"In looking at new models of work, we can't leave people behind"*

- *Perpetuation of inequalities in later life.* Research demonstrates how inequalities continue into retirement age and the end of life (i.e., people with lower education, have lower pensions and shorter average life spans). For example, it should be expected that people who work in manual labor jobs may not want to stay in their positions as long as people in the "knowledge economy". Yet, people who work in manual labor jobs typically often make lower salaries, and if they also leave their jobs earlier, they will receive lower pensions, and thus inequalities later in life are increased and perpetuate. This also applies for women, who still take on the majority of unpaid labor.
- *Flexible and fair retirement arrangements.* To counter persistent societal inequalities, there needs to be more recognition and compensation for unpaid and different types of labor, with one strategy being through offering more flexible and fair retirement arrangements. Other options could be through financial redistribution through pension systems and adjusting retirement options to different types of labor.
- *Tele-work.* EuroFound estimates suggest that 38% of current jobs in Europe could become "tele-working" positions, but these jobs predominately require high education levels and are higher paying. There are also geographic disparities in terms of where these jobs exist, so it is important not to forget when designing the "future of work" that the majority of people (and jobs) remain attached to certain places.
- *Digitalization and digital divide.* Relatedly, there is a continued need to assess how technology will impact jobs, thus bringing together the "green and digital transitions". Planning and mitigating the "digital divide" and those who are at risk of (or already have been) left behind by increasing digitalization is also critical.
- *Intergenerational divide.* Policy must consider the impacts of the divergence between the wages of young people (those just starting jobs) and older (more

senior) workers. If the starting salary for a job is radically lower than those who are more senior, then this could impact intergenerational solidarity, emigration aspirations, and more generally, the resilience of the labor market.

- There is a prejudice that older workers are “crowding out” younger people in the job market, but data show that in countries with more young people in the job market, there are also more older people working (meaning there is more labor market participation overall).

## Conclusions

This report investigates the integration of resilience into policy design, elucidating how policies can effectively foster resilience. We begin by establishing a theoretical framework that delineates the foundations of individual resilience. Subsequently, we present empirical insights derived from a case study, shedding light on the elements that rendered individuals more resilient in the face of the challenges posed by the Covid-19 pandemic. Our focus is on identifying tangible strategies and factors that proved instrumental in enhancing resilience. Lastly, we provide a synthesis of perspectives obtained from experts and policymakers who participated in the first FutuRes Policy Lab. Integrating these diverse methodologies, we aim to distill key insights and recommendations for policy formulation that can effectively promote resilience in the face of unforeseen disruptions.

We frame resilience in terms of life-course capitals, emphasizing the significance of different individual capitals pivotal for fostering resilience, namely, economic, human, social, and institutional capitals. Specifically, our exploration delves into the pivotal role of institutions and their capacity to enhance individual resilience. We underscore the importance of institutions in three key aspects:

1. *Buffering Shocks*: Institutions serve as critical buffers against shocks, implementing risk management strategies and short-term interventions to effectively mitigate the impact of unforeseen disruptions.
2. *Providing Life Course Capitals through Social Investment Policies*: Institutions play a central role in endowing individuals with life-course capitals through the formulation and implementation of social investment policies. This involves strategic investments in youth, education, health, and lifelong learning, fostering the development of essential tools for sustained resilience.

3. *Institutional Resilience and Adaptability*: Institutions, by cultivating their own resilience, become more effective and adaptable. This proactive approach enables institutions to not only withstand challenges but also to initiate meaningful changes and adaptations in response to evolving needs, contributing significantly to overall resilience.

In our empirical analysis, we evaluate the determinants of individual resilience during the Covid-19 pandemic using the CD-RISC resilience scale. The findings of our study affirm the validity of our theoretical framework, highlighting the indispensable role of economic, human, and social capital as pivotal dimensions influencing individual resilience across various welfare regimes. Notably, *social inclusion* emerges as a particularly critical factor in this context. Thus, policies enhancing social inclusions appears particularly relevant to build a resilient society. Furthermore, our analysis highlights the importance of institutions in bolstering resilience. We gauged the influence of institutions through two key variables—social expenditure and government effectiveness. Our rationale was that social expenditure primarily reflects how citizens' resilience may be fortified through public institutions, while government effectiveness centers on the resilience of these institutions themselves. Our findings reveal that both dimensions are notably associated with increased individual resilience. It's noteworthy, however, that while our identified factors contribute substantially to explaining variations in resilience, they do not account for all observed differences. This underscores the nuanced and multifaceted nature of resilience dynamics, suggesting the presence of additional factors or interactions that warrant further exploration and scrutiny.

Moving on to experts' opinions, they provide valuable insights into the role of resilience in policy-making, emphasizing its multilevel and multidimensional nature. The experts identify key challenges for resilient policy-making, including the necessity for long-term planning, coping with uncertainty regarding future challenges, and addressing the diverse needs of individuals within society. Experts underline the paramount importance of prioritizing individual well-being in policy formulation, highlighting its centrality for resilience. Their interventions align with a social investment perspective, emphasizing the significance of preventive measures over reactive buffering strategies. They stress the need for reliable and updated data, advocating for continuous monitoring through data to facilitate effective needs assessment.

Finally, the public panel discussion specifically focused on the resilience of European pension systems in the context of a progressively aging population. The discourse emphasizes the imperative to enhance flexibility in retirement age and improve the quality of work to enable individuals to extend their working years. Furthermore, participants stress the importance of considering inequalities in the workforce and emphasize the need to prevent the perpetuation of inequalities in later life by establishing fair retirement arrangements.

Overall, through a diverse range of methodologies, including qualitative assessment, quantitative analysis, and expert opinions, this report consolidates novel insights on strategies to enhance the resilience of policies. Integrating these approaches provides a comprehensive understanding of the multifaceted aspects influencing policy resilience and offers valuable recommendations for informed and effective policy-making.

## References

- Aldrich, D. P. (2011). The power of people: Social capital's role in recovery from the 1995 Kobe earthquake. *Natural Hazards*, 56(3), 595–611. <https://doi.org/10.1007/s11069-010-9577-7>
- Alessi, L., Benczur, P., Campolongo, F., Cariboni, J., Manca, A. R., Menyhart, B., & Pagano, A. (2020). The Resilience of EU Member States to the Financial and Economic Crisis. *Social Indicators Research*, 148(2), 569–598. <https://doi.org/10.1007/s11205-019-02200-1>
- Anderson, B. (2015). What Kind of Thing is Resilience? *Politics*, 35(1), 60–66. <https://doi.org/10.1111/1467-9256.12079>
- Angeler, D. G., & Allen, C. R. (2016). Quantifying resilience. *Journal of Applied Ecology*, 53(3), 617–624.
- Ansell, C., Boin, A., & Keller, A. (2010). Managing Transboundary Crises: Identifying the Building Blocks of an Effective Response System. *Journal of Contingencies and Crisis Management*, 18(4), 195–207. <https://doi.org/10.1111/j.1468-5973.2010.00620.x>
- Anuradha, J. M. P. N., Fujimura, M., Inaoka, T., & Sakai, N. (2021). Role of Social and Human Capital in Household Resilience: Empirical Evidence from an Agricultural Village Community with Exposure to Significant Environmental Stresses in Sri Lanka. *Global Social Welfare*, 8(1), 81–92. <https://doi.org/10.1007/s40609-018-00137-w>
- Atkinson, P. A., Martin, C. R., & Rankin, J. (2009). Resilience revisited. *Journal of Psychiatric and Mental Health Nursing*, 16(2), 137–145. <https://doi.org/10.1111/j.1365-2850.2008.01341.x>
- Barrera, M. (1986). Distinctions between social support concepts, measures, and models. *American Journal of Community Psychology*, 14(4), 413–445. <https://doi.org/10.1007/BF00922627>
- Beckert, J. (1996). What is sociological about economic sociology? Uncertainty and the embeddedness of economic action. *Theory and Society*, 25(6), 803–840. <https://doi.org/10.1007/BF00159817>
- Bekker, S. (2021). The EU's Recovery and Resilience Facility: A Next Phase in EU Socioeconomic Governance? *Politics and Governance*, 9(3), 175–185. <https://doi.org/10.17645/pag.v9i3.4290>
- Berkes, F. (2007). Understanding uncertainty and reducing vulnerability: Lessons from resilience thinking. *Natural Hazards*, 41(2), 283–295. <https://doi.org/10.1007/s11069-006-9036-7>
- Bonanno, G. A. (2004). Loss, Trauma, and Human Resilience: Have We Underestimated the Human Capacity to Thrive After Extremely Aversive Events? *American Psychologist*, 59(1), 20–28. <https://doi.org/10.1037/0003-066X.59.1.20>
- Christensen, R. K., & Gazley, B. (2008). Capacity for public administration: Analysis of meaning and measurement. *Public Administration and Development*, 28(4), 265–279. <https://doi.org/10.1002/pad.500>
- De La Porte, C., & Jensen, M. D. (2021). The next generation EU: An analysis of the dimensions of conflict behind the deal. *Social Policy & Administration*, 55(2), 388–402. <https://doi.org/10.1111/spol.12709>
- DiPrete, T. A. (2002). Life Course Risks, Mobility Regimes, and Mobility Consequences: A Comparison of Sweden, Germany, and the United States. *American Journal of Sociology*, 108(2), 267–309. <https://doi.org/10.1086/344811>
- Duit, A. (2016). Resilience Thinking: Lessons for Public Administration. *Public Administration*, 94(2), 364–380. <https://doi.org/10.1111/padm.12182>
- Duit, A., Galaz, V., Eckerberg, K., & Ebbesson, J. (2010). Governance, complexity, and resilience. *Global Environmental Change*, 20, 363–368.



- Duval, R., Elmeskov, J., & Vogel, L. (2007). *Structural Policies and Economic Resilience to Shocks* (SSRN Scholarly Paper 1002508). <https://doi.org/10.2139/ssrn.1002508>
- Ferlander, S. (2007). The Importance of Different Forms of Social Capital for Health. *Acta Sociologica*, 50(2), 115–128. <https://doi.org/10.1177/0001699307077654>
- Ferrer-i-Carbonell, A. (2005). Income and well-being: An empirical analysis of the comparison income effect. *Journal of Public Economics*, 89(5), 997–1019. <https://doi.org/10.1016/j.jpubeco.2004.06.003>
- Fletcher, D., & Sarkar, M. (2013). Psychological Resilience: A Review and Critique of Definitions, Concepts, and Theory. *European Psychologist*, 18(1), 12–23. <https://doi.org/10.1027/1016-9040/a000124>
- Folke, C. (2006). Resilience: The emergence of a perspective for social–ecological systems analyses. *Global Environmental Change*, 16(3), 253–267. <https://doi.org/10.1016/j.gloenvcha.2006.04.002>
- Fuller-Iglesias, H., Sellars, B., & Antonucci, T. C. (2008). Resilience in Old Age: Social Relations as a Protective Factor. *Research in Human Development*, 5(3), 181–193. <https://doi.org/10.1080/15427600802274043>
- Goldin, I., & Mariathasan, M. (2014). *The Butterfly Defect: How Globalization Creates Systemic Risks, and What to Do about It*. Princeton University Press.
- Hemerijck, A., & Huguenot-Noël, R. (2022). *Resilient welfare states in the European Union*. Agenda Publishing.
- Hoffman, R. R., & Hancock, P. A. (2017). Measuring Resilience. *Human Factors*, 59(4), 564–581. <https://doi.org/10.1177/0018720816686248>
- Jones, C., Burström, B., Marttila, A., Canvin, K., & Whitehead, M. (2006). Studying Social Policy and Resilience to Adversity in Different Welfare States: Britain and Sweden. *International Journal of Health Services*, 36(3), 425–442. <https://doi.org/10.2190/E9H5-URYL-2W4U-QED6>
- Kwok, A. H., Doyle, E. E. H., Becker, J., Johnston, D., & Paton, D. (2016). What is ‘social resilience’? Perspectives of disaster researchers, emergency management practitioners, and policymakers in New Zealand. *International Journal of Disaster Risk Reduction*, 19, 197–211. <https://doi.org/10.1016/j.ijdrr.2016.08.013>
- Leys, C., Arnal, C., Wollast, R., Rolin, H., Kotsou, I., & Fossion, P. (2020). Perspectives on resilience: Personality Trait or Skill? *European Journal of Trauma & Dissociation*, 4(2), 100074. <https://doi.org/10.1016/j.ejtd.2018.07.002>
- Liu, L., Meng, Y., Wu, D., Ran, Q., Cao, J., & Liu, Z. (2022). Impact of haze pollution and human capital on economic resilience: Evidence from prefecture-level cities in China. *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-022-02625-8>
- Luthar, S. S., & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology*, 12(4), 857–885. <https://doi.org/10.1017/S0954579400004156>
- Manca, A. R., Benczúr, P., & Giovannini, E. (2017). *Building a Scientific Narrative Towards a More Resilient EU Society Part 1: A Conceptual Framework*. <https://doi.org/10.2760/635528>
- Matzenberger, J. (2013). A novel approach to exploring the concept of resilience and principal drivers in a learning environment. *Multicultural Education & Technology Journal*, 7(2/3), 192–206. <https://doi.org/10.1108/17504971311328071>
- Narayan, D. (2002). Bonds and Bridges: Social Capital and Poverty. In J. Isham, T. Kelly, & S. Ramaswamy (Eds.), *Social Capital and Economic Development*. Edward Elgar Publishing. <https://doi.org/10.4337/9781781950388.00013>

- Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2008). Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness. *American Journal of Community Psychology*, 41(1), 127–150. <https://doi.org/10.1007/s10464-007-9156-6>
- 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*. <https://doi.org/10.1126/sciadv.1400217>
- Reeskens, T., & Vandecasteele, L. (2017). Hard times and European youth. The effect of economic insecurity on human values, social attitudes and well-being: HARD TIMES AND EUROPEAN YOUTH. *International Journal of Psychology*, 52(1), 19–27. <https://doi.org/10.1002/ijop.12387>
- Richards, L. (2016). For Whom Money Matters Less: Social Connectedness as a Resilience Resource in the UK. *Social Indicators Research*, 125(2), 509–535. <https://doi.org/10.1007/s11205-014-0858-5>
- Rutter, M. (2000). Resilience Reconsidered: Conceptual Considerations, Empirical Findings, and Policy Implications. In J. P. Shonkoff & S. J. Meisels (Eds.), *Handbook of Early Childhood Intervention* (2nd ed., pp. 651–682). Cambridge University Press. <https://doi.org/10.1017/CB09780511529320.030>
- Saja, A. M. A., Teo, M., Goonetilleke, A., & Ziyath, A. M. (2021). A Critical Review of Social Resilience Properties and Pathways in Disaster Management. *International Journal of Disaster Risk Science*, 12(6), 790–804. <https://doi.org/10.1007/s13753-021-00378-y>
- Shanahan, M. J., Mortimer, J. T., & Kirkpatrick Johnson, M. (Eds.). (2016). *Handbook of the Life Course: Volume II*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-20880-0>
- Sippel, L. M., Pietrzak, R. H., Charney, D. S., Mayes, L. C., & Southwick, S. M. (2015). How does social support enhance resilience in the trauma-exposed individual? *Ecology and Society*, 20(4). <https://www.jstor.org/stable/26270277>
- Ungar, M. (2012). Social Ecologies and Their Contribution to Resilience. In M. Ungar (Ed.), *The Social Ecology of Resilience* (pp. 13–31). Springer New York. [https://doi.org/10.1007/978-1-4614-0586-3\\_2](https://doi.org/10.1007/978-1-4614-0586-3_2)
- Ungar, M., Connelly, G., Liebenberg, L., & Theron, L. (2019). How Schools Enhance the Development of Young People's Resilience. *Social Indicators Research*, 145(2), 615–627. <https://doi.org/10.1007/s11205-017-1728-8>
- Ungar, M., Ghazinour, M., & Richter, J. (2013). Annual Research Review: What is resilience within the social ecology of human development?: Resilience in the social ecology of human development. *Journal of Child Psychology and Psychiatry*, 54(4), 348–366. <https://doi.org/10.1111/jcpp.12025>
- Vanhercke, B., & Verdun, A. (2022). The European Semester as Goldilocks: Macroeconomic Policy Coordination and the Recovery and Resilience Facility. *JCMS: Journal of Common Market Studies*, 60(1), 204–223. <https://doi.org/10.1111/jcms.13267>
- Walker, B. H. (2020). Resilience: What it is and is not. *Ecology and Society*, 25(2), art11. <https://doi.org/10.5751/ES-11647-250211>
- Windle, G. (2011). What is resilience? A review and concept analysis. *Reviews in Clinical Gerontology*, 21(2), 152–169. <https://doi.org/10.1017/S0959259810000420>