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THE IMPACT OF ENVIRONMENTAL TAX REFORM ON GREENHOUSE GAS EMISSIONS: EMPIRICAL EVIDENCE FROM EUROPEAN COUNTRIES

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Abstract

Climate change is a major threat for our planet, with major negative impacts on economies and populations. International and regional organizations, nongovernmental organizations, and governments have joined forces to take meaningful action against it. The European Union has also prioritised the fight against climate change, creating and implementing economic measures as part of its evolving environmental policy. The aim of our paper is to empirically evaluate the effects of environmental taxes on greenhouse gas (GHG) emissions in 20 European countries, in the time frame between 1994 and 2012. Our research is based on data collected from the OECD database, using panel data estimation techniques. In our paper, we analyze the direct effect of environmental taxes on GHG emissions, as well as the indirect effect resulting from environmental expenditures, which are used as control variables. The empirical results we obtained, based on fixed-effect estimates, show that the direct effect of environmental taxes (energy taxes and other taxes) on GHG emissions is negative and statistically significant. Moreover, our findings show that environmental expenditures do not have a significant impact on greenhouse gas (GHG) emissions. Overall, our paper underlines that environmental taxes are extremely important in order to reduce pollution and improve environmental quality in European countries.

Key words: environmental policy, environmental taxes, greenhouse gas emissions, pollution

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