

Carbon Intensity as a Proxy for Environmental Performance & the Informational Content of the EPI

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Abstract

We analyze the relationship between carbon intensity and EPI and find that the informational content of EPI is in large part explainable by the state of economic growth and level of carbon intensity, with the second variable being already an increasing function of emissions and a decreasing function of economic well being. Carbon intensity has the largest explanatory power for EPI rankings and consistently produces the correct, anticipated, negative sign in its relationship to EPI. Second in importance are the renewable energy sources, which also produce consistent results with respect to their impact on the EPI but with much lower explanatory power. Our results suggest that advanced countries should, as they are doing already, implement measures of high quality environmental content while measures for increasing economic growth, while controlling emissions, are appropriate for developing countries. A number of other energy policy implications and the use of new technologies are also discussed in the context of our analysis.

Keywords: Environmental Performance Index, Carbon Intensity, Policy implications, Panel regression, Economic Growth.

JEL Codes: Q42, Q56, C23, C33