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ECONOMIC GROWTH AND CO2 EMISSIONS NEXUS IN ALGERIA: A CO-INTEGRATION ANALYSIS OF THE ENVIRONMENTAL KUZNTES CURVE

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ABSTRACT

This paper investigated the income-environment nexus through establishing a co-integration analysis as well as causal relationship between economic growth and carbon dioxide (CO_2) emissions for Algeria, during the period from 1965-2009. The investigation was made on the basis of the environmental Kuznets curve hypothesis, using the Auto Regressive Distributed Lag (ARDL) methodology. The results show that there is a long-term co-integrating relationship between the per capita emission of CO_2 and the per capita GDP. The findings supported EKC hypothesis validity for Algeria with an inverted -U shape relationship between CO_2 emissions and GDP both on short and long-term. The Granger Causality test based on the Vector Error Correction Model (VECM) presented a uni - directional Granger causality on both long and short -term from economic growth to CO_2 emissions, while evidence in favor of the reverse case for Granger causality either in the long or short term was not found in the case of Algeria.

KEYWORDS: Environmental Kuznets Curve Bound Testing Approach, Algeria