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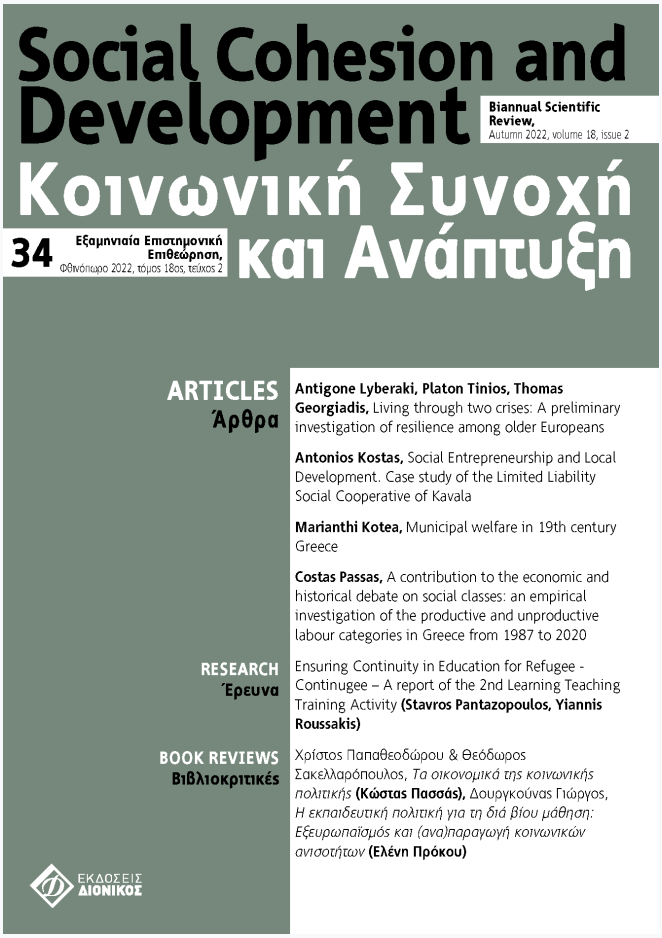

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Living through two crises: A preliminary investigation of resilience among older Europeans

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Επιβιώνοντας σε δύο κρίσεις: Προκαταρκτική διερεύνηση της ανθεκτικότητας των ηλικιωμένων στην Ευρώπη

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ABSTRACT

This paper explores what resilience can mean when characterising individuals. The conceptual discussion attempts to transpose the collective concept to individual behaviour, focusing on how living through one major crisis affects the probability to cope in a subsequent shock. If resilience is a general concept, then it should apply even when the origins of the crises are different, and the triggers should work in different domains (economic, social and epidemiological). A preliminary investigation is conducted using the only available panel data in Europe, the Survey of Health, Ageing and Retirement (SHARE) of individuals over 50. The preliminary findings suggest that the effects of the first crisis tend to operate in different directions: some operate to prepare (and empower) and others tend to increase vulnerability. The paper concludes by speculating on factors that could lie behind differentiated responses.

KEY WORDS: Resilience, ageing, economic recession, pandemic, vulnerability.

ΠΕΡΙΛΗΨΗ

Αυτό το άρθρο εξετάζει το νόημα της ανθεκτικότητας στο επίπεδο της ατομικής συμπεριφοράς. Η θεωρητική συζήτηση αντιδιαστέλλει τη μακρο-έννοια με την ατομική διάσταση, προκειμένου να φωτίσει τους τρόπους με τους οποίους η εμπειρία μιας κρίσης επηρεάζει την ικανότητα ενός ατόμου ή οικογένειας να αντιμετωπίσει μια επόμενη. Αν η ανθεκτικότητα αποτελεί γενική έννοια, τότε θα πρέπει να είναι χρήσιμη ακόμα και όταν οι αιτίες των διαδοχικών κρίσεων είναι διαφορετικές μεταξύ τους (πχ οικονομικές και επιδημιολογικές). Στο άρθρο επιχειρούμε μια προκαταρκτική διερεύνηση, χρησιμοποιώντας τη μόνη διαθέσιμη δεξαμενή ατομικών στοιχείων πάνελ -την Έρευνα για την Υγεία, τη Γήρανση και την Συνταξιοδότηση στην Ευρώπη (SHARE) για άτομα άνω των 50 ετών. Τα πρώτα ευρήματα υποδηλώνουν ότι τα αποτελέσματα της κρίσης οδηγούν σε διαφορετικές κατευθύνσεις: σε κάποιες περιπτώσεις ενισχύουν την ανθεκτικότητα και σε άλλες το αντίθετο- την ευπάθεια. Καταλήγει θέτοντας ερωτήματα για τους παράγοντες που προδιαθέτουν τις διαφορετικές επιπτώσεις.

ΛΕΞΕΙΣ-ΚΛΕΙΔΙΑ: Ανθεκτικότητα, γήρανση, οικονομική κρίση, πανδημία, ευπάθεια.

1. Introduction

The pandemic has renewed interest in the 20-year old concept of resilience – in academic and policy circles. The abrupt discontinuation of what was perceived as "normal", triggered a sense of fragility both at the collective (society-wide) and the individual level (women, men and families). Public and private discourse centre around the capacity to recover quickly as opposed to carry permanent scars.

Resilience is the ability to rebound after a shock. It differs from robustness, the ability to resist. Whereas resilience refers to the capacity to weather a storm, robustness is simply the capacity to resist (while remaining the same). The meaning of recovery thus goes beyond reverting to the "old normal" and acquires the meaning of adaptation, flexibility and change. Resilience is also linked to sustainability: A state is sustainable if it can be maintained in the long run, important considerations in climate change and to environmental sustainability.

Given its breadth, it is not surprising that resilience is steadily gaining traction after the recession of 2008-10 and, more importantly, after the outbreak of the COVID-19 pandemic. Multiple academic and policy contributions are addressed to the components of resilience at the level of the economy, the society, the regional economy, human behaviour and the ecosystem (Martin, 2011 and 2012; Holy et al., 2011; Marshall et al., 2012). In recent years it has showcased in the policy discourse; applied to how countries can bounce back after the pandemic, it is used as a key objective of the EU – where it is the centrepiece of the Resilience and Recovery Facility (European Union, 2022).

A key characteristic of the conceptual discussion was its focus on the macro level (Groot et al., 2011; Foster, 2012; OECD, 2011; Psycharis et al., 2014). Indeed, the concept is used to characterize countries, collectivities or else distinct geographical units such as regions. What is lacking is the counterpart of resilience at the micro level: how experiencing a crisis operates at the level of the individual or the household. Similarly lacking is a method of linking the macro, systemic, concepts to construct indicators based on individual level data. This paper makes a start in tackling this issue, both at the conceptual and the empirical levels. It uses panel survey data of the experience of individuals who lived through both the financial crisis of 2008-15 and the pandemic of 2020. This rich source of information allows us to speculate how coping with the financial shock affected the ability to react to the multidimensional impact of the pandemic. In this case a shock in one domain – finances – is followed by one in a different domain – health; the key question is "can we discern the existence of a generalized social resource – call it 'resilience' – as an attribute of households?" And, if we can, what can we say about how that quantity migrates from one crisis to the next?

The timing of the pandemic just a decade after the great recession and the way the world is exiting from it is adding research questions to the complex puzzle of analysing individual and collective responses to external shocks. While it is well known that human behaviour changes when a shock occurs, we know very little about what happens when shocks occur repeatedly. Is there a learning curve? Do societies and individuals gradually acquire the capacity to weather adversities and adapt, or is each shock different - hence requiring a different toolkit? Which factors play the role of resilience-enhancing aids and which factors are resilience killers? To what extent is resilience under the control of the individual or household and to what to social processes – be they social solidarity or formal social protection? How can we make the best use of what we know at the collective level (society, economy etc) to move the focus to the individual and family level?

To be able to link the general to the specific, the macro to the micro, necessitates access to

panel data – observations of the same individual at different points of time. This requirement, in the case of Europe, constrains the analysis to older individuals. The reason is that the only European-wide panel survey that currently exists is the Survey of Health, Ageing and Retirement in Europe (SHARE)[1]. Focusing on resilience in the "silver years" of the life-course is associated with specific characteristics. The capacity to adapt may be shrinking with age:

i) If individuals engage in lifetime planning, individuals over 50 will be at a disadvantage, with a larger proportion of 'sunk costs' plus a limited ability to react. This is especially the case for those already retired.
ii) The time horizon for any rearrangements of plans is shorter; "bouncing-back (at the individual and at the collective level) needs time to work.
iii) The capacity to make life-changing decisions is inversely related to age. Nevertheless, stoicism (acceptance of change) could be seen, as part of a "learning process" and hence may be enhanced over the years.
iv) Adaptability and resilience in older age necessitate formal and informal resource mobilization options (which vary socially and geographically).
v) On the other hand, older individuals can be expected to bring to bear experience of other, older crises – of both general and individual shocks.

Our focus is resilience at the individual and family level among people over 50 years of age. An individual can live through both idiosyncratic and general shocks: job losses, illness or divorce affect some individuals and not others. Generalised shocks – such as the financial crisis – affect many individuals at the same time; their impact on the individual though may not be very different from an idiosyncratic shock. We would thus expect the data to be 'noisy, a fact which should be reflected in the empirical strategy.

In principle, consecutive waves of external shocks could have two opposing outcomes. On the one hand, cumulative adversities can push individuals and families over a tipping point, leading to rapid deterioration in their wellbeing and prospects. On the other hand, if an earlier shock has been absorbed and individuals managed to bounce back, they may find it easier to deal with the next adversity. The two effects may well coexist in the data; a key empirical strategy is (a) discern the effects and (b) speculate on what determines which reaction characterizes one individual or household from another.

In this paper we set two objectives. The first is to test whether severe exposure to the 2008 recession acts as resilience enhancer or resilience killer during the pandemic. The second task is to dig deeper in individuals and families, looking how defended their income, health and optimism during the previous recession. To do this, we distinguish winners and losers of the recession and follow them through to the pandemic.

In the following section we discuss the concept of resilience and formulate some research hypotheses. Section 3 describes the data that have been used in the empirical analysis. Next, section 4 deals with the comparative picture in Europe, in particular with the juxtaposition of the least resilient countries and the rest, while part 5 examines the trajectory of the winners and the losers of the previous shock. Finally, part 6 concludes and highlights areas for further research.

2. The elusive meaning of resilience

The concept of resilience[2] dates back to the 1970s, when it was used in physics, engineering, the ecosystem and psychology). In Economics and Regional Science, the concept flourished much later, after the turn of the millennium. In economics, the notion of resilience is associated with the ability of a market to self-restore and reach the pre-shock equilibrium state (Duval & Vogel, 2008; Martin, 2012; Alessi et al., 2019). In a broader society-wide sense, "a resilient society is able to react to and to respond after a shock. Resilience even opens new doors to enhanced growth and sustainability" (Brunnermeier, 2021:13). Resilience is a multi-dimensional concept, which cuts across many different aspects of the performance of countries and regions (Alessi et al, 2019: 570). Bearing this in mind, it is important to decide the questions of resilience of what/who, to what and over what period (Carpenter et al., 2001).

Resilience can refer to a rather defensive attribute, meaning the capacity to recover into the pre-shock level; this is the defensive resilience. It can also acquire a more dynamic meaning, denoting the capacity to adapt into something new; this is adaptive resilience. Adaptive resilience describes the ability to adapt, learn and reorganize in response to a shock. This involves a dynamic process of learning and transformation (Folke et al., 2010; Martin & Sunley, 2015; Alessi et al., 2019; Boschma, 2015; Di Pietro et al., 2021; Giannakis & Bruggeman, 2020). The notion of resilience is gaining traction among international institutions, the G20, OECD, the IMF and the European Central Bank (Duval & Vogel, 2008; Caldera-Sanchez et al., 2016; ECB, 2016). The Joint Research Centre of the European Commission together with the European Political Strategy Centre have taken on board the various academic and policy discussions and developed a useful conceptual framework in order to assess and measure resilience (Navracsics et al., 2015; Manca et al., 2018). According to the JRC framework, in the face of shocks, a society is resilient if it retains the ability to deliver social well-being in a way that it does not compromise the well-being of future generations.

At the individual level, resilience is the attribute of women and men that allows them, after falling down during a crisis, to make the right moves and bounce back after the impact. In other words, it is the ability to adapt and to react rather than panic. At the collective level, a society is resilient if most individuals have the option to react in order to bounce back. It has been persuasively argued that risk exposure teaches resilience (Brunnermeier 2021: 17). In other words, when individuals or societies are exposed to some risks, they gain the capacity to develop resilience by learning how to cope and adapt, and are better equipped to deal with similar risks in the future. Social arrangements and institutions are of the essence regarding resilience. Resilience enabling institutions and social arrangements can offer a powerful tool preventing shocks/crises from spiralling into self-destruction. Alternatively, in the absence of such arrangements/institutions, a powerful external shock could set off a cumulative spiral to disaster.

2.1 Do the type and the severity of shocks matter?

In addressing the question of the length of a recovery to an external shock, Krugman (2020) makes an important distinction between two types of economic shocks. The first type of shock is created by internal imbalances; the second type of shocks is caused by external headwinds. The former type of shock tends to delay the recuperation period and recovery tends to come more slowly and more painfully (it takes the form of an L shaped recovery). The latter upheaval can be shorter in duration, provided the economic fundamentals are sound (its shape is more like

a V=type recovery -fast and vigorous). In an attempt to draw lessons from history, he suggests that recessions due to the "private sector overextending itself by getting carried away" (as in the case of the dot.com and the 2008 recessions) are harder to end. In contradistinction, recessions caused by monetary policies in response to rising oil prices (as in 1979-82) tend to lead to fast recoveries. So, the type of economic shock has implications both on the duration and the resilience performance. Krugman's own hypothesis in 2020 was that the pandemic -COVID-19 crisis, in contrast to the financial meltdown a decade ago, will ensure a more rapid recovery the day after. Nevertheless, the severity of the COVID-19 shock could lead to long-term scarring, thus undermining resilience for the weaker individuals and their families.

2.2 Is inequality eroding resilience?

Brunnermeier (2021) takes a deeper look at the concept of resilience. He argues that unequal societies tend to display weaker resilience. Wealthier people are better equipped to deal with adverse shocks and tend to be able to recover faster. The most vulnerable tend to lack the necessary tools for bouncing back and run the risk of suffering permanent losses -scarring. Scarring may be caused by the enduring negative effects of previous shocks/recessions. Deep scares may trap individuals and families in a long declining path whereby indebtedness increases, optimism diminishes and trust erodes. Although inequality if often seen as mainly consisting of income and wealth inequalities, it should also include inequality in resilience; it is the latter that ensures an ever-increasing gap between winners and losers over time. The new concept of "resilience inequality" conveys the observation that people have unequal abilities to bounce back (ibid: 225). Inequality of resistance means that those who are more resilient can take up riskier and more profitable opportunities which makes them better able to generate income.

The inequality of resilience between the rich and the poor has important social implications. For the wealthier groups in a society, the COVID crisis may only be a temporary shock. For poorer and vulnerable people, the consequences may well be long-lasting, morphing into permanent scarring. Hence poorer people tend to be less resilient than richer people. What is more, resilience inequality amplifies income inequality and tends to persist, hence worsening wealth inequality in the long run (ibid: 230). These views resonate a new strand in comparative political science, namely the discussion on the varying resilience of welfare states in the European Union (Hemerijck et al, 2022; Hemerijck & Huguenot-Noel, 2022).

2.3 Individual Resilience as a social buffer

Once examined at the individual level, resilience can result from the existence of several resources that can be used in case of need. Financial assets and savings is certainly one. A similar role, however, can be played by access to social protection benefits, or to social and familial solidarity. Generalising further, we may see emotional and mental reserves, a philosophical stoicism in reacting to shocks as adding to the social buffer. The last, for lack of a better word, may be termed 'individual resilience'.

We may draw parallels with Anton Hemerijk's treatment of 'social investment' and life-course multiplier (Hemerijck, 2017). For social investment to work in practice, much depends on how "inclusive buffers" work. Complementary social investment policies over the life-course of individuals (and at the macro-level) can create a cycle of well-being in terms of poverty alleviation, bridging inequalities and boosting life satisfaction. An individual at any one time has access to a stock of

resilience which can be used to react to a crisis. This can consist of the ability to call on financial assets, social protection from the State or social solidarity from social networks. At times of crisis, the stock of solidarity can either be used up and drawn down, or it can be increased – chiefly by the ability to call on the different sources of solidarity. Social trust can be expected to play a key role in the ability of an individual to call upon the different solidarity reserves. Trust, as a prime axis of social capital[3] has this unique attribute: contrary to physical capital that diminishes as it is being used up, social capital tends to be strengthened and invigorated the more it is being practiced (Putnam, 1994). Thus, one household can draw down its reserves in one crisis and hence face the next crisis in a weakened state; another may be able to build coping mechanisms and support networks that allow it to face the next crisis in a more advantageous position.

2.4 The two specific shocks

The financial crisis had an especially harsh impact in some countries (Greece saw pensions being cut back in cash terms and to a lesser extent in Italy). In sharp contrast, in Germany and Poland the crisis did not disturb preexisting growth trends. In the remaining countries, the crisis was evident chiefly in more restrained rates of growth. In addition, in most countries pensioners were in a relatively privileged position compared to the working population. The initial evidence from the COVID-19 shock shows that in the first phase fear became the initial reaction (whereby the direct impact of the pandemic was combined with the indirect impact of lockdowns). In the second phase (after the vaccines became available) the reactions changed: COVID fatigue and some evidence of a (premature) resilience illusion leading to difficulties in navigating the last mile. The question at this stage is whether the COVID-19 shock will act as a great leveler in income and wealth inequality -as happened earlier with the plague, the big revolutions, the world wars and state failure? (Scheidel, 2018).

3. Data

The empirical analysis of the present paper uses panel data obtained from the SHARE survey (Survey of Health, Ageing and Retirement in Europe) (Börsch-Supan et al., 2013). The selected sample is derived of a panel sample of persons aged 50+ years who participated in wave 2 (2006/7), wave 6 (2015) and in the SHARE Corona Survey 1 conducted in June 2020. Data collection of wave 2 and 6 was by computer-assisted personal interviewing (CAPI) (Börsch-Supan & Jürges, 2005; Malter et al., 2016). Lockdowns necessitated that the SHARE Corona Survey 1 was by telephone administered interviews (CATI) (Scherpenzeel et al., 2022), making SHARE the only survey linking individual data before and during the pandemic. However, this comes at a cost of comparability issues – the 2020 questionnaire is shorter, while researchers must be mindful of mode effects. Full comparability will be restored with the next CAPI wave, collected in 2022 and to be released in 2023.

SHARE wave 2 and 6 allows for charting the effect on the recession on diverse dimensions - physical and mental health, financial stress and life satisfaction. SHARE Corona Survey 1 data takes their story forward to the first wave of the pandemic. SHARE is the only source of information which allows examination of how specific individuals navigated the troubled time of the financial crisis, and who then faced the pandemic. It is thus unique in two respects: (a) it is the only panel survey covering all regions of the EU and (b) it is currently the only panel survey containing data during the crucial first pandemic year.

The selected panel sample consists of 10,086 people who participated in all of wave 2, wave 6 and Corona 1. They are located in twelve European countries plus Israel: of the North (Sweden and Denmark), the centre (Germany, Belgium, Switzerland and France), the East (Czech Republic and Poland), and the South countries (Spain, Italy and Greece). 60% of the sample are women, while the overall median age is 74 years (Table 1).

Table 1: Sample size and sample characteristics

Sample size		Gender composition		Distribution of age (in years)		
Country	# Obs.	(%) Men	(%) Women	1st quartile	Median	3rd quartile
SE	489	40.3	59.7	65	70	76
DK	770	43.2	56.8	62	68	73
DE	599	39.6	60.4	64	69	76
BE	1,167	42.7	57.3	65	70	78
CH	572	38.3	61.7	62	68	76
FR	640	41.8	58.2	64	69	76
CZ	572	40.8	59.2	64	68	73
PL	726	34.5	65.5	62	67	75
ES	945	39.9	60.1	66	72	79
IT	1,188	38.1	61.9	66	72	78
GR	1,565	40.8	59.2	63	69	76
IL	853	39.3	60.7	63	68	75
Total	**10,086**	**39.6**	**60.4**	**64**	**70**	**77**

We examine crisis impacts in several dimensions: Physical health status is based on self-perceived health status. The equivalent question in Corona asked respondents to evaluate whether their health improved, worsened or stayed about the same since the outbreak of Corona. Mental health is proxied by the score of the depression scale EURO-D. The pandemic effect of the on mental health is based on responses on whether they felt more, the same, or less sad during Corona. Financial stress is captured by replies on ability to make ends meet from 'with great difficulty' to 'easily'. Life satisfaction in measured in SHARE by a self-reports evaluating it on a scale ranging from 0 to 10. In Corona Survey the proxy is used the coding to the question asking respondents to name what they are looking most forward to doing once Corona abates; the coding is 'named something right-away', 'hesitated to name something' and 'did not name anything'.

4. The legacy of the great recession in Europe in COVID-19: country-level impacts

This section generalizes the approach of the macro-empirical analysis of Alessi et al (2019) on resilience of EU-member states in the face of the 2008-2010 crisis. The indicators used capture different resilient capacities including: the impact of the crisis (the ability to resist shocks), recovery performance (adaptive capacity), medium-run performance and capacity to bounce forward. The two questions addressed were: a) which countries had resilient outcomes during and after the crisis? And b) what country characteristics could explain the resilience performance? While they uncovered a hugely heterogeneous performance in the EU, their success stories in resilience were Germany, Bulgaria and Poland, while Greece, Cyprus and Italy were the least resilient countries in the defensive and in the dynamic -bounce-back and adapt- meanings of resilience.

Table 2 reports the 33%, 50% and 66% cut-off points as defined by each country's distribution of the change in equivalent income between wave 2 and wave 6. In line with Alessi et al. (2019), Italy and Greece exhibit a severe impact, as the median change in equivalent income is -6.7% and -11.4% respectively. At the other extreme, Poland, Switzerland (and to a lesser extent Belgium, along with Germany and the two Nordics) exhibit stability in income status.

Table 2: Distribution of the wave 2 – wave 6 percentage change in equivalent income

Distribution of the wave 2 - wave 6 percentage change in income (%)												
Cut-off	**SE**	**DK**	**DE**	**BE**	**CH**	**FR**	**CZ**	**PL**	**ES**	**IT**	**EL**	**IL**
1st tertile (33%)	-5.1	-9.5	-12.0	9.0	10.2	-22.5	-19.4	23.5	-22.0	-51.7	-37.5	-14.7
Median	**10.1**	**7.8**	**4.6**	**23.1**	**41.1**	**2.8**	**18.1**	**50.5**	**13.1**	**-6.7**	**-11.4**	**23.0**
2nd tertile (66%)	26.5	24.8	20.0	40.0	86.8	21.9	34.5	89.9	42.9	14.3	9.3	56.2

Is the impact of the pandemic more noticeable in those countries where individuals experienced the 2008 recession more severely? Table 3 compares at country level experiences in physical and mental health during the recession with the corresponding outcomes in the pandemic. As regards physical health there is a negative correlation (rho correlation -0.41) between worsening health in the recession and worsening health in the pandemic. In contrast, in the mental health, we have a positive correlation (rho equals to 0.71) between the percentage of persons who reported worsened mental health during the recession and the percentage of persons who felt more sad in the pandemic.

Table 3: Linking physical and mental health at country level during the recession (2006-2015) and in the pandemic (2020)

	In recession: (%) with worsened physical health		In pandemic: (%) with worsened physical health		In recession: (%) with worsened mental health		In pandemic: (%) with worsened mental health	
	Mean value	St. error	Mean value	St. error	**Mean value**	St. error	**Mean value**	St. error
SE	**37.8**	2.4	**9.7**	1.5	**38.7**	2.4	**14.9**	1.7
DK	**30.1**	1.7	**5.0**	0.8	**35.1**	1.8	**9.2**	1.1
DE	**35.2**	2.2	**10.1**	1.4	**44.2**	2.3	**14.1**	1.7
BE	**31.6**	1.4	**10.9**	1.0	**41.9**	1.5	**20.2**	1.2
CH	**39.3**	2.4	**7.8**	1.4	**38.0**	2.3	**14.4**	1.8
FR	**30.8**	1.9	**14.2**	1.4	**45.6**	2.0	**22.4**	1.7
CZ	**32.7**	2.5	**6.1**	1.2	**38.1**	2.7	**6.5**	1.1
PL	**26.3**	1.8	**13.7**	1.4	**41.0**	2.0	**17.3**	1.5
ES	**31.3**	1.8	**11.7**	1.2	**44.9**	1.9	**27.6**	1.8
IT	**34.0**	1.5	**14.0**	1.2	**46.2**	1.6	**30.9**	1.5
GR	**38.3**	1.3	**8.7**	0.8	**39.7**	1.3	**16.8**	1.0
IL	**28.7**	2.4	**13.7**	1.4	**47.1**	2.3	**15.9**	1.5
	Correlation index: (rho)= **-0.41**				Correlation index: (rho)= **0.71**			

Turning to financial stress, there is a strong positive correlation at country level between the percentage of persons who felt more financial stress during the recession and those who made ends meet with great difficulty in the pandemic (Table 4). Greece (35.4%) and Italy (24.8%) -the two countries who exhibited the highest increase in financial stress between 2006 and 2015- are the countries with greatest pandemic difficulty. In contrast, in life satisfaction there no correlation is evident between outcomes in the recession and the corresponding perception in the pandemic (rho 0.13).

Are the countries with the most severe decrease in income those who experienced more severe outcomes during the pandemic? Calculating correlation coefficients, change in financial status correlates with pessimism (rho= -0,26) as well as making ends meet with great difficulty (rho=-0.40). In contrast, the vulnerability hypothesis is not supported in the association between income change and worsening health, or with the proportion of pessimists.

Table 4: Linking financial stress and life satisfaction at country level during the recession (2006-2015) and in the pandemic (2020)

	In recession: (%) who experienced more financial stress		In pandemic: (%) who made ends meet with great difficulty		In recession: (%) with less life satisfaction		In pandemic: (%) who does not look forward to do anything after CORONA abates	
	Mean value	St. error	Mean value	St. error	Mean value	St. error	Mean value	St. error
SE	**17.2**	1.8	**0.9**	0.4	**26.9**	2.2	**7.4**	1.3
DK	**13.5**	1.3	**1.3**	0.4	**25.9**	1.6	**9.2**	1.1
DE	**16.0**	1.9	**1.2**	0.5	**32.2**	2.1	**4.8**	1.0
BE	**20.2**	1.2	**2.3**	0.5	**23.3**	1.3	**14.0**	1.1
CH	**18.9**	1.8	**0.9**	0.4	**29.3**	2.1	**7.7**	1.4
FR	**20.9**	1.6	**2.9**	0.7	**31.9**	1.9	**18.6**	1.6
CZ	**11.2**	1.9	**0.7**	0.3	**34.7**	2.7	**11.5**	1.5
PL	**16.6**	1.5	**9.1**	1.2	**28.4**	1.8	**36.3**	2.0
ES	**18.6**	1.5	**3.3**	0.7	**30.5**	1.8	**20.3**	1.6
IT	**24.8**	1.4	**8.5**	1.0	**33.1**	1.6	**28.8**	1.5
GR	**35.4**	1.3	**43.4**	1.3	**29.5**	1.2	**8.7**	0.8
IL	**16.0**	1.5	**4.7**	0.8	**29.8**	1.9	**19.5**	1.5
	Correlation index: (rho)= **0.86**				Correlation index: (rho)= **0.13**			

5. Winners and losers of the previous recession in the time of COVID-19

The previous section examined the country level. In this section, attention turns to the individual: has the response to the pandemic been different between persons who were more severely affected by the recession, as compared to those who had managed to cope better? Following Alessi at al. (2019), countries are grouped in three groups as follows: (i) Italy and Greece (negative recession impact); (ii) Germany and Poland (positive); and (iii) rest of countries Sweden, Denmark, Belgium, Switzerland, France, Czech Republic, Spain and Israel (stable).

The picture presented in Table 5 is agnostic on either the resilience or the vulnerability hypothesis at individual level. Differences in individual experiences are more noticeable across persons with similar recession experiences but in different country groups, compared to persons with different experiences during the recession within the same group of countries.

Table 5: Experiences at individual level during the recession and in the pandemic

	(%) whose health worsened during the pandemic, by health status change between wave 2 (2006/7) and wave 6 (2015)			
Country	with equal or better self-perceived health between wave 2 & wave 6	with worse self-perceived health between wave 2 & wave 6	Dif.	P-value
EL & IT	12.4	14.1	-1.6	0.419
DE & PL	10.5	12.6	-2.2	0.364
Others	11.0	13.4	-2.4	0.101
	(%) who felt more sad during the pandemic, by eurod mental health change between wave 2 (2006/7) and wave 6 (2015)			
Country	with equal or better mental health between wave 2 & wave 6	with worse mental health between wave 2 & wave 6	Dif.	P-value
EL & IT	26.2	31.0	-4.8	0.059
DE & PL	12.2	18.8	-6.6	0.011
Others	19.8	23.1	-3.3	0.055
	(%) who made ends meet with great difficulty during the pandemic, by financial stress change between wave 2 (2006/7) and wave 6 (2015)			
Country	with equal or lower financial stress between wave 2 & wave 6	with more financial stress between wave 2 & wave 6	Dif.	P-value
EL & IT	11.2	16.9	-5.8	0.005
DE & PL	2.9	5.6	-2.7	0.144
Others	2.5	2.2	0.3	0.727
	(%) who do not look forward to do anything after CORONA abates, by life satisfaction change between wave 2 (2006/7) and wave 6 (2015)			
Country	with equal or better life satisfaction between wave 2 & wave 6	with worse life satisfaction between wave 2 & wave 6	Dif.	P-value
EL & IT	23.4	28.6	-5.2	**0.063**
DE & PL	14.9	13.6	1.3	0.518
Others	16.9	16.8	0.1	0.956

To investigate the relative importance of individual characteristics in determining each person's response to the pandemic, but also to control for cofactors we need to move to multivariate analysis. Thus, four exploratory probit equations were computed on the the probability of: (i) worsening self-perceived health in the pandemic; (ii) worsening mental health in the pandemic (Table 6); (iii) making ends meet with great difficulty in the pandemic; and (iv) not looking forward to do anything after CORONA abates (Table 7).

The specification of the four probits is identical. All four attempt to explain the probability of an individual faring worse in the pandemic in each of the four dimensions identified – i.e. the obverse of resilience, vulnerability. This is related to four types of influences:

i. Status before the recession – characteristics promoting the ability to respond: relative income status (decile in 2007); engagement in the labour market –presence of at least one working household member; gender; tertiary education.
ii. Changes during the recession: Worsening mental health, retired, income falls between 2007-15.
iii. Status in 2015: Age, married, larger social network (>3), less than good health.
iv. Severity of pandemic experience: A close contact hospitalised or died.
v. Country vulnerability dummies for the groups identified previously (IT or El; DE or PL, others).

The four equations, seen as a whole, are not especially well defined, with the possible exception of financial vulnerability (table 9); the variables seem to explain a small part of overall variability. This is to be expected given that at the individual level idiosyncratic shocks would dominate – generating much statistical noise. More importantly, the theoretical discussion has prepared us for an initial shock giving rise to greater vulnerability in some cases (where resilience stocks are run down) and greater resilience in others (where coping mechanisms are developed). In a general sample such as ours the influences pulling in opposite directions would coexist, a fact which should prepare us for low impacts. Looking at the four equations, it is fair to say that neither impact dominates, even when the influence of country effects is allowed. This can be read as a challenge to examine the factors favouring one over the other reaction – a task left for future work.

Commenting on specific variables, variables predicating greater responsiveness - labour market engagement, higher education, initial relative income have some influence. A similar impact can be hypothesised for variables predisposing for solidarity – marital status, network size. Health developments have a key, if complex, importance, as does age. Gender seems to exert an independent effect on mental health, on financial stress, while women appear more optimistic. Finally, direct experience of covid has a depressing influence. Country effects are important in all dimensions. This can be taken as an indication of external and network effects not captured by individual variability, including the performance of social protection and social solidarity.

Table 6: Estimated Probit marginal and impact effects on the probability: i) of worsening physical and ii) of worsening mental health, during the pandemic

	Probability of worsening self-perceived health in the pandemic			Probability of worsening mental health in the pandemic		
Status before the recession (2007)						
Income decile (0 to 10)	0.003	0.002		0.002	0.003	
Household with at least one member in employment	-0.003	0.016		-0.032	0.018	*
Change during the recession (2006 - 2015)						
Worsening mental health	0.020	0.010	**	0.030	0.013	***
Retired between 2007 & 2015	-0.027	0.016	*	-0.037	0.019	*
Interaction term: Percentage change in income for those who have experienced a decline in their income	0.007	0.020		0.020	0.026	
Status in 2015						
Age spline: 50-64	0.000	0.005		-0.002	0.005	
Age spline: 65-74	0.004	0.002	***	0.002	0.002	
Age spline: 75+	0.002	0.002		-0.004	0.002	*
Female	0.008	0.010		0.098	0.012	***
Married, living with spouse	-0.009	0.011		0.003	0.014	
Social network size: More than 3 persons	0.028	0.010	***	0.014	0.013	
Tertiary education	0.018	0.014		-0.007	0.016	
Less than good health	0.065	0.011	***	0.093	0.014	***
Covid-19 experiences						
A person close to the respondent hospitalised and/or died due to Covid-19	0.036	0.020	**	0.054	0.025	***
Groups of countries						
IT or EL	0.006	0.011		0.048	0.015	***
PL or DE	-0.007	0.012		-0.076	0.015	***
Rest countries (SE, ES, FR, DK, CH, BE, IL, CZ)	*f*			*f*		
Pseudo R2	0.037			0.053		
# obs.	10079			10079		

Note: ***, ** & * denotes statistical significance at 0.01. 0.05 and 0.10 level respectively, while f denotes reference category.

Table 7: Estimated Probit marginal and impact effects on the probability: i) of making ends meet with great difficulty during the pandemic and ii) of not looking forward to do anything after CORONA abates

	Probability of making ends meet with great difficulty in the pandemic			**Probability of not looking forward to do anything after CORONA abates**		
Status before the recession (2007)						
Income decile (0 to 10)	-0.006	0.001	***	-0.005	0.002	**
Household with at least one member in employment	-0.017	0.006	***	-0.047	0.017	***
Change during the recession (2006 - 2015)						
Worsening mental health	0.005	0.005		0.001	0.011	
Retired between 2007 & 2015	0.006	0.008		-0.009	0.019	
Interaction term: Percentage change in income for those who have experienced a decline in their income	-0.030	0.009	***	-0.064	0.022	***
Status in 2015						
Age spline: 50-64	-0.004	0.002	**	0.003	0.004	
Age spline: 65-74	0.000	0.001		-0.003	0.002	*
Age spline: 75+	-0.002	0.001	***	0.013	0.002	***
Female	0.008	0.004	**	-0.023	0.012	**
Married, living with spouse	-0.029	0.006	***	-0.025	0.013	**
Social network size: More than 3 persons	0.004	0.004		-0.028	0.011	***
Tertiary education	-0.016	0.005	***	-0.070	0.012	***
Less than good health	0.026	0.005	***	0.041	0.012	***
Covid-19 experiences						
A person close to the respondent hospitalised and/ or died due to Covid-19	-0.013	0.007		-0.005	0.022	
Groups of countries						
IT or EL	0.084	0.010	***	0.047	0.014	***
PL or DE	0.006	0.007		-0.019	0.014	
Rest countries (SE, ES, FR, DK, CH, BE, IL, CZ)	*f*			*f*		
Pseudo R2	0.153			0.063		
# obs.	9546			10079		

Note: ***, ** & * denotes statistical significance at 0.01. 0.05 and 0.10 level respectively, while f denotes reference category.

6. Conclusions and issues for further research

In this paper we discussed issues related to the resilience of older individuals (and families) in the face of the COVID-19 pandemic. We used the only available internationally comparable source – individuals over 50 participating in SHARE. The theoretical discussion concluded that resilience is a fluid concept which went through various definitions depending on the field of application. Understanding and analysing resilience requires a broader inter-disciplinary approach, encompassing social, economic and institutional aspects. Examining resilience at the individual level based on SHARE panel data of 2006, 2015 and 2020 led us to some preliminary observations, pertinent for future work.

Our first research question was whether the experience of the recession in the societies mostly hit by cuts led to greater resilience among older individuals during the pandemic as compared to countries least affected by the recessionary shock. Older individuals in Greece and Italy experienced during the pandemic more pronounced health deterioration, greater prevalence of sadness, harder time to make ends meet financially and bleaker morale compared to the rest of the countries and more so compared to the success stories of the previous recession (Germany and Poland). Predictably, the severity of the effects is inversely related to the level of income; poorer and less connected individuals struggle more.

Our second hypothesis revolved around the individual characteristics acting as resilience enhancers or resilience killers. Our preliminary results indicate that resilience enhancers at the individual level could be engagement with the labour market, being married and having a social network. Resilience killers include gender (being a woman makes the effects worse -except morale), direct exposure to COVID and a lower starting point.

We cannot overstress the preliminary character of our findings. It is beyond doubt that the dynamics of resilience/vulnerability are still evolving and will take more concrete shape in future waves of SHARE. Our contribution has grappled with complexity of issues and data noise but has, nevertheless, charted a way forward – in the direction of multi-disciplinary work to probe why the same stimulus derails some families but strengthens others.

Notes

1. Other international surveys, such as SILC are pseudo-panels, where individuals stay in the panel for three years in total. SHARE is the only cross-national panel survey. Panel analysis can be undertaken where data exists at the national level only. Even so, in the most affected country, Greece, SHARE is still the only panel survey in existence.
2. The term originates from the Latin *resilire*, meaning leaping back and recovering.
3. Social Capital, the "glue that binds us together" refers to connections among individuals -social networks and the norms of reciprocity and trust that arise from them. Social capital rich societies tend to be more cohesive, less unequal and with higher life satisfaction. Also, better operating democracy.

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Sources-Data

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