Economic Crisis, worker's health and social protection

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Abstract

Objective The aim of this paper is to analyse the individual and contextual factors that could affect worker's mental and physical health during economic downturn. This paper fills the gap in the literature that addresses the link between crisis, physical and mental health.

Methods Bivariate, machine learning method and multi-level regression analysis were performed to explore the determinants of European Worker's mental and physical health. Machine learning method is dedicated to the predictors of mental and physical health problems based on a classification algorithm, *random forest* model. Since the respondents of our data come from different European countries, the database has a hierarchical form with at least two levels identified here. Thus, multilevel modelling is used for perfectly take account such data structures where the level 2 effect (country) and level 1 (individuals) are correlated.

Findings The 2008 economic crisis has had a significant impact on Europe.Our study, based on three periods (2005,2010 and 2015), examined the relationship between economic crisis, worker's health and social protection. Our empirical analysis reveals that, the mechanisms that could explain the effect of crisis on worker's health are: (i) the work environment, in this case, working and employment conditions; (ii) the characteristics of individual workers, notably gender, age, occupation, etc.; (iii) public policies such as the generosity of the social protection system.

Conclusion The relationship between economic crisis, workers' health and social protection is complex and related to various factors. However, the effect of 2008 economic crisis on european workers mental health can be mitigated or intensified by public policies. In addition, increased social spending on active labour market programs (ALMPs) could help retain and reintegrate workers into their jobs, thereby mitigating some adverse health effects of the economic recession.

Key words: 2008 economic crisis, recession, health problems, working conditions, social protection.