

SOCIAL DISCOUNTING

Giving a voice to future generations and environments

Discounting is a tool used in cost-benefit analyses to accommodate and understand the implications of different decisions in different time frames. It allows alternative options to be evaluated on the same cost and benefit scale, and the best (or least costly) course of action to be identified.

Current discounting methods are generally appropriate for business decisions, such as whether to buy equipment, but they under-value long-term costs and benefits, such as those typically associated with environmental decisions. When decisions have very long-term implications, we need discounting practices that tally costs and benefits out much further into the future.

SOCIAL DISCOUNTING IS A GAME CHANGER

While current discounting practices effectively optimise decisions for business cycles, social discounting aims to maximise the wellbeing of society across longer time scales. For example, the arrival of a new invasive pest may require biosecurity decision-makers to choose between immediately spending a million dollars to eradicate it, or doing nothing and incurring larger (but more uncertain) damage and control costs into the future. The current discounting method will favour doing nothing while social discounting will justify investing in protection of the environment for the long-term benefit of future generations.

WHY ENVIRONMENTAL DECISIONS NEED SOCIAL DISCOUNTING?

There are good reasons to use discounting, including the fact that the future is less certain than the present. Plus, if we don't apply some form of discounting to environmental outcomes then we may end up estimating infinite benefits which will always exceed available funding and make it impossible to decide between competing environmental investments.



AT A GLANCE

For environmental decisions, we need discounting practices that value the future in the way that societies, rather than businesses, think about the future: we need social discounting.



HOW DOES SOCIAL DISCOUNTING WORK?

There are several different forms of social discounting that have been implemented around the world. Social discounting typically uses a relatively low discount rate that may also decline through time, ensuring long-term implications of present decisions are considered.

Social discount rates can be estimated to match the way that societies think about the future and who is assumed to experience the costs and benefits of a decision.

Under current Treasury practices, more than 80% of the implications from a decision (costs and/or benefits) are assumed to be felt within the first thirty years (= 1 generation). Effectively, future generations are assumed to be affected very little by the decisions of today. See Figure 1.

However, social discounting assumes that the impacts from a decision are felt for much longer. Here, the current generation may feel only around half of the decision's impacts, with significant costs and/or benefits still being felt by generations 5, 6 and beyond.

In addition, social discounting increases the overall estimate of the costs and benefits of environmental decisions, compared to current treasury practices. This helps account for the uncertainty of long-term implications from decisions. If environmental costs and benefits are discounted this way, they will effectively receive a greater weight compared to standard business costs and benefits. This helps address the need to elevate environmental concerns in decision making.

Current Treasury practices



Social discounting



● this generation ● next generation ● generation 3 ● generation 4 ● generations 5+

Figure 1. Generations affected by Current Treasury practices (left) vs Social discounting (right)

Social discounting empowers an intergenerational approach to environmental decision making that better emulates kaitiakitanga and Māori environmental practices

How can I start using social discounting in my environmental decision making?

BioHeritage and Lincoln University's Agribusiness & Economics Research Unit have prepared a report to help environmental managers to understand and start implementing social discounting, when appropriate. The report targets Regional Pest Management Plans, but the same principles may be applied across a wider range of environmental decisions.

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FIND OUT MORE

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