Moving towards a green decoupling between economic development and environmental stress? A new comprehensive approach for Ecuador

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Abstract
Focused on Ecuador’s Economy this article analyses for the 2000–2014 period. (i) What have the drivers of CO2 emission in Ecuador been? (ii) What are the determining factors to be focused on with regards to energy policy efforts and the mitigation of GHG emissions? And (iii) Is the economy of Ecuador moving towards decoupling between economic growth and environmental stress? To respond to question (i), a decomposition analysis of the change in CO2 emissions has been developed using the LMDI-I model. The decomposing factors or effects used include Carbon Intensity, Renewable Energy Sources penetration, Energy Intensity, Economic Structure, Economic Activity and Population. To answer question (ii) a so-called Innovative Accounting Approach (IAA) has been implemented. Another innovative aspect of the methodology used has been to incorporate decoupling analysis between economic growth and environmental stress. This facilitates answering question (iii) which is the first time that a comprehensive model is undertaken as described. The methodological approach of the paper linking decoupling analysis with an ex-post approach (LMDI) and with an ex-ante one (IAA) makes its contribution going beyond the specifics of the case of Ecuador. Additionally, Literature focused on Ecuador is scarce when compared with other countries size similar.

Author keywords
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Paris’ agreement