

Multilateral Environmental Agreements and the Eu: Application of a Partial Credit Model

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Abstract

Multilateral environmental agreements are the most commonly used international legal instruments to shape global environmental strategies and reach the environmental goals of humanity's common future. For this reason, evaluating the performances of countries in terms of their desire to join the global environmental collaboration is a necessity. This study examines the participation of European Union (EU) countries in multilateral environmental agreements by using the multilevel partial credit model from the item response theory family. The purpose of the study is to conduct a systematic analysis to evaluate the environmental treaty participation performances of EU countries. The main contribution of this paper is ranking country performances by taking into account the complexity of agreement portfolios and the dedication to the ratified agreements. The results reveal that the founding members appear to outperform the new Member States. The performance of France, Germany, and the Netherlands ranks top. However, after controlling for economic and political indicators with initial conditions, Central and Eastern European countries such as Bulgaria, Czechia, and Latvia, have climbed up the ladder and made significant changes in the ranking.

Keywords: Environmental Policy, Item Response Models, Multilateral Environmental Agreements, Ranking

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