

## **PROJECT TITLE**

Assessing viability and desirability of a steady-state Australian economy

## **AIMS AND BACKGROUND**

The project will investigate how to better manage the existing tension between economic and environmental sustainability by building upon recent theoretical and applied research on the steady-state economy. There is an increasing awareness of the unsustainability of the economy in its current form, yet few detailed proposals of how the economy could be substantially improved to promote sustainability. The outputs of the research, which would include a detailed model of a sustainable Australian economy, could, therefore, allow government agencies, politicians and political parties to engage with the issue of sustainability in a more substantive manner.

Contemporary societies do not currently operate in a manner that is environmentally sustainable. We have already crossed four of the nine planetary boundaries that stabilise the earth's processes, the boundaries being climate stability, biosphere integrity, land-system change and biogeochemical cycles (IPCC 2014; Steffen et al. 2015). Australia makes a disproportionate contribution to these problems by having the largest per capita greenhouse gas emissions in the OECD (OECD 2019) and being second only to Indonesia in terms of the rate of biodiversity loss (Waldron et al. 2017).

As a consequence, there are increasing demands around the world for policy changes to address sustainability, particularly to combat climate change. For instance, calls have been made in the USA for an ambitious 'Green New Deal' to help stabilise the climate, deliver good jobs and improve living standards. However, there is considerable disagreement about whether such policies are feasible. Some argue that economies can still grow as long as 'the growth process is decoupled from fossil fuel consumption' and, in fact, that this is the only strategy that can achieve a stable climate (Pollin 2019). Others argue that sustainability is incompatible with high levels of economic growth (Schor and Jorgensen 2019).

The proposed research is therefore important as we need to know how the steady-state economy could conceivably look, and whether such an economy offers a solution to the profound sustainability challenges of the 21st Century. If a model of the Australian economy cannot be constructed without relying on unreasonable assumptions and causal relationships, and if the political and social institutions that underpin the modelling need to be unrealistic, then we will know that the steady-state economy is not something we should be pursuing. This negative verdict on the post-growth economy would still be an important and highly valuable result as it would allow the growing number of people who are advocating the pursuit of a post-growth economy to redirect their energies to a solution that is viable and desirable.

## **PROPOSED METHODOLOGY**

The conceptual and theoretical foundations of the steady-state economy have a long intellectual lineage going back to Adam Smith, John Stuart Mill and J M Keynes. All of them foresaw the end of economic growth. Notably, they had markedly different perspectives on

what this would mean: Smith saw it in stagnationist terms, Mill and Keynes saw it as liberating and progressive.

Modern thinking on the steady-state economy developed from the work of researchers such as Herman Daly (1968), Nicholas Georgescu-Roegen (1971), and the Club of Rome's *Limits to Growth* (Meadows et al. 1972). It is political-economic and interdisciplinary in nature and as such is at odds with orthodox economics. It also has ontological foundations that align it with politics and the other social sciences in general.

In the last ten years, scholarship on the steady-state economy has developed in interesting and significant ways. Of particular relevance to this research proposal is the work of Victor (2008), Jackson, Victor and Naqvi (2016) and Jackson and Victor (2019). They have developed a Green Economy Macro-Model and Accounts (GEMMA) framework that captures the essential structure of the economy, employment requirements, environmental impacts and resource requirements, as well as modelling the financial (money) economy in a stock-flow consistent manner. However, other researchers are critical of this approach. Spash (2019) argues that the Jackson & Victor modelling approach 'inadvertently' adopts many of the assumptions of orthodox economics. This, he claims, leaves the environment as subservient to the human economy, and therefore helps 'perpetuate a false reality of the world's social, environmental and economic systems' (Spash 2012). The initial part of the research will be finding a modelling approach that can provide a suitable template on which to build a steady-state model of the Australian economy, then applying the model to the Australian economy.

Another set of theoretical and conceptual tools would be drawn from institutional political economy and behavioural economics. This literature would be brought in to supply institutional flesh to the bones of the model and to justify the causal linkages and assumptions in the model. This research would be a political economy analysis of the steady-state economy, not just the production of a mathematical model as would occur in an economic analysis.

The political economy orientation of the proposed research means that it is an exercise in institutional design and evaluation. Certainly, quantitative analysis will be at the core of the analysis, and there will be the production of a large scale model of the economy with which economists and other analysts can engage. However, in addition, a significant proportion of the research would be concerned with trying to justify the assumptions, calibrations and causal linkages made in the quantitative model. In other words, there will be a focus on describing the institutional features of the system and then using theory and evidence to assess whether they are likely to be viable and desirable. The institutional features of a steady-state Australian economy would certainly be different to those that exist today, but it is not clear what they would need to look like and even less clear whether they could be defended as being viable and realistic. The attempt to justify them would be an exercise in multidisciplinary social science analysis and would be expected to draw on the established methods of social science analysis: case studies, historical comparisons, interviews and field-work, as well as quantitative modelling.

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