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# Amazonian Deforestation, Environmental Kuznets Curve and Deforestation Policy: A Cointegration Approach

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## Abstract

Brazilian Amazon deforestation rate is found to display a unit root and to be cointegrated with Brazilian GDP and its square – An Environmental Kuznets Curve (EKC). Although, it is not the first time that such an EKC is detected, this may be the first such time-series evidence; only the cointegration may guarantee that the relation is not spurious. The analysis of an EKC is hampered by several econometric issues that are satisfactorily addressed in a cointegrated framework, while testing for an EKC has been shown difficult in cross-section and panel contexts.

There is evidence that the "Action Plan" of the Brazilian government against deforestation also had an important effect.

These results are in contrast to the literature on an EKC in emissions such as CO<sub>2</sub>, but appear to be consistent with a more geographical sciences literature that considers that deforestation declines when alternative activities become available.

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