
The Intergenerational Political Economy of Natural Resources and Environmental Externalities

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Résumé

Our modern society has difficulties to implement public policies limiting long-term global environmental externalities such as climate change. While the international coordination issue is a well known reason for this policy failure, the intergenerational coordination issue is hardly evoked. The present paper tackles this issue by developing an overlapping generation model in which the use of an exhaustible natural resource generates a long-term global environmental externality. We show that an intertemporal global policy maker would implement a Pigouvian tax on the natural resource (welfare economics approach), but a democratic global policy maker would in general implement a tax below the Pigouvian level as the latter policy maker only represents the living generations (political economy approach). The analysis gives new insights on the Pigouvian tax formula, in particular the discounting factor. Moreover, it explains how the lack of coordination between the policy makers of different periods affects the tax level. The implementation of a tax close enough to the Pigouvian level requires either high individual altruism towards descendants or high voting power for young generations.

Mots-Clés: Overlapping generations, Welfare economics, Political economy, Discounting, Altruism, Natural Resources, Fossil Fuels, Environmental Externalities, Climate Change.

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