

Cascading biases against poorer countries

To the Editor — A recent article by Robiou du Pont et al.¹ suggests that wealthier countries (for example, the members of the EU) have made more 'equitable' contributions to the Paris goals than poorer countries (such as India and China), with most other developing countries somewhere in between. These results are counter-intuitive, given that developed countries have the majority of the responsibility for the atmospheric build-up of GHGs² and the majority of the financial wherewithal to help solve the climate problem³, yet their Paris pledges amount to fewer tons of mitigated emissions than developing countries⁴.

The objective of Robiou du Pont and colleagues (to examine multiple equity approaches) is laudable, however, the methodology reflects a selection of approaches that are biased in favour of wealthier, higher-emitting countries in three ways.

First, the approaches¹ selected to represent the IPCC equity categories are skewed by the prominence of 'grandfathering' as an allocation principle. Grandfathering, (or the constant emissions ratio¹), privileges today's high-emitting countries when allocating future emission entitlements. Despite acknowledging that grandfathering is criticized on equity grounds, it is chosen to represent one of their five categories because "it is implicitly followed by many of the developed countries"¹. This rationale is no basis for including a political position in a survey of equity approaches, and by construction it generates outcomes that favour developed countries. Its consequences can be anticipated: for example, grandfathering gives the EU and United States per capita allocations that are four and nine times higher, respectively, than India, despite India still combating widespread energy poverty, with hundreds of millions of residents without basic energy services⁵.

Exacerbating the problem, grandfathering is introduced into two other approaches (equal per capita and capability)¹. While these approaches draw on ethically defensible bases (equality and ability to pay, respectively), the methodology¹ dilutes them by means of a gradual transition period from pure grandfathering to the specified equity approach. (This concession cannot be rationalized on the basis of avoiding technically implausible reduction rates, nor economic efficiency, since Robiou du Pont and colleagues analyse transferable emissions allocations rather than physical

emissions.) With global emissions declining rapidly towards zero, this slow shift means that nearly half of the remaining carbon budget is grandfathered, rather than being allocated according to the nominal equity principle of each approach. Making grandfathering a central part of three out of the five equity approaches used embeds a bias against poorer and lower-emitting countries.

Second, Robiou du Pont et al. present only five of the six categories used by the IPCC, excluding one category based exclusively on the Responsibility Principle — that the largest contributors to global GHG concentrations ought to do the most to reduce global emissions. This exclusion discounts a key principle of the Rio Convention and UN Framework Convention on Climate Change, and compounds the bias against poorer, lower-emitting countries.

Third, the "IPCC equity categories"¹ referenced cannot be considered an authoritative and ethically robust taxonomy of equity approaches in any sense. The IPCC borrowed this categorization from a single study⁶, intending simply to present data from an incomplete and non-representative sampling of approaches. The original study cautioned that "the current literature only covers a small proportion of the possible allocation approaches" and observed that "many different categorizations ... can be found in the literature"⁶. Indeed, the IPCC recognized the ethical importance of several other equity notions relevant for emissions allocations.

These include: the relative moral relevance of consumption-based versus production-based emissions, survival versus luxury emissions, progressive versus regressive allocation of mitigation costs, prioritarianism versus egalitarianism and finally — but not least — the right to development and the critical ethical importance of the eradication of poverty. Incidentally, but importantly, each of these issues engender ethical arguments that imply greater allocations for poorer and lower-emitting countries compared with the subset of approaches used by Robiou du Pont and co-authors. Neglecting them compounds the bias in the results. Ultimately, the article's conclusions are not so much derived as predetermined by the authors' biased normative choices.

These methodological and logical shortcomings of Robiou du Pont et al. reveal

a more profound problem. When reflecting on the relative fairness of countries' pledges and actions, the role of scholarly analysis and quantification is to help clarify the ethical underpinnings and consequences of the choices facing society. It is emphatically not to make those normative choices. However, the article by Robiou du Pont et al. has made a number of normatively crucial choices, and not explicitly but rather in a way that obfuscates the ethical underpinnings and their consequences. While presented as a neutral, ecumenical, comprehensive survey that follows an objective IPCC taxonomy, the overall effect — far from illuminating the moral choices confronting society — at best conceals the moral choices and at worst arrogates them.

However, we are in utter agreement with Robiou du Pont et al. that "equity is still central for the ratcheting process and when discussing the adequate magnitude of climate finance and support"¹. Climate change is a global commons problem, and broad global cooperation is needed to address it. As the IPCC noted, an agreement that is "seen as equitable can lead to more effective cooperation"⁷. The chances of keeping warming to tolerable levels vastly improve if there is a robust and productive conversation about fairness and equity⁸. □

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Published online: 27 April 2018

<https://doi.org/10.1038/s41558-018-0152-7>

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Competing interests

The authors declare no competing interests.


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