

ABSTRACT

There is disagreement on the Environmental Kuznets Curve (EKC) shape, extent, and determinants, which links economic growth to environmental degradation, while the concept is well demonstrated. Given the acceleration of economic development in ASEAN (Association of Southeast Asian Nations) and ALADI (Asociacion Latinoamericana de Integracion) member countries, a better understanding of the relationship between economic growth and pollution is essential for policymakers. This study investigates the effect of economic variable and Worldwide Governance Indicators (WGI) variable on carbon dioxide emissions, and carbon dioxide emissions level between before and after the Kyoto Protocol was entered into force in 2005 using panel data for 9 ASEAN countries and 11 ALADI countries over the period 2002-2017. Descriptive analysis and panel data regression analysis method is used to achieve research objectives.

The results confirm that financial development, trade openness, foreign direct investment, control of corruption, and voice and accountability influence positively carbon dioxide emissions on ASEAN. On the contrary, gross domestic product and political stability and absence of violence or terrorism have a negative effect on carbon dioxide emissions. Meanwhile, gross domestic product, financial development, trade openness, control of corruption, and political stability and absence of violence or terrorism influence positively carbon dioxide emissions on ALADI. On the contrary, voice and accountability have a negative effect on carbon dioxide emissions. In addition, there are differences in the level of carbon dioxide emissions between before and after the Kyoto Protocol was entered into force on ASEAN and ALADI. This illustrates that ASEAN and ALADI member countries do not yet commit to implementing the Kyoto Protocol. The majority of ASEAN and ALADI member countries have similar characteristics as developing countries so that many independent variables are identical and significant. Geographical differences do not cause major differences in the determinants of carbon dioxide emissions on ASEAN and ALADI.

Based on these findings, ASEAN and ALADI member countries should reduce carbon dioxide emissions through encourage the entrance of foreign direct investment in environmentally friendly and high technology-intensive fields. In addition, these countries need to implement regulations related to pollution-control strategies and reduce environmental damage without hindering economic growth. The results confirm the importance of institutional frameworks in reducing carbon dioxide emissions since institutional quality not only affects carbon dioxide emissions directly but also indirectly via economic growth and foreign direct investment.

Keywords : *Carbon dioxide emissions, economic growth, good governance, the Kyoto Protocol.*