

Controlling environmental pollution: dynamic role of fiscal decentralization in CO2 emission in Asian economies

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Authors

Cong The Phan, Vipin Jain, Eko Priyo Purnomo, Md. Monirul Islam, Nafeesa Mughal, John William Grimaldo Guerrero & Sana Ullah

Abstract

The “environment” has become one of the important and debatable topics of the world and policymakers identifying the new predictors of CO2 emissions. Therefore, some economies have been promoting fiscal decentralization to encourage environmental quality by granting more financial autonomy to provincial and sub-national governments. Therefore, this study evaluates the dynamic effect of fiscal decentralization on CO2 in selected nine Asian economies using a fresh dynamic panel ARDL model from 1984 to 2017. The empirical findings show that fiscal decentralization has asymmetric effects on CO2 emissions because a positive change in revenue and expenditure decentralization reduced CO2 emissions in Asia. Moreover, a negative change in expenditure decentralization has also enhanced CO2 emissions in the long run. Thus, clean environmental policies and recommendations can be revised and proposed based on nonlinear findings in the modern era.

Keywords

Fiscal decentralization, CO2 emission, Pollution, ARDL, NARDL, Asia