

The role of education in the Environmental Kuznets Curve. Evidence from Australian data

Abstract

This paper is based on the underlying idea that the use of energy resources in a society significantly depends on their level of education. Then, it is hypothesized that education might directly affect environmental quality by worsening it at early stages and improving it once education expands from its certain level. Thus, we pursue an extension of the standard Environmental Kuznets Curve by including an indicator of the evolution of citizens' education. This empirical strategy might avoid bias on income coefficients and, in turn, assess the value of education as environmental policy. An application for Australia is given to illustrate this possibility by using higher education data for a large time span (1950-2014). Empirical results suggest that, in most of the studied period, expansion in education rate has increasingly compensated the rise of per capita CO₂ emissions stemming from the economic growth. Moreover, only in recent years, both per capita income and education expansion have been proved to reduce emissions. However, provided that income growth is difficult to manage, it would be worth considering the possibility of promoting education in order to achieve environmental objectives.

Keywords: Environmental Kuznets Curve, CO₂ emissions, education, economic growth, Australia.

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