THE COST OF NON-COMMUNICABLE DISEASES IN THE EUROPEAN UNION; A FUTURE PROJECTION

Abstract:
Non-communicable diseases (NCDs) are responsible for 90% of deaths in the European Union (EU) and impose significant costs on the health care system and society as a whole. The aim of this paper is to offer perspective into the evolution of NCD costs in the EU by 2050. Through a non-homogeneous, semi-Markov state-transition model, the future costs of major NCDs under the current health policy framework are explored. Additionally, we assess potential costs savings under a framework with additional population-based prevention measures, focused on limiting lifestyle-related risk factors. Under the current policy framework, we find that health care and economic costs could increase by respectively 80% and 60% in 2050, which is equivalent to a total cost increase of over 70% due to NCDs in the EU. Cost-effective prevention efforts can limit this total cost increase by 20% and prevent over half a million deaths.

Keywords:
Non-communicable disease; European Union; Markov process; financial impact; prevention policy

JEL Classification: I10, I18