The evolution of social vulnerability in Greece during the economic crisis (2008-2017)

Michail Melidis and Stylianos I. Tzagkarakis

Department of Politics, University of Exeter, Exeter, UK; Department of Political Science, University of Crete, Rethymnon, Greece

ABSTRACT
After a long period in the doldrums with austerity measures and consecutive bailouts, Greece still bears the scars of the recent financial adventure while strives to recover in a new economic environment. As one of the hardest-hit by the economic crisis Member states, Greece has seen its economic capacity reduced, the unemployment and poverty levels rising, and the living conditions for a significant part of the population and social groups deteriorating. Despite the plethora of analyses on the political and socio-economic perspectives, the evolution of social vulnerability remains a largely unexplored area that merits further investigation and analysis in a crisis-ridden country of the European South. The paper aims to study how social vulnerability has evolved in Greece from 2008 to 2017 using secondary data and descriptive statistics that focus on five key variables (disposable income, education, employment, gender, urban/rural environment) for a better understanding of the domestic social vulnerability dynamics in a period of stark contrasts. Overall, our findings demonstrate an increased risk of social exclusion and a widening of inequality and poverty rates during the stated period.

ARTICLE HISTORY Received 13 November 2020; Accepted 14 November 2021

KEYWORDS Social vulnerability; economic crisis; inequality; poverty; social exclusion; Greece

1. Introduction
While the cycle of consecutive crises (i.e. the financial crisis in 2008, the sovereign debt crisis in 2009-2010, and the Great Recession from 2008 to 2012) that staggered the global and European economy the last decade is seemingly closed, their strong legacy lends useful lessons for the fragility and volatility of national economies in light of persistent socio-economic challenges. As Verney (2009:1) rightly put it, ‘as the financial storm clouds began to gather, the potential weakness of Europe’s south rapidly emerged.
as a focus of concern’. Not far from this view, Manasse and Katsikas (2017) claimed that the euro area debt crisis has largely been a crisis of the European South. Issues of competitiveness, power imbalances among and within the Eurozone and EU Member states, the ‘core-periphery’ divide, and the different policy prescriptions in response to the economic crisis raised many questions about the future of the EU and the sustainability of the European growth engine (Celi et al. 2017; Parker and Tsarouhas 2018).

With the term of the economic crisis in this study, we refer to the protracted period of economic hardship that afflicted many Member states following the sovereign debt and Eurozone crisis. Indicatively, Cyprus, Greece, and Portugal facing sovereign default, struck bailout agreements that involved the application of inclusive financial adjustment programs. Subsequently, Spain’s ailing financial sector received a more limited financial package and countries such as Italy which were not in need of an immediate financing agreement, felt the pressure to adjust their economies. In exchange for bailout funds, Badwin and Giavvazzi (2015) underscored the importance of structural reforms and fiscal consolidation as the main pillars of the euro area’s strategy to tackle the crisis.

According to Parker and Tsarouhas (2018:2), ‘the crisis has cast the relationship between the two categories of state in a new light that renders the ‘core-periphery’ concept increasingly pertinent.’ Apart from the exposure of shared vulnerabilities (e.g. structural, institutional, and administrative inefficiencies) of ‘peripheral’ states (i.e. Greece, Portugal, Italy, and Spain) in relation to ‘core’ states (i.e. Austria, Belgium, France, Germany, and The Netherlands), other differences between the two groups were identified in the use of different economic models, prescriptions and growth strategies to surpass the crisis (Bartlett and Prica 2016). Additionally, economic asymmetries – that predated the economic crisis – contributed to a considerable GDP contraction and running government budget deficits for the former and lesser effects for the latter as their economies proved more resilient and robust (Serapioni and Hespanha 2019). In light of different domestic structures and economic dynamics in EU Member states, the impact of the economic crisis and austerity measures varied significantly with Southern Europe and particularly Greece suffering the most (Featherstone 2011).

Amid economic uncertainty, the emergence of social pressing issues in Southern Europe such as poverty, material deprivation, unemployment, and job insecurity were no surprise (Buendia 2018; Dooley 2018). In our research, Greece is a particularly significant case to study as its
pro-crisis high growth rates and thereafter the excessive government borrowing and skyrocketing government bond yields left it exposed to an unparalleled financial storm (Morlino and Sottilotta 2019). Such a condition rendered Greece one of the hardest-hit Member states and biggest recipients of international financial aid from the EU and IMF through three economic adjustment programs in 2010, 2012, and 2015 (Verney 2009). Arguably, the country’s long austerity and economic recession brought about an unprecedented cut in government spending and a significant GDP contraction by 25% (from 2009 to 2016 before it started rising again in 2017) (Matsaganis 2011; Petmezidou and Guillén 2014; Eurostat 2020a; 2021a). Evidence demonstrates that a significant part of the Greek population was at risk of poverty, social exclusion, and material deprivation caused, inter alia, by precarious forms of work and unemployment (Papadopoulou et al. 2014; Gkasis 2018; Eurostat 2020b; Eurostat 2021b).

Turning now to the issue of identifying the dynamics of social vulnerability, many scholars have adopted various approaches, methodologies and analyses (Lindsay et al. 2015; Morrone et al. 2011). Social vulnerability is defined here as the reduced capacity of an individual or community to foresee, manage, withstand and recover from the adverse effects of natural or human-made events. To gain insight into what drives social vulnerability, we selected five different variables (disposable income, education, employment, gender, urban/rural environment). Especially, disposable income indicates the relation of purchasing power and household expenditure with income inequalities; education points how unequal access can affect child poverty, social exclusion, and social mobility; employment presents how precarious forms of work and economic instability may increase poverty; gender shows how males and females are impacted by unemployment and income inequality; and lastly, urban/rural environment depicts the context within which inequalities and phenomena of social exclusion can take place.

Against this backdrop, social vulnerability in Greece constitutes a largely under-researched area whose investigation can provide a deeper understanding of the domestic dynamics in light of the economic crisis. Hence, the aim of our study is to build upon the existing literature, conduct a rigorous and contemporary analysis, and provide a clear picture of how has social vulnerability in Greece evolved from 2008 to 2017, a period fraught with stark controversies and complexities. Methodologically, our research employs secondary data from the Eurostat, ELSTAT, ILO, Bertelsmann Stiftung, and OECD datasets, and descriptive
statistics (correlation analysis) complemented by various reports to show the link between the five different variables and social vulnerability. In the article that follows, the first section of our analysis outlines the conceptual framework and the basic theoretical considerations of social vulnerability. Then, the second part gives an overview of the methodological steps and the third exhibits the empirical analysis underpinned by descriptive statistics (correlation analysis). Lastly, the fourth section discusses the key findings such as the emergence of patterns of social exclusion, and the widening of inequality and poverty and draws some broader conclusions.

1.1. Defining social vulnerability

Social vulnerability has been a relatively new concept that has triggered long debates amongst academics since the 1990s but its widespread use is traced back to the early 2000s across different disciplines (Spini et al. 2013; Oris et al. 2016). Interestingly, it has been a subject of wide-ranging research in the existing literature assisted by an abundance of definitions, methodologies, and analyses (Vasta 2004; Ranci 2010; Morrone et al. 2011). The diversity of scholarly views and the lack of a commonly accepted definition has inevitably caused conceptual confusion while interdisciplinarity added more versatility to a purported narrow term. In this respect, vulnerability is described as a state of openness and powerlessness but has also been featured as passiveness, exposure, liability, and susceptibility. For the purposes of this research, we will rely on the definition of Chambers (2006:33) who points out that ‘vulnerability […] refers to exposure to contingencies and stress, and difficulty in coping with them. Vulnerability has thus two sides: An external side of risks, shocks, and stress to which an individual or household is subject; and an internal side which is defenselessness, meaning a lack of means to cope without damaging loss. Loss can take many forms – becoming or being physically weaker, economically impoverished, socially dependent, humiliated or psychologically harmed’.

In a narrow context, social vulnerability is an aspect of vulnerability (i.e. the other three dimensions are physical, functioning, and economic vulnerability) which encompasses several pressing factors or stressors that determine the extent to which someone’s livelihood and life can be put in danger by distinct and recognizable occurrences in society or nature (Ranci 2010). Notably, social vulnerability is employed to explain specific risks in each discipline (i.e. environmental, economics,
societal, etc.). These may include potential harm and losses to people, abuse, exclusion, marginalization, shocks, and natural hazards (Lindsay et al. 2015). In essence, the term of social vulnerability refers to the features of a person or a group of people, societies, and organizations with regards to their (in)ability to anticipate, encounter, withstand and recover from adverse impacts derived from pressing factors or stressors to which are exposed (Spini et al. 2013). This (in)ability is attributed to elements found in social interactions, culture, and institutions. With regard to the main characteristics, particular emphasis is placed on family structures, community organizations, civic participation (i.e. unequal participation in decision making, political accountability, lack of leadership and conflict resolution), discrimination (i.e. racial, ethnic, linguistic, and religious), culture (i.e. tradition, values, local norms), and economic condition (Zimmermann 2017).

Drawing on the existing literature, the populations that seem particularly vulnerable and prone to old and new social risks¹ are children, young people, working women, migrants-refugees, families with young children, and low-skilled individuals (Kiss 2016). To this end, Bonoli (2005: 435) argued that ‘while it is difficult to set clear borders around the section of the population that bears most NSRs [new social risks], it is clear that the categories […] are largely overlapping, and that it is possible to identify in every post-industrial society a fairly large minority of the population that struggles daily against the consequences of NSRs’. Ervasti et al. (2012:26) put forward the relationship of new social risks with the (un)successful entry into the labor market by stating that new risks might become more acute for ethnic and social minorities than the population majority.² Other significant contributors are the reduced capacity of the state and family to provide support for the children and elderly as well as the lack of adequate training and education.

Interestingly, Leoni’s description (2016:835) has offered more details about the key characteristics of the ‘socially vulnerable groups’ by under-scoring the significance of the socio-economic background, gender, ethnicity, social class, poverty, unemployment, and health needs. Finally, the

¹Some of the main new social risks evolving from the several economic and socio-demographic changes include the reconciliation of work and family, single parenthood, having a frail relative, possessing low or no skills, facing a temporal situation of relative poverty, insufficient social security coverage due to atypical employment and precarious employment (Bonoli 2005; Ranci 2010).

²Discrimination is also another key source of social risk where ‘vulnerable social groups’ can be exposed to social exclusion and inequality. However, we need to note here that ‘social vulnerability’ differs from the notion of poverty as it includes aspects that are not exclusively related to the income level per se. These aspects touch upon housing, employment, childcare, dependency relationships, family models and difficulties in the transition from education to employment or from the single to parental life.
definition of the European Foundation for the Improvement of Living and Working Conditions (2002) linked socially vulnerable groups to (un)employment and the risk of exclusion from the labor market. Correspondingly, Greek law 4375/2016 makes a reference to the crisis-stricken socially vulnerable groups. In this category are included the unemployed, poor, elderly, children, single parents, victims of violence and human trafficking, disabled, and ill. In addition, the uninsured, those suffering from chronic diseases and mental disorders, and the generalized vulnerability of the workforce caused by informal, precarious, and casual employment could also be listed (Economou et al. 2014; Papadopoulou et al. 2014; Zafiropoulou 2014). For example, the exclusion of young people from education and vocational training may make their access to labor market more difficult. Additionally, the lack of social relations and civic participation may increase anxiety. In this setting, social vulnerability can have a link with characteristics such as anxiety, depression, and mental problems with long-term implications (Zafiropoulou et al. 2018).

1.2. Broader trends in Southern Europe and Greece

Austerity measures, tight budgets and fiscal imbalances seem to have impacted more the capacity of the Southern European states (e.g. Cyprus, Greece, Portugal, Spain, Italy) to respond to the challenges of the economic crisis adequately and promptly. Several indicators reflect some of the discrepancies among and within the EU and Eurozone states which fuel the ‘core-periphery’ divide. For example, differences in real GDP growth rate (Eurostat 2020c), output, expenditure and income (Eurostat 2020d) among EU-27 and ‘peripheral’ states still pose several obstacles for further integration and convergence. Based on Eurostat datasets from 2009 to 2020, the highest rates of unemployment for the general population (aged 15-74), male, female, youth (aged 15-24), and senior (aged 55-74) were noticed in Greece and Spain (Eurostat 2021b).

In particular, Karamessini et al. (2019) examined how some individual-level factors contributed to youth unemployment, inactivity, and difficulties in integrating young people into the EU labor market. Admittedly, there has been a reduction of people at risk of poverty or social exclusion in the EU from 2008 to 2017 (Eurostat 2018). However, Greece’s rates were among the highest followed by Spain, Portugal, Italy and Cyprus (See Tables 1 and 2 in Appendix).
Another group that regularly falls into this category is migrants who experienced the highest risk of social exclusion, poverty, material deprivation and low work intensity compared to national citizens in the EU-27 from 2010 to 2019 (Eurostat 2021c). Lastly, according to OECD (2015), child poverty in Southern European countries (Spain, Greece, Italy, Portugal) was the highest among the Eurozone countries.

Economic indicators such as the decline in citizens’ consumption were also important. For instance, the middle socio-economic groups in Greece experienced a serious decrease in their living standards which prompted a shift in consumer habits. This shift reasonably came as a response to the sharp increase in taxation that exhausted citizens’ tax capacity (Bell and Blanchflower 2015). Some scholars (Matsaganis 2018) also argued that wage cuts exposed to poverty risk a large proportion of citizens (i.e. the youth and migrants). It is telling that Greece possessed one of the highest levels of material deprivationiii in the Eurozone and the highest increase amongst EU countries during the economic crisis (Eurostat 2019a). With disposable income decreasing by 24.33% between 2008 and 2017 in Greeceiv, an increase in poverty levels did not come as a surprise. Furthermore, budget constraints, decreasing government revenues, and social contributionsv seem to have seriously affected the financing of and access to health care services with the middle and lower socio-economic groups suffering more as a result of the declining disposable income and rising costs in products and services (Kalafati 2012; Vadoros et al. 2013; Zavras et al. 2016). Indeed, Greece, under the pressure of MoUvi for fiscal consolidation, sought to curb public expenditure and health care was one of the sectors that incurred significant reductions (Tsiligianni et al. 2014). Hence, it may be argued that the above indicators show some of the key challenges that contribute to the so-called ‘new poverty’ phenomenon (Schierup et al. 2015; Barbieri and Bozzon 2016).

iiiMaterial deprivation is the measurable value of the inability of the welfare state to provide conditions to meet basic needs, let alone safeguarding social welfare, which is a subsequent step.
ivFor more details see: Eurostat (2019), Disposable Income, Available at: https://ec.europa.eu/eurostat/web/products-datasets/-/sdg_10_20 (Accessed: 12/8/2019).
vBy social contributions we refer to the employees’ and employers’ contributions as part of the decrease of income and employment levels that comprise a significant part of the health system.
viMemoranda of Understanding between the Greek government and the European Commission, the European Central Bank and the International Monetary Fund on bailout in order to avoid bankruptcy of the Greek state. In response, the Greek authorities had to comply with a set of extraordinarily detailed conditions on reforms.
2. Methods

To test the significance and connection between the variables which are important for the indication of social vulnerability problems, such as inequality and general poverty, a correlation analysis of secondary quantitative data was conducted. The data used were drafted from Eurostat, ELSTAT, ILO, OECD, and Bertelsmann Stiftung institutions as they constitute some of the most important and reliable data pools. The selected variables-indicators which are connected (but not limited to) to social vulnerability are the following: poverty, income inequality (Gini coefficient), monthly household expenditure in rural and urban areas, equal access to education, child poverty and social exclusion danger as well as gender (men and women) and the general unemployment rate. To measure the evolution of social vulnerability, we used Gini Coefficient for income inequality on the grounds of a) consistency, b) it allows negative values for income unlike some other measures of inequality and c) because it is sensitive to outliers even in a large sample.

Measuring income inequality with the use of Gini Coefficient does not necessarily cover all aspects of inequality. The aim of the paper is not to focus merely on income inequality and its exclusive aspects but to analyse it in accordance with other indicators and show more accurately the evolution of social vulnerability in Greece during the economic crisis period. Correlation analysis was conducted between the following variables: poverty rate and income inequality (Gini coefficient), monthly household expenditure in rural areas and inequality, monthly household expenditure in urban areas and inequality, equal access to education and child poverty and social exclusion rate, men general unemployment and income inequality (Gini coefficient), and finally women general unemployment and income inequality (Gini coefficient). We need to note that the available OECD and Eurostat data for Gini coefficient do not include a distinction between genders and geographical areas (rural/urban) which ultimately leads us to use the general Gini coefficient data for the correlations.

The two-tailed Pearson’s r correlation analysis was used to test the positive or negative relationship between the two variables examined (i.e. poverty rate and income inequality or in-work poverty rate and income inequality). Scatter plots were used to visualize the relationship between the two variables examined. The purpose of scatter plots is to verify that variables have a linear relationship. For each variable, the number of cases does not include missing values. Each pair of variables was tested with Pearson’s correlation coefficient, Spearman’s rho, Kendall’s tau-b,
cross-product of deviations, and covariance. The data comprise quantitative variables dispensable for Pearson’s correlation coefficient and for Spearman’s rho and Kendall’s tau-b. By using Pearson’s correlation coefficient, we measure the strength of the linear relationship within each figure. It should also be mentioned that a correlation does not necessarily imply causation. However, very often by measuring the strength of a relationship and proving its initial existence may enhance decision making towards direct or indirect interventions in the related public policies.

Moreover, the data for social vulnerability is not limited to those analyzed in this research. For reasons of accuracy, clarity and economy of space we have chosen the most representative variables which can help us show more clearly the effects of the economic crisis on Greece’s social fabric and vulnerable groups. Importantly, not all variables include the same year of study as for some the available data end in 2016 (i.e. poverty and income inequality correlation, average monthly expenditure in rural and urban areas and income inequality correlation, men and women unemployment and income inequality correlation) and for others in 2017 (i.e. access to education and child poverty and social exclusion correlation). This happens due to the available data from the selected datasets. Finally, the correlations bear the same available year for both variables to maintain consistency.

3. Analyses

According to Figure 3.1., income inequality and poverty rates in Greece across the years 2008–2016 demonstrate a strong correlation. This correlation seems to be in line with the literature as a general assumption. What is worth noting here is that the degree and the sharpness of the economic crisis are crucial. For example, the first years of the crisis (2008-2009) were accompanied by low rates of poverty and income inequality as the economy looked better off. However, as the economic crisis deepened after 2012, this seems to be changing with the rates of both increasing accordingly. Finally, the last year of recession (2016) brings about a considerable de-escalation followed by lower rates. Hence, it may be argued that income inequality is proportional to poverty which can be associated with the increased volatility of the labor market and unemployment, and the reduction of disposable household income.

Figure 3.2. presents an inverse relationship between the two variables during the economic crisis. The evidence below seems to partly agree
with the existing literature about inequality as a consequence of the decreased disposable income and the ensuing shift in consumers’ habits linked to high taxation and reduced citizens’ tax capacity (Liargovas and Apostolopoulos 2017; Pelagidis and Mitsopoulos 2017).

**Figure 3.1.** Correlation between Poverty and Income inequality. Source: Authors’ compiled data from OECD Datasets.

**Figure 3.2.** Correlation between average monthly household expenditure in urban and rural areas and income inequality. Source: Authors’ compiled data from ELSTAT and OECD Datasets.
However, the finding here is that the breakdown of the household expenditure in rural and urban areas (see Figure 3.2.) brings to light strong similarities and gives a clear picture of the ‘centre/periphery’ competition with regards to the level of income inequality in Greece. Interestingly, both the rural and urban areas have seen a significant reduction in household expenditure since 2008 with a simultaneous increase in the risk of income inequality, except in 2016 where the inequality rates tend to return to the 2011 levels. Such a development could be attributed to a relatively more stable economic environment after the first year of the 3rd MoU implementation. However, the GDP was reduced to 2003 levels and more than 850,000 jobs were lost between 2010 and 2016 thus disrupting, in a sense, social mobility (Kotzamanis et al. 2017). In light of such pressures, the decrease in urban and rural household expenditure seems reasonable. In a broader sense, this drop may imply that the economic uncertainty and austerity may considerably affect the disposable income and the average monthly household expenditure.

Furthermore, a significant difference is that urban areas seem to have higher purchasing power and consumption rates based on their expenditure (numerical values) per year. That being said, one may argue that urban areas as richer due to higher economic activity and employability would feel to a lesser extent the severity of the economic crisis, the slashing of wages, and income squeezing. Thirdly, in sheer numbers, the rural areas appear to be more exposed to income inequality as the monthly expenditure are significantly fewer. This would mean that fewer economic resources entail a higher risk of inequality. However, to support this claim we need to take into consideration the cost of living which is generally lower than the urban centers as a result of a more localized economy, under-employment, and a weaker purchasing power. It may also be asserted that the occurrence of atypical economic relations and solidarity bonds among people in most rural areas and smaller communities could potentially play a role in offsetting the negative economic implications but factors such as lower employability and precarious forms of work cannot be overlooked (Anthopoulou et al. 2017).

What is really striking in Figure 3.3. is that the performance of Greece after 9 years of crisis witnesses a serious problem in ensuring equal access to education and reducing child poverty and social exclusion.

\footnote{The data used for equal access to education was retrieved from Bertelsmann Stiftung dataset. Equitable education is measured by Bertelsmann Stiftung by using the following indicators: 1. Socio-economic background and student performance (OECD PISA), 2. Pre-primary education expenditure (Eurostat), 3. Early School Leavers (Eurostat) and 4. Less than upper secondary education (Eurostat).}
Indicatively, Greece seems well-entrenched in 2008 among the top-performing states by enjoying a very good record in equal access to education and a relatively low rate in child poverty and social exclusion. However, this comes into question when we look at its performance in 2017. The new finding here is that strong signs of freefall compared to the previous ranking are clearly shown. Arguably, this condition finds Greece in the group of low performers such as Italy, Spain, Hungary, Bulgaria, and Romania. Greece’s sliding in the ranking unveils largely the inability and inefficiency of the state to support one of the most vulnerable groups, the children. Some of the explanations for this performance could be sought to the lack of funding, organization, and modern care structures.

In line with the literature, the unemployment levels between men and women in Figure 3.4. find the latter worse off. Women appear to suffer more from the outset of the crisis whose rates are more than double compared to men. On the other hand, men are less exposed concerning the numerical values at almost all phases of the economic crisis. Although both genders experience a rapid increase in unemployment and inequality, this occurs to a varying degree. Crucially, the beginning of the crisis is accompanied by a relatively low risk; but this suddenly changes after 2009. The worst period for both genders is identified between 2012 and 2015 where the unemployment and inequality rates are peaking.

![Figure 3.3](image.png)

**Figure 3.3.** Equal access to education and child poverty and social exclusion danger correlation in EU 28. Source: Authors’ compiled data from Bertelsmann Stiftung and Eurostat datasets.
Empirical research shows that the evolution of social vulnerability is not linear but is subject to considerable variations as indicated by the correlation analyses. From this study, we found some similarities with the existing literature as regards the general effects of the economic crisis on the societal aspect (Eurostat 2019a, b; Petmezidou and Gullen 2014). More specifically, our findings suggest that the economic crisis appears to be determinant in all of our figures. It is noteworthy that the intensity and deepening of the crisis are commensurate to further deterioration of social vulnerability problems (Kiss 2016). Furthermore, the effects of the economic crisis are clearly offset in all correlations with the increasing trends of inequality, poverty, and social exclusion for significant parts of the population, particularly the youth and children. Consequently, it is not surprising that these elements constitute new social risks which seem to unfold incrementally (Bonoli et al. 2005; Ervasti et al. 2012).

We also found that the socio-economic background, class and gender are crucial factors (Leoni 2016). However, we did not find strong evidence, but just a few indications about the connection of social vulnerability with the aspects of personal debt and lack of skills (Kotroyannos et al. 2015). With regards to the former – based on average monthly

![Figure 3.4. Correlation between women and men unemployment and income inequality. Source: Authors’ compiled data from ILO and OECD Datasets.](image-url)
household expenditure in rural and urban areas – we could contend that personal debt is a factor that worsens the already impaired psychological, moral and economic situation of the individual or groups. For the latter, we may argue that in a period of high unemployment and economic uncertainty the most vulnerable groups or individuals can be the unskilled or the ones with a limited skillset.

Subsequently, our findings are revealing about the occurrence of the ‘new poverty’ phenomenon in Greece (Schierup et al. 2015). Evidence of this phenomenon is found in the upward trends in most of our correlations about income inequality and poverty across the board. The high exposure of vulnerable groups to poverty inevitably poses a serious threat to Greece’s social fabric. We tend to agree with the view that erosion of social cohesion and a weakening of public trust in the state’s capacity to deal effectively with vulnerability problems would be very likely under these circumstances (Dubois and Droy 2019). For example, high unemployment and economic instability could fuel further disappointment and lack of trust among the young generation. Another alarming issue is that failing to ensure equal access to education may increase dramatically the risk of poverty and social exclusion for children. This would happen because this group may be deprived of the provision of key pedagogical and development skills useful for their personal and professional development, which, in turn, could hamper social mobility.

Synthesizing a scenery like this would suggest that a potential social exclusion of the most dynamic social groups may seriously undermine the country’s future prospects and economic recovery (Ranci 2010). Simultaneously, such a condition could also trigger some unintended consequences such as lower prospects of family creation and birth rates (Bell and Blanchflower 2015). Lastly, the inability of the Greek state to live up to the rising problems of unemployment, social exclusion, unequal access to education, income inequality, and poverty raises plausibly many questions about Greece’s capacity to provide a safety net and social protection for those in need in hard times. On top of that, it should not be ignored that the chronic and structural pathologies and poor performance of the state mechanism constitute key barriers towards (in)efficient social policies. For instance, the exponential increase of vulnerability problems reasonably alludes to failures of the existing social programs and policies which need further consideration (Serracant 2015; Barbieri and Bozzon 2016).
In many respects, the implications of our findings regarding the evolution of social vulnerability demonstrate that Greece’s limited capacity, the dramatic lowering of living standards, and social exclusion rates suggest that policy reforms are now necessary and ripe to tackle this phenomenon but their implementation may impinge on various domestic institutional and administrative obstacles. Acknowledging the chronic problems of Greece’s state mechanism, restructuring the current system, and reforming its policies will not be an easy task due to entrenched interests, limited sources of funding, economic pressures, and political hesitance. That said, particular attention should be given to how social vulnerability is widely perceived by the political parties, the public, and other stakeholders. Although social vulnerability is generally viewed as a multifaceted problem with long-term effects, in practice the above patterns of increasing poverty, inequality, and social exclusion demonstrate the opposite with the manifestation of a rather sluggish, myopic, and piecemeal approach for a problem that requires immediate action.

Along these lines, another argument that is often articulated is that the state by fixing the economy first would be able to grant more funding for the addressing of vulnerability problems. Although advocates of this line of reasoning prefix economy over society, the risk here is that social vulnerability problems cannot be deprioritized due to humanitarian reasons. In other words, putting social vulnerability on the back burner and focusing solely on the economic dimension would possibly accentuate Greece’s existing social problems and compromise its future socio-economic prospects. To improve the current situation, a more active involvement of the EU would be necessitated to exert pressure on Greece to adopt more inclusive policies and comprehensive recalibration strategies. In fact, linking the necessary reforms with the EU level would increase transparency and accountability by enabling domestic actors to coordinate better their actions with those of their counterparts at the supranational level and thus implement better practices. Such actions would also signal Greece’s determination to turn a new page and seek further convergence with the rest of the EU Member States.

Finally, it would be fair to mention some of the main caveats in our research. Although the selection of five variables offered a clear picture of the social vulnerability dynamics in an EU ‘peripheral’ state, the examination of more variables, though, would markedly enrich our sample. Furthermore, while the use of descriptive statistics and correlation
analyses contributed to a more quantifiable approach, the inclusion of qualitative analysis with some interviews prior to the crisis would measure the impact of the decade more fully. In this case, we do recognize that the risk of relying solely on descriptive statistics may overshadow other critical parameters such as personal views, experiences, culture, and attitudes and obscure the structural pathologies of the Greek welfare state. Additionally, it would be beneficial for our deeper understanding to conduct further analysis on the characteristics and functioning of the Greek welfare system and the implementation of social policies during the stated period. Lastly, our analysis included the study of only one peripheral country (Greece) meaning that a cross-country comparison or the addition of more than one ‘core or/and peripheral’ country would greatly enlarge the reach of this study.

5. Conclusion

Concluding, the paper did exhibit some of the dominant patterns of social vulnerability in Greece with the use of descriptive statistics and correlation analysis. Specifically, the study assessed through five key variables the evolutionary process and domestic social vulnerability dynamics in a crisis-stricken state of Europe’s South. The selection of these variables illuminated certain aspects of social vulnerability which were crucial for a deeper understanding of this phenomenon. That being said, the paper’s main departure point was the economic crisis, a period filled with many complexities and uncertainty, and its impact on the socio-economic context of an EU ‘peripheral’ state. Arguably, the country’s long austerity program and deep recession in conjunction with the duration and intensity of the economic crisis constituted significant factors that undermined Greece’s capacity to respond to the socio-economic challenges adequately and promptly.

Clearly, our findings demonstrate that the economic crisis exacerbated the already existing social problems in the country. Unlike other Southern European states, Greece finds itself in a weaker position – as reflected by our data and figures – with dramatic consequences for significant parts of the population. Some general assumptions that derive from this study could be summarized in the fact that the economic crisis as an external factor exerted significant pressure on the societal and economic realms and tested the overall capacity of the Greek state. Second, Greece showed reduced administrative reflexes and ability which plausibly raise many questions about the efficiency of the state
machinery and welfare system to protect the vulnerable groups in difficult times. In this regard, it will not be surprising if public trust in the state may further diminish.

Third, economic uncertainties and high unemployment have resulted in the emergence of new social risks such as increasing poverty, social exclusion, and a widening of inequalities which may seriously undermine the country’s future prospects and recovery as well as its human, economic and social capital. Taking into account Greece’s economic condition, it becomes clear that the state of the economy is very likely to remain a core issue guiding many of the government decisions. However, an imminent risk, in this case, is a shift of government’s focus from the social to the economic sphere with significant implications for the former such as further deterioration of social vulnerability. In this regard, a more active EU role to exert pressure on Greece to make profound changes and reforms to its welfare system and social policies would be a step forward.

However, what raises many concerns about post-crisis Greece is that social vulnerability may obtain more permanent characteristics if the same level of state response remains in place. To put it bluntly, although the purported end of the cycle of consecutive crises of the previous decade may allow more optimistic views for EU’s next day, Greece’s poor performance causes great skepticism and triggers many debates about the blend of actions and strategies required in the dawn of a new economic era. Sadly, the picture of a weak state does not help much, however, the lessons drawn from other states with similar experiences (i.e. Portugal) and the EU can be helpful to find solutions tailored to Greece’s needs. By all means, the addressing of vulnerability problems remains in Greece’s hands and as such requires a decisive domestic approach which will need, inter alia, to encompass a more contemporary social toolkit and long-term strategic planning.

Acknowledgements

The authors would like to thank the two anonymous reviewers whose constructive and useful comments on an earlier version helped significantly improve the quality of this manuscript.

Disclosure statement

No potential conflict of interest was reported by the author(s).
Notes on contributors

Dr. Michail Melidis is an Associate Lecturer in Politics at the University of Exeter (UK). His work research is centered on policy analysis and implementation of public policies and more specifically on social and environmental policies in the EU, Greece, and the UK.

Dr. Stylianos I. Tzagkarakis is a Teaching Fellow in Comparative Politics at the University of Crete (Greece). His work and research interests are focused on the analysis and implementation of public and welfare policies in Greece and the EU.

ORCID

Michail Melidis  http://orcid.org/0000-0002-0042-4001
Stylianos I. Tzagkarakis  http://orcid.org/0000-0002-9393-8991

References

Anthropoulou, T., Kaberis, N. and Petrou, M. (2017) ‘Aspects and experiences of crisis in rural Greece. Narratives of rural resilience’, Journal of Rural Studies 52: 1–11.
Baldwin, R. and Giavazzi, F. (2015) ‘The Eurozone crisis: a consensus view of the causes and a few possible solutions, CEPR, chap’, The Eurozone Crisis: A Consensus View of the Causes, 18–63.
Barbieri, P. and Bozzon, R. (2016) ‘Welfare, labour market deregulation and households’ poverty risks: an analysis of the risk of entering poverty at childbirth in different European welfare clusters’, Journal of European Social Policy 26(2): 99–123.
Bartlett, W. and Prica, I. (2016) ‘Interdependence between core and peripheries of the European economy: secular stagnation and growth in the Western Balkans’, LEQS Paper No. 104/2016.
Bell, D. and Blanchflower, D. (2015) ‘Youth unemployment in Greece: measuring the challenge’, IZA Journal of European Labor Studies 4(1): 1–25.
Bonoli, G. (2005) ‘The politics of the new social policies: providing coverage against new social risks in mature welfare states’, Policy & Politics 33(3): 431–449.
Buendía, L. (2018). ‘The spanish economic ‘miracle’that never was’, in O. Parker and D. Tsarouhas (eds.), Crisis in the Eurozone Periphery: The Political Economies of Greece, Spain, Ireland and Portugal, Cham: Palgrave Macmillan, pp. 51–72.
Celi, G., Ginzburg, A., Guarascio, D. and Simonazzi, A. (2017) Crisis in the European Monetary Union. A Core-Periphery Perspective, London: Routledge.
Chambers, R. (2006) ‘Vulnerability, coping and policy (editorial introduction)’, IDS Bulletin 37(4): 33–40.
Dooley, N. (2018). ‘Portugal’s economic crisis: overheating without accelerating’, in O. Parker and D. Tsarouhas (eds.), Crisis in the Eurozone Periphery: The Political Economies of Greece, Spain, Ireland and Portugal, Cham: Palgrave Macmillan, pp. 73–91.
Dubois, J.-L. and Droy, I. (2019) *Report on Social Vulnerability Indicators. Analytical Framework and Methodological Considerations*. RE-InVEST report, Paris: IRD.

Economou, C., Kaitelidou, D., Katsikas, D., Siskou, O. and Zafiropoulou, M. (2014) ‘Impacts of the economic crisis on access to healthcare services in Greece with a focus on the vulnerable groups of the population’, *Social Cohesion and Development* 9(2): 99–115.

Ervasti, H., Andersen, J. G., Fridberg, T. and Ringdal, K. (2012) *The Future of the Welfare State: Social Policy Attitudes and Social Capital in Europe*, Cheltenham, UK: Edward Elgar.

European Foundation for the Improvement of Living and Working Conditions (2002) Access to employment for vulnerable groups, *Foundation Paper* No. 2, Luxembourg: Office for Official Publications of the European Communities.

Eurostat (2018) Downward trend in the share of persons at risk of poverty or social exclusion in the EU. Available from: https://ec.europa.eu/eurostat/documents/2995521/9310033/3-16102018-BP-EN.pdf/16a1ad62-3af6-439e-ab9b-3729edd7b775 [Accessed 12 Sep 2019].

Eurostat (2019a) Material deprivation statistics – early results. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php/Material_deprivation_statistics_-_early_results [Accessed 12 Aug 2019].

Eurostat (2019b) Share of young people (1ged 16-29 years) at risk of poverty or social exclusion. Available from: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Share_of_young_people_(aged_16-29_years)_at_risk_of_poverty_or_social_exclusion,_2017_(%25)_YP18.png [Accessed 12 Aug 2019].

Eurostat (2020a) Real GDP rate of change, 2009-2019. Available from: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Real_GDP_rate_of_change,_2009-2019.png [Accessed 12 Sep 2019].

Eurostat (2020b) People at risk of poverty or social exclusion. Available from: https://ec.europa.eu/eurostat/web/products-datasets/-/t2020_50 [Accessed 12 Sep 2019].

Eurostat (2020c) Real GDP growth rate – volume. Available from: https://ec.europa.eu/eurostat/web/products-datasets/-/tec00115&lang=en [Accessed 12 Sep 2019].

Eurostat (2020d) GDP and main components (output, expenditure and income). Available from: https://ec.europa.eu/eurostat/en/web/products-datasets/-/NAMA_10_GDP [Accessed 12 Sep 2019].

Eurostat (2021a) GDP and main components (output, expenditure and income). Available from: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nama_10_gdp&lang=en [Accessed 12 Sep 2019].

Eurostat (2021b) Unemployment statistics and beyond. Available from: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Unemployment_statistics_and_beyond [Accessed 12 Sep 2019].

Eurostat (2021c) Migrant integration statistics - at risk of poverty and social exclusion. Available from: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Migrant_integration_statistics_-_at_risk_of_poverty_and_social_exclusion#People_at_risk_of_poverty_or_social_exclusion [Accessed 12 Sep 2019].
Featherstone, K. (2011) ‘The JCMS annual lecture: the Greek sovereign debt crisis and EMU: a failing state in a skewed regime’, *JCMS: Journal of Common Market Studies* 49(2): 193–217.

Gkasis, P. (2018). ‘Greece and European monetary union: the road to the demise of the Greek economy’, in O. Parker and D. Tsarouhas (eds.), *Crisis in the Eurozone Periphery: The Political Economies of Greece, Spain, Ireland and Portugal*, Cham: Palgrave Macmillan, pp. 93–110.

Kalafati, M. (2012) ‘How Greek healthcare services are affected by the Euro crisis’, *Emergency Nurse* 20: 26–27.

Karamessini, M., Symeonaki, M., Stamatopoulou, G. and Parsanoglou, D. (2019). ‘Factors explaining youth unemployment and early job insecurity in Europe’, in B. Hvinden, C. Hyggen, M. A. Schoyen and T. Sirovátka (eds.), *Youth Unemployment and Job Insecurity in Europe: Problems, Risk Factors and Policies*, Cheltenham, UK: Edward Elgar Publishing, pp. 24–44.

Kiss, M. (2016) *Vulnerable Social Groups: Before and After the Crisis*, European Parliamentary Research Service PE 586.605, European Union. Available from: https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.europarl.europa.eu%2FRegData%2Fetudes%2FBREIE%2F2016%2F586605%2FEPRE_BRI(2016)586605_EN.pdf&data=04%7C01%7CM.Melidis%40exeter.ac.uk%7C6f d7bb3ecf774d25623408d9b50da1a%7C912a5d77b984e9eaf321334df804a53%7C0 7%7C0%7C637739890565367162%7CUnknown%7CTWpGBZsb3d8eyjWfjoiM C4wLjAwdMAlilCjQiJojIv2LuMzlIcJBTiIk1haWwicjJxVCI6Mn0%3D%7C 3000&xdata=UhhpcwAidcGEtPuZRIw41qhH9j%2FjmsBbxsP51EOgTA%3D&re served=0 [Accessed 24 Nov 2021].

Kotroyannos, D., Lavdas, K. A., Papadakis, N., Kyridis, A., Theodorikakos, P., Tzagkarakis, S. I. and Drakaki, M. (2015) ‘An individuality in parenthesis? social vulnerability, youth and the welfare state in crisis: on the case of neets, In Greece, within the European context’, *Studies in Social Sciences and Humanities* 3(5): 268–79.

Kotzamanis, B., Baltas, P. and Kostaki, A. (2017) ‘The trend of period fertility in Greece and its changes during the current economic recession’, *Population Review* 56(2): 30–48.

Leoni, T. (2016) ‘Social adjustment: a guiding principle for welfare state adjustment after the crisis?’, *Empirica* 43: 831–8.

Liargovas, P. and Apostolopoulos, N. (2017). ‘Taxes as barriers to sustainable economic prosperity: the case of Greece’, in D. D. Thomakos and K. I. Nikolopoulos (eds.), *Taxation in Crisis Tax Policy and the Quest for Economic Growth*, Cham: Palgrave Macmillan, pp. 389–410.

Lindsay, M. K. W., Theou, O., Pena, F., Rockwood, K. and Andrew, M. K. (2015) ‘Social vulnerability as a predictor of mortality and disability: cross-country differences in the survey of health, aging, and retirement in Europe (SHARE)’, *Aging Clinical and Experimental Research* 27: 365–72.

Manasse, P. and Katsikas, D. (2017). *Economic Crisis and Structural Reforms in Southern Europe: Policy Lessons*, London: Routledge.

Matsaganis, M. (2011) ‘The welfare state and the crisis: the case of Greece’, *Journal of European Social Policy* 21(5): 501–12.
Matsaganis, M. (2018). 'Income support policies and labour market reforms under austerity in Greece', in S. Theodoropoulou (ed.), Labour Market Policies in the era of Pervasive Austerity: A European Perspective, Bristol: Policy Press, pp. 43–68.

Morlino, L. and Sottilotta, C. E. (2019) 'Southern Europe and the Eurozone crisis negotiations: preference formation and contested issues', South European Society and Politics 24(1): 1–28.

Morrone, A., Scrivens, K., Smith, C. and Balestra, C. (2011) 'Measuring vulnerability and resilience in OECD countries', Paper for the IARIW-OECD conference on economic insecurity, Paris, France, November 22–23.

Oris, M., Roberts, C., Joye D. and Stähli, M. E. (2016) 'Surveying human vulnerabilities across the life course: balancing substantive and Methodological Challenges', in M. Oris, C. Roberts, D. Joye and M. E. Stähli (eds.), Vulnerabilities Across the Life Course, Springer Open, pp. 1–25.

Papadopoulou, D., Dimoulas, C. and Symeonaki, M. (2014) National Report on the Labour Market Position of Vulnerable Groups in Greece, Athens: Panteion University of Social and Political Studies.

Parker, O. and Tsarouhas, D. (2018) Crisis in the Eurozone Periphery: The Political Economies of Greece, Spain, Ireland and Portugal, Cham: Palgrave Macmillan.

Pelagidis, T. and Mitsopoulos, M. (2017) Who’s to Blame for Greece? How Austerity and Populism are Destroying a Country with High Potential, Cham: Palgrave Macmillan.

Petmesidou, M. and Guillén, A. M. (2014) 'Can the welfare state as we know it survive? A view from the crisis-ridden South European periphery', South European Society and Politics 19(3): 295–307.

Ranci, C. (2010) 'Social vulnerability in Europe', in C. Ranci (ed.), Social Vulnerability in Europe. The New Configuration of Social Risks, Basingstoke and New York: Palgrave Macmillan, pp. 3–34.

Schierup, C.-U., Krifors, K. and Slavnic, Z. (2015). ‘Social exclusion: migration and social vulnerability’, in M. Dahlstedt and A. Neergaard (eds.), International Migration and Ethnic Relations, London and New York: Routledge, pp. 200–226.

Serapioni, M. and Hespanha, P. (2019) ‘Crisis and austerity in Southern Europe: impact on economies and Societies’, e-cadernos CES 31: 4–18.

Serracant, P. (2015) ‘The impact of the economic crisis on youth trajectories: a case study from Southern Europe’, Young 23(1): 39–58.

Spinì, D., Hanappi, D., Bernardi, L., Oris, M. and Bickel, J.-F. (2013) ‘Vulnerability across the life course: a theoretical framework and research directions’, Working Paper LIVES 2013/27.

Tsiliogianni, I. G., Papadokostakis, P., Prokopiadou, D., Stefanaki, I., Tsakountakis, N. and Lionis, C. (2014) ‘Impact of the financial crisis on adherence to treatment of a rural population in Crete, Greece’, Quality in Primary Care 22(5): 238–44.

Vandoros, S., Hessel, P., Leone, T. and Avendano, M. (2013) ‘Have health trends worsened in Greece as a result of the financial crisis? A quasi-experimental approach’, European Journal of Public Health 23(5): 727–31.

Vasta, K. S. (2004) ‘Risk, vulnerability, and asset-based approach to disaster risk management’, International Journal of Sociology and Social Policy 24(10/11): 1–48.
Verney, S. (2009) ‘Flaky fringe? Southern Europe facing the financial crisis’, *South European Society and Politics* 14(1): 1–6.

Zafiropoulou, M. (2014) ‘Exclusion from healthcare services and the emergence of new stakeholders and vulnerable groups in times of economic crisis: A civil society’s perspective in Greece’, *Social Change Review* 12(2): 141–60.

Zafiropoulou, M., Theodosiou, A. and Pérez, A. (2018) ‘Civil society discourses on poverty and social exclusion during the Greek crisis’, in A. Katsikas, D. A. Sotiropoulos and M. Zafiropoulou (eds.), *Socioeconomic Fragmentation and Exclusion in Greece Under Crisis*, London: Palgrave Macmillan, pp. 163–187.

Zavras, D., Zavras, A. I., Kyriopoulos, I. I. and Kyriopoulos, J. (2016) ‘Economic crisis, austerity and unmet healthcare needs: the case of Greece’, *BMC Health Serv. Res* 15: 309.

Zimmermann, A. (2017) *Social Vulnerability as an Analytical Perspective*, Population Europe Discussion Papers, Berlin: Max Planck Society for the Advancement of Science on behalf of the collaborative network “Population Europe”.

**Appendix**

**Table 1.** Unemployment percentages based on age, gender, educational level and nationality 2008-2018.

|                | Greece 2008 | Greece 2018 | Spain 2008 | Spain 2018 | Italy 2008 | Italy 2018 | Portugal 2008 | Portugal 2018 | Cyprus 2008 | Cyprus 2018 | Eurozone 2008 | Eurozone 2018 |
|----------------|-------------|-------------|------------|------------|------------|------------|---------------|---------------|-------------|-------------|--------------|--------------|
| Male (15-64)   | 5.2         | 15.5        | 5.6        | 10.0       | 6.9        | 6.9        | 3.3           | 8.3           | 6.9         | 8.0         |              |              |
| Female (15-64) | 11.6        | 24.4        | 12.9       | 17.1       | 8.5        | 9.3        | 7.6           | 11.9          | 4.3         | 8.8         | 8.4          | 8.7          |
| Age 15–24      | 21.9        | 39.9        | 24.5       | 34.3       | 21.2       | 22.2       | 16.7          | 20.3          | 9.0         | 20.2        | 15.8         | 16.9         |
| Age 25–49      | 7.7         | 19.8        | 10.3       | 14.1       | 6.4        | 11.1       | 7.3           | 6.2           | 3.3         | 7.9         | 6.9          | 8.2          |
| Age 50–64      | 3.8         | 14.7        | 7.8        | 13.7       | 3.2        | 6.5        | 6.6           | 6.2           | 2.9         | 6.1         | 5.7          | 6.2          |
| Education level: Primary | 7.7 | 22.8 | 15.4 | 22.3 | 8.5 | 14.9 | 8.3 | 7.7 | 5.2 | 10.4 | 11.7 | 15.2 |
| Education level: Secondary | 8.9 | 21.9 | 10.5 | 15.5 | 6.1 | 10.2 | 7.8 | 8.3 | 3.7 | 8.9 | 6.9 | 7.5 |
| Education level: Tertiary | 6.5 | 14.3 | 6.4 | 9.0 | 4.6 | 6.1 | 6.9 | 12.7 | 3.0 | 5.4 | 4.3 | 5.1 |
| Native         | 8.0         | 19.0        | 10.2       | 14.4       | 6.7        | 10.4       | 7.9           | 7.1           | 3.4         | 8.6         | 7.1          | 7.8          |
| Immigrants     | 6.8         | 26.9        | 17.5       | 21.9        | 8.5        | 14.1       | 10.9          | 11.4          | 5.4         | 8.3         | 13.2         | 13.0         |
| Total unemployment | 7.9 | 19.5 | 11.3 | 15.4 | 6.8 | 10.8 | 8.0 | 7.3 | 3.8 | 8.6 | 7.6 | 8.3 |

Source: Authors’ compiled data from Eurostat.

**Table 2.** Selected economic and social indicators 2008-2017.

|                                | 2008    | 2017 (percentage change) |
|--------------------------------|---------|--------------------------|
| Gross domestic product per capita value | 22370   | 17110 (−23.51%)          |
| Severe material deprivation     | 11.2    | 21.1 (+88.39%)           |
| Poverty and social exclusion    | 28.1    | 34.8 (−23.84%)           |

Source: Authors’ compiled data from Eurostat.