

Policy design elements for addressing presentist bias: non-climate analogues relevant to climate change adaptation



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Acknowledgements: The research on which this poster is based (Lawrence, 2015) was supervised by Dr Amanda Wolf, School of Government, Victoria University of Wellington, and Dr Andy Reisinger, New Zealand Agricultural Greenhouse Gas Research Centre.

THE DECISION-MAKING CHALLENGE

The ability to address long-term policy problems is threatened by presentist bias. Empirical experience is limited about how institutional measures can address deep uncertainty and changing climate risk profiles (IPCC, 2014a). Potential analogous non-climate decision settings, already tested in real-life situations, have learning potential for addressing the presentist bias in policy-making.

POTENTIAL ANALOGUES

Four potential analogues have relevant lessons for addressing the presentist bias (Lawrence, 2015).

1) Financial risk supervision (New Zealand Reserve Bank)

- » 'Stress testing' a tool to test risk sensitivity; and
- » Mechanisms for the quarantining (or prioritising) of risk by shifting some risk categories offshore to remove the incentive for risk transfer to current or future generations.

2) Natural Disaster Fund (New Zealand Earthquake Commission)

- » A durable Fund in anticipation of a disaster;
- » Funded through levies on home, contents and fire insurance;
- » Covers (within prescribed limits) residential land against storm and flood damage which will be exacerbated by climate change impacts;
- » Underwrites natural disaster risk post hoc;
- » Spreads risk by being part-funded through government stock and bank securities and part-funded through investment in international equities. The latter enables the Fund to grow faster and reduce risk when significant claims occur, since they can be sold first and thus not draw down government cash;
- » The EQC Fund, the reinsurers, and the Crown Guarantee, all contribute to meeting claims; and
- » Has a comprehensive catastrophe reinsurance programme to enable claim payments to be made.

3) The New Zealand Super Fund

- » Anticipates long-term *changing* and unquantifiable risk;
- » Continual review and adjustment of policy settings;
- » Pre-funding to manage intergenerational risk while delivering certainty of outcome;
- » Cross-party commitment giving political stability (exception when government stopped contributions to the fund for managing fiscal and political risk); and
- » Financial literacy institution that builds capacity to reduce financial risk.

4) Surgical risk management

- » Institutionalises management of human behavioural flaws (e.g., fixation error);
- » Acknowledges procedural and intuitive behaviours; and
- » An integrated system of monitoring (using checklists, an idea borrowed from airline pilots' routines), education, professional performance tools and sanctions.

POTENTIAL DESIGN FEATURES

- » Ability to test decisions against a range of future outcomes (1);
- » Robust over a range of plausible future outcomes (1);
- » Flexible by identifying triggers that enable course correction (e.g., for adaptive pathways, review provisions) (3);
- » Spreads risk over current population and future generations (3);
- » More durable political commitment (3);
- » Capacity and tools to manage risk over long timeframes (2 & 3);
- » Capacity to address procedural and intuitive behaviours (4); and
- » Incentivises risk reduction behaviours (4).



CONCLUSION

An examination of potential policy analogues from non-climate policy domains can help identify components of policy design that may incentivise adaptation to climate change.

Lawrence, J. (2015). The adequacy of institutional frameworks and practice for climate change adaptation decision making (PhD), Victoria University of Wellington, Wellington, New Zealand.

THE CLIMATE CHANGE ADAPTATION CHALLENGE

- » Sea-level rise is ongoing over time;
- » The rate and magnitude of sea-level rise has uncertainties;
- » Coastal areas will be impacted concurrently;
- » Risk will compound existing hazard risks;
- » People live mainly by the coastal margins; thus, exposure is high;
- » Adaptation will be driven by capacity and vulnerability;
- » The problem and how to address it is contested by some;
- » Blurred responsibilities in some jurisdictions;
- » Resources will be stretched as sea-level rise advances; and
- » For some it is an existential threat.



Coastal Erosion at Haumoana Beach, New Zealand. Credit: Alan Blacklock, courtesy of NIWA.