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An Empirical Analysis of Trade Market Dynamics on CO₂ Emissions: A Study of GCC Economies
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Abstract

This study aims to conduct a comprehensive investigation into the impact of macro trade determinants on carbon dioxide emissions within Gulf Cooperation Council (GCC) economies spanning from 1995 to 2022. Specifically, it explores this influence through the theoretical frameworks of the Pollution Haven Hypothesis (PHH) and the Environmental Kuznets Curve (EKC). Advanced econometric methods, including stepwise regression employing the fully modified least square method and Pool ordinary least square method, are utilized in this research. Granger causality and Johnson cointegration tests are employed to assess both long-and short-term dynamics. The findings reveal that macro trade factors such as total investment, trade reserves, per capita income, and net inflow of foreign direct investment exhibit significant associations with carbon dioxide emissions across both short and long-term timeframes. Particularly noteworthy is the positive and statistically significant impact of per capita income, total investment, foreign direct investment, and gross national savings on CO₂ emissions. In contrast, trade reserves demonstrate a significant and negative impact on greenhouse gas emissions. © 2024, Econjournals. All rights reserved.

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Cointegration; Drivers; Granger Causality; Gulf Cooperation Council; Trade Openness

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