

Discounting the Future Climate: Myths and Facts

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The choice of an appropriate discount rate is related to the problem, how to achieve simultaneously a fair balance between the present and the future on one and an efficient use of limited resources on the other. Unfortunately, there is no easy answer to this question, especially since there are several, sometimes controversial myths that make the discussion even more difficult. One of them says that intergenerational fairness and equity requires discounting the future at rate zero. A second myth states that there is a tradeoff between efficiency and equity of greenhouse gas abatement. A third argument says that for an efficient solution of the global climate problem the choice of the discount rate must be based on the opportunity costs of capital. However, quite the opposite position also exists in the literature. Finally it is argued that global climate policy can be optimal only if the social discount rate and the pure time preference coincide.

This paper discusses these myths on the basis of a simple integrated assessment model of climate change. In particular a systematic clarification what equity means is given.