Gain without Pain? Renewable Energy and Economic Growth in EU Countries

ABSTRACT

EU energy policy makers like to argue that promotion of renewable energy sources (RES) will contribute to the creation of job opportunities and sustainable economic growth. However, subsidy induced "green" energy growth may be costly and slow down economic growth. This study investigates the causal short- and long-run relationship between renewable energy production and economic growth variables in 15 EU countries using balanced annual panel data from 1991 to 2009. The main contributions to the existing literature regarding the effects of the RES deployment on economic growth and employment in the EU region are: first, the focus on EU15 region; second, the focus on renewable energy *production* but not the *consumption* of renewable energy as it is done in the most related studies*;* third, the existing literature on EU renewable energy expansion-GDP nexus is still poor. Panel cointegration tests and panel GMM type Granger causality tests are applied to investigate the short- and long-run causal relationship among variables in the system. The preliminary empirical findings show that promotion of RES in EU had a negative the economic growth.