The Relationship Between Central Asia's CO2 Emissions, Unemployment Rate, and Economic Development ARDL-PANEL APPROACH

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Abstract:

This paper studies the effect of unemployment rate and GDP per capita on carbon dioxide emissions in Central Asia was determined using the "Panel ARDL - PMG" model. In the study, the unemployment rate and GDP per capita in Central Asia have long-term positive effect on the annual CO2 emissions, and a short-term positive effect was observed only in the countries' economic development factor. According to the results, unemployment rate in two countries in Central Asia has a negative effect on annual CO2 emissions in the short term, and in three countries it has a positive effect. Also, GDP per capita has a positive effect on annual CO2 emissions in the short term in one country in four countries. It was estimated that the secret was statistically insignificant. These results have important implications for policymakers, emphasizing the potential role of unemployment mitigation strategies in promoting environmental sustainability in Central Asia.

Keywords:

unemployment, CO2, CA, correlation-regression analyses.