

The environmental influence of national savings in D-8 countries: Empirical evidence using an ARDL model

Abstract

Extensive theoretical and empirical evidence supports the crucial role of savings in driving a nation's economic growth and development. However, previous studies have not considered their potential environmental implications. This study aims to explore the influence of savings and remittances on the Developing-8 countries (D-8) from 1989 to 2019, using the panel autoregressive distributed (ARDL) model. The findings reveal that national savings and remittances, in the long run, help mitigate environmental degradation in the D-8 countries but energy use and population growth stimulate carbon dioxide (CO₂) emissions. In contrast, economic growth does not significantly affect these countries' environmental quality in the long run. However, none of the explanatory variables have any significant relationship with CO₂ emissions in the short run. Therefore, policymakers in the D-8 countries are strongly encouraged to prioritize the enhancement of national savings across the three economic agents to maximize the positive effects of savings on environmental quality. Government savings can be increased by reducing deficits and borrowings, while corporate savings can be encouraged by implementing investment tax credits and promoting research and development. Additionally, governments can embark on public enlightenment campaigns on financial education and provide incentives to encourage household savings. © 2023, The Author(s), under exclusive licence to Springer-Verlag GmbH Germany, part of Springer Nature.

Keywords

Clean Energy; CO₂ emissions; Developing eight countries; Energy consumption; Remittances; Savings