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THE INFLUENCE OF FOREIGN DIRECT INVESTMENT ON CARBON DIOXIDE EMISSION IN NEWLY INDUSTRIALIZED COUNTRIES: A PANEL ARDL-PMG APPROACH

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Abstract

In this study, the effect of foreign direct investment on carbon dioxide emissions was analyzed using annual data for the 1990-2016 period for the newly industrialized countries. The study was analyzed using Panel Pooled Mean Group-Autoregressive distributive lag cointegration test and Dumitrescu and Hurlin panel causality test. As a result of the long-term analysis, the foreign direct investment, energy consumption and trade openness have a positive and significant impact on carbon dioxide emissions whereas economic growth has negative and significant impact on carbon dioxide emissions. It has been analyzed that a 1% increase in foreign direct investment increases carbon dioxide emission by 0.03%. According to Dumitrescu and Hurlin panel causality tests analysis results, a bidirectional causality relationship between energy consumption and carbon dioxide emissions; a unidirectional causality relationship from economic growth and trade openness to carbon dioxide emissions and from carbon dioxide emissions to foreign direct investment has been determined.

Key words: CO_2 emissions, foreign direct investment, NIC countries, PMG panel ARDL

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