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# Climate Finance and Emission Reductions: What Do the Last Twenty Years Tell Us?

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## Résumé

In the framework of the Paris Agreement implementation, financial transfers remain a major point of negotiation for addressing equity concerns raised by the ambitious objectives of global emission reductions. While a lot of theoretical studies as well as experimental or numerical simulations have been conducted on the issue, very little empirical analysis has been drawn so far. Using data of the last 20 years, we assess the role financial transfers have played in enabling carbon emission reductions to draw conclusions for the current negotiations. To do so, we develop the current theoretical literature by incorporating financial transfers either as (i) direct bilateral incentives provided by utility-maximizing donor countries to receiving countries or as (ii) surplus sharing schemes redistributing the welfare gains from emission reductions. We derive an equation of the impact of mitigation and adaptation finance on national emissions, taking into account national vulnerabilities. We estimate this model on historical carbon emissions of non-OECD countries. Our results support financial transfers as a way of incentivizing emission reductions, but distinctions have to be made between private and public financial flows as well as between mitigation and adaptation finance.

**Mots-Clés:** International environmental agreements, public goods, transfers, climate finance, emission reductions, adaptation, climate policy

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