Are Energy Endowed Countries Responsible for Conditional Convergence?

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We present a simple yet compelling contrast in economic convergence (and non-convergence) patterns across two distinct samples of countries: those with and without significant fossil fuel (FF) resource endowments, which we consider to be plausibly exogenous.

Among countries with FF endowments, we find evidence of both absolute and conditional convergence in both GDP per capita and consumption per capita, as indicated by standard $\beta$- and $\sigma$-convergence tests. By contrast, we find little to no evidence of convergence among countries without FF endowments. This pattern—convergence among FF-endowed countries and nonconvergence among non-endowed countries—is robust to changes in the sample period and to controlling for potential ‘resource curse’ effects, and is consistent across measures of physical capital, human capital, and total factor productivity.

We discuss potential implications of our results for both economic development and de-carbonization policies. As developed economies worldwide pursue policies to reduce demand for FFs in an effort to reduce their carbon footprints, developing economies with significant reserves in the ground might face lower global prices for these resources. Any reduction in the value of FF resources might negatively impact the ability of these countries to develop. On the other hand, lower prices may reduce the cost of development through channels such as electrification and access to transportation. Thus, the potential distributional and growth effects on the developing world of climate policies implemented by the developed world are complex and multi-faceted.

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