Induced Innovation and Energy-Environmental Policies.

This study investigates the relationship between energy regulation policy and technological innovation for Taiwanese air conditioner manufacturing. By using the 1,795 individual air conditioners data collected from Taiwan's various producers over the past 20 years and applying the Newell et al. (1999) model, our results show that the Hicks' price-induced innovation hypothesis was not supported by the data because the electricity price was controlled and held constant by the government. However, the policy-induced innovation significantly increased energy efficiency. Furthermore, the results obtained by the non-parametric Kernel estimation show that the direction of innovation was responsive to cost-saving technological change rather than energy-saving technological change.