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Comment on "Remembering the future"

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Making future generations count: Comment on “Remembering the future”

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Abstract

Prager and Shertzer (this volume) made three points on our intergenerational discounting approach presented in Sumaila and Walters (2005). We comment on each of these in this short response to their comments.

Keywords: Current and future generations; Discount factor; Environmental resources

JEL classification: A10; D61; D63; D64; N50; Q01; Q20

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Introduction

Prager and Shertzer made three points on our intergenerational discounting approach presented in Sumaila and Walters (2005). First, they found the approach a welcome solution to a persistent problem in applied resource management, and that it provides a sensible way to integrate economics with policy considerations. Second, they provided a useful clarification of our use of notation to denote the future generation discount rate in the approach. Finally, they suggested that a cap should be incorporated into the discounting equation we introduced to make sure that the discount factor derived from our intergenerational discounting equation does not exceed 1. We comment on each of these in this short response to their comments.

Response to Prager and Shertzer

We agree with Prager and Shertzer that if the major goal of economics is to quantify human preferences, it must be the case that conventional discounting is illogical because society has expressed a strong preference for sustainability in resource use and management. Their syllogism is beautiful: Simply put, for conventional discounting to be logical, society will have to accept that emptying the ocean, cutting down all our forest, etc, *is* acceptable. This is because with conventional discounting there are practical levels of discount rates at which it would be economically non-optimal *not* to do so (Clark, 1973, Chichilnisky, 1996, Nordhaus, 1997, Weitzman, 2001).

The point made by Prager and Shertzer regarding our unclear use of notation for the intergenerational discount rate is well taken. Their clarification of the need to more clearly define and separate the intergenerational discount rate in terms of (i) R_{fg} – the future-generation discount rate per generation and (ii) r_{fg} , denoting the future-generation discount rate per year is very helpful, and will be beneficial to the reader and all those who want to apply the method.

Finally, the suggestion by Prager and Shertzer that there is a need to cap the discount factor to ensure that it does not exceed 1 is problematic because there are real-life situations in which a negative real discount rate, and hence a discount factor greater than 1, is practical and necessary. Negative real discount rates have actually been recorded in the past. The U.S. came close to facing a negative discount rate after 9/11. Also, Japan most probably faced a negative discount rate during its prolonged recession of recent times. One can therefore see situations in resource management where a negative discount rate and therefore a discount factor greater than one are reasonable. For instance, society may discover that a certain vital component of the natural environment is in such a bad state that it decides to ‘pull all the stops’ to remedy the situation by any means necessary - for the benefit of both current (in the future) and future generations. Such a move can, in most cases, be justified only by an implicit assumption of a negative discount rate.

Conclusion

We thank Prager and Shertzer for a useful commentary on our contribution. They have, by their commentary, made our approach more accessible to colleagues. The authors have helped to make a method that promises to provide policy makers a useful tool that can help them meet society's strong preference to ensure the long term sustainability of our natural and environmental resources. In other words, they have contributed in helping make future generations count when it comes to resource management and policy making.

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