

The implications of the recent economic crisis on life expectancy in Greece

Extended abstract

A systematic review of economic recessions previously occurred in developed countries, confirms that economic crises always have serious effects in population dynamics (e.g. Sobotka et al. 2010, Khang et al., 2005).

With regard to mortality, the economic downturn can be a powerful factor of poor health (Bezruchka, 2009, Stuckler et al., 2009), but also can lead to a reduction of population life expectancy, as the crisis has a serious impact on the state's ability to fully meet the transfer costs (pensions and unemployment benefits) and to totally cover the health costs of the population, part of them being transferred to individuals and households. A sharp decline of pensions combined with a reduction of health services may have a significant impact on life expectancy, especially in the elderly population (Kentikelenis and Papanicolas, 2012). In addition, the literature suggests that economic crises are strongly associated with an increase in both the levels of perinatal and infant mortality (Reeves et al., 2012, Ensor et al., 2010), as well as the levels of mortality of adult ages from cardiovascular diseases, infections, liver diseases, suicides and homicides. Therefore financial crises are usually accompanied by an elevation of the overall levels of mortality in the population (Simms, 2009), as well as the levels of mortality from specific causes, with varying intensities. Consequently, a thorough examination of the available data is necessary in order to assess the impact of the economic crisis in the mortality rates of the population in Greece, differentiated by sex, age, and cause of death, as well as on life expectancies.

In order to assess the effect of the elevated mortality risks in the life expectancy of the population at various ages, we consider the cause-specific mortality structure, differentiated by sex, age and cause of death, the evolution of mortality rates through time, as well as the specific mechanisms linking macroeconomic conditions with different causes of death. The cause and age specific pattern of mortality as determined by the intensity of death risks from the various causes, could explain changes of life expectancies of the population during the economic crisis. In order to estimate the differential impact of each cause of death on the total life expectancy, multiple decrement life tables differentiated by sex, age, and cause of death, and calendar year are calculated, giving particular emphasis on the appearance of reversals after 2009.

The results of this investigation can be useful for policy makers, public health authorities and institutions to consider the appropriate control measures in order to modify or even, if possible, to reverse the relationship between the recession and the population dynamics.

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