

**Institution:** University of Surrey

**Unit of Assessment:** 12 Engineering

**Title of case study:** Sustainable Prosperity in a Post-Growth Economy

Period when the underpinning research was undertaken: 2013-2020

Details of staff conducting the underpinning research from the submitting unit:

Name(s): Role(s) (e.g. job title): Period(s) employed by submitting HEI:

Prof Timothy Jackson Director CUSP January 1995 – present

Period when the claimed impact occurred: 2014-2020

Is this case study continued from a case study submitted in 2014? N

## **1. Summary of the impact** (indicative maximum 100 words)

The Centre for the Understanding of Sustainable Prosperity (CUSP) has pioneered a new vision of prosperity founded not on endless economic growth but on the potential for people to flourish as human beings within the ecological limits of a finite planet. Our work pays attention not only to technologies and to economic institutions but also to social aspirations and to political realities. In particular, we are at the forefront of building new dynamic models for a 'post-growth' economy. In the wake of the global pandemic and in the light of the climate emergency, we are engaging closely with business, government and civil society to 'build back better' and to shape a fairer, greener society.

# **2. Underpinning research** (indicative maximum 500 words)

Our research addresses the technical, economic and social challenges of achieving sustainable prosperity and making the transition to a fairer, greener economy. The underlying research has been supported by several grants from the Economic and Social Research Council (ESRC), including a Professorial Fellowship on *Prosperity and Sustainability in the Green Economy* (PASSAGE) held by Prof Jackson between 2013 and 2016 and an ESRC Centre grant which has supported the work of CUSP from 2016 to 2021. We have undertaken a detailed exploration of three main challenges:

- The challenge of managing a 'new economic normal' where economic growth is hard to come by 'the postgrowth challenge' [R1, R2, R3];
- The challenge of living better, more fulfilling lives with less impact on the planet having 'more fun with less stuff' [R1, R4, R5]; and
- The challenge of investing in a fairer, greener 'net zero carbon' society the 'net zero transition'. [R1, R6, R7]

# The Post-Growth Challenge

In the last decade research, public debate and policy have increasingly found that endless economic growth as measured by the Gross Domestic Product (GDP) may be neither desirable nor feasible [R1]. This realisation presents society with several critical challenges concerning the economic and social stability of such a 'post-growth' world [R2]. Using techniques from system dynamics and complexity theory we have developed a suite of macroeconomic models to explore how economies behave under conditions of declining, stagnant or negative growth. These models help us understand, for instance, how to achieve full employment, financial stability and social equality even as the growth rate declines. Key results include the finding that: a non-growing economy is compatible with positive interest rates, that low growth rates do not automatically lead



to rising inequality and that there is a 'sweet spot' of economic activities which has high social value, low environmental impact, and the potential to create jobs [R1, R2, R3].

#### More Fun with Less Stuff

A key premise of our work is that it is possible for people to lead better, healthier and more fulfilling lives with lower material, carbon and environmental 'footprints' [R1]. These changes are possible partly through technological efficiency improvements and partly through changes in people's behaviours and practices. Exploring the potential to have 'more fun with less stuff' has been a key research avenue for CUSP. It was also one of the themes explored in PASSAGE. Several key findings have emerged. Perhaps the most important is that sustainable living depends on fundamental changes in physical infrastructure as well as in social norms and institutions [R4]. Equally important are the values endorsed within society: materialistic values inhibit the potential to achieve 'peak experiences' that promote human wellbeing [R5].

#### The Net Zero Transition

The transition to a net zero economy requires substantial investment in low-carbon technologies and infrastructures and also in the 'sweet spot' of economic sectors identified in post-growth macroeconomics [R1]. Our work has aimed to understand the dynamics of financial investment and articulate the policies that support the net zero transition. Our findings have challenged the UK's current net zero target, supported an earlier target [R6] and modelled the dynamics of sustainable investment at the national level [R7]. We have highlighted the urgent need for divestment from fossil fuel assets and the key role of government in the net transition.

- 3. References to the research (indicative maximum of six references)
- **[R1]** Jackson, T 2017. Prosperity without Growth (2<sup>nd</sup> revised edition): foundations for the economy of tomorrow. London: Routledge. ISBN: <u>9781138935419</u>
- [R2] Jackson, T 2019. The Post-Growth Challenge: Secular Stagnation, Inequality and the Limits to Growth. *Ecological Economics*, Vol 156. DOI: 10.1016/j.ecolecon.2018.10.010
- [R3] Jackson, T and P Victor 2015. Does Credit Create a Growth Imperative? A quasi-steady state economy with interest-bearing debt. *Ecological Economics* 120. DOI: 10.1016/j.ecolecon.2015.09.009
- [R4] Jackson, T and C Smith 2018. Towards Sustainable Lifestyles: Understanding the Policy Challenge. Chapter 16 in Lewis, A (Ed). The Cambridge Handbook of Psychology and Economic Behaviour. Cambridge: Cambridge University Press. DOI: 10.1017/9781316676349.017
- [R5] Isham, A, B Gatersleben and T Jackson 2019. Flow Activities as a Route to Living Well With Less. *Environment and Behavior* 51(4). DOI: 10.1177%2F0013916518799826
- **[R6]** Jackson, T and P Victor 2020. The Transition to Sustainable Prosperity a Stock-Flow-Consistent Ecological Macroeconomic Model for Canada. *Ecological Economics* 177. DOI: 10.1016/j.ecolecon.2020.106787
- [R7] Jackson T 2019: Zero Carbon Sooner—The case for an early zero carbon target for the UK. CUSP Working Paper No 18. Guildford: University of Surrey. [Peer-reviewed] https://www.cusp.ac.uk/themes/aetw/zero-carbon-sooner/

### Funding:

- ESRC Prosperity and Sustainability in the Green Economy (PASSAGE) ES/J023329/1, February 2013 January 2017, £439,203;
- ESRC Sustainable Prosperity: Centre for the Understanding of Sustainable Prosperity ES/M010163/1, January 2016 June 2021, £4,843,923.



### 4. Details of the impact (indicative maximum 750 words)

Our work has contributed to a substantial change in narratives about social progress – away from a simple, one-dimensional measure of progress based on GDP growth and towards a more multifaceted vision of progress in terms of prosperity, wellbeing and social inclusion. Here we highlight a few of the influences traceable from our work across three sectors: government; business and finance; and civil society.

#### Government

In 2019, the United Nations Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) published a comprehensive review of biodiversity. Citing our work [R1] directly, the review recognised that 'a key element of more sustainable future policies is the evolution of global financial and economic systems to build a global sustainable economy, steering away from the current limited paradigm of economic growth' [S1]. Jackson also contributed to the work of the Dasgupta Review on the Economics of Biodiversity. Our work on postgrowth economics [R2, R3, R6] is also acknowledged in the final report of the United Nations Environment Programme (UNEP) inquiry into Designing a Sustainable Finance System [S2]. Prof Jackson is currently assisting the International Monetary Fund in its periodic evaluation.

In September 2018, Prof Jackson gave the opening keynote at the first ever Post-Growth Conference convened by the European Parliament. An accompanying open letter signed by 243 scientists citing *Prosperity without Growth* received extensive international coverage [S3]. Following this, Prof Jackson was appointed as 'expert to the rapporteur' for an 'own-initiative opinion' of the European Economic and Social Committee (EESC). *The Sustainable Economy We Need* highlighted that building a 'wellbeing economy' must start by adopting 'a precautionary approach in which macroeconomic stability does not depend on GDP growth' and drew extensively on our research on enterprise, work, investment and the monetary system [R1, R2, R3, R6]. The opinion was adopted almost unanimously in January 2020 and went on to inform the EU's discussions about recovery in the wake of the Covid-19 pandemic. The President of the EESC section responsible for the opinion, Maurizio Reale, said: "Tim's thinking about prosperity, wellbeing and economic growth was invaluable in formulating this opinion". [S4]

CUSP provides the Secretariat for the UK All Party Parliamentary Group on Limits to Growth (APPG) which has provided a series of seminars for Parliamentarians on questions related to the post-growth challenge. In July 2020 this led to the APPG writing to the UK Chancellor urging him to prioritise wellbeing in his plans to rebuild the economy after Covid-19 [S5]. In 2017, Prof Jackson wrote a background paper for the UK Government's bi-annual review of Global Strategic Trends, which situates the challenge of inequality and secular stagnation [R2] as one of its key findings and cites the background paper [S6]. CUSP's work with the Aldersgate Group was cited in the Government's 25 Year Environment Plan in 2018 and Jackson was an Ambassador for the UK Government's Year of Green Action in 2019.

Prof Jackson's work is widely cited in a key strategy paper from the German Environment Agency which calls for a 'precautionary post-growth' approach to social wellbeing [S7]. In 2015, Jackson gave a keynote presentation at a New Zealand Treasury meeting on Tackling Poverty. The event went on to inform the Treasury's first Wellbeing Budget which identified child poverty as a priority area. Thanking Jackson for his participation in the earlier event, the organiser, Wendy McGuinness wrote: "Your session was perfect – it set the tone for the presentation in Parliament" [S8]. In Canada, our work on the net zero transition [R6] was cited in a key White Paper on post-pandemic recovery which called on government to 'shift our concept of growth to be centred around sustainable prosperity' [S9].

#### **Business and Finance**

Prof Jackson is a member of the Sustainability Advisory Panel for Air New Zealand, where his work on zero carbon pathways [R7] has contributed directly to company policy [S10]. His work on sustainable living [R1, R4, R5] has been picked up in support of sustainable fashion by Vogue magazine [2020, Fashion's Post-Growth Future]. A key – and perhaps surprising influence – has



been on the financial sector. Following a conference organised by *Die Zeit* magazine in Hamburg, Prof Jackson was invited by Deutsche Bank's Chief Economist to help them think through aspects of the post-growth challenge [R2]. The conversation led to an internal position paper on the challenges to the growth paradigm. The bank subsequently hosted a seminar series called *Is Growth an Illusion?* at the 50<sup>th</sup> meeting of the World Economic Forum in Davos [S11], where Jackson gave the opening session. In 2019, he was invited to give the main conference keynote presentation at the 2<sup>nd</sup> Annual Conference of the Network of Central Banks and Supervisors for Greening the Financial System (NGFS), where he presented work on the challenges to growth [R2] and the transition to sustainable prosperity [R6, R7]. Thanking him for his participation, Sarah Breeden, the Bank of England's sponsor for work on climate change said: "your presentation... challenged our usual way of thinking as well as offering some practical ideas. We appreciated it." The NGFS went on to produce a set of climate transition scenarios which continues to influence the Bank of England's Net Zero Review [S12].

### **Civil Society**

CUSP's influence on civil society has been extensive. The second edition of *Prosperity without Growth* was called 'one of the most important essays of its generation' by former Archbishop of Canterbury, Rowan Williams [R1]. It was also voted 'book of the decade' by Unherd.Com and led to Prof Jackson being awarded the Hillary Laureate for exceptional international leadership on sustainability in 2016. As a result of his work on wellbeing and living well within limits [R1, R4, R5], Jackson is an Ambassador for the Wellbeing Economy Alliance which works with governments around the world to promote a wellbeing economy. In 2018, he appeared in an award-winning documentary *System Error*, critiquing the growth paradigm. Jackson's work on the net zero transition [R7] has been influential with local community groups, actively supporting their evidence base in declarations of 'climate emergency'. This work also contributed to the drafting of a Climate and Ecological Emergency Bill which is now gaining support from UK Parliamentarians [S13]. Since *Prosperity without Growth* was first published, numerous other authors, artists and scientists have created a vibrant narrative about a different kind of society – and a different kind of economics.

### 5. Sources to corroborate the impact (indicative maximum of 10 references)

- [S1] UN 2019 IPBES Global Assessment Report, UN 2019:
   <a href="https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/">https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/</a>; in particular "Pathways towards a Sustainable Future", chapter 5:
   <a href="https://ipbes.net/sites/default/files/ipbes\_global\_assessment\_chapter\_5\_unedited\_31may.pdf">https://ipbes.net/sites/default/files/ipbes\_global\_assessment\_chapter\_6\_unedited\_31may.pdf</a>

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- [S2] UN 2018. Making Waves. Final report of the inquiry into Designing a Sustainable Financial System. Online at: <a href="http://unepinquiry.org/wp-content/uploads/2018/04/Making">http://unepinquiry.org/wp-content/uploads/2018/04/Making</a> Waves lowres.pdf
- **[S3]** Open letter to EU institutions signed by over 200 scientists September 2018. Online at: <a href="https://degrowth.org/2018/09/06/post-growth-open-letter/">https://degrowth.org/2018/09/06/post-growth-open-letter/</a>.
- [S4] EESC 2020. Towards the sustainable economy we need:

  <a href="https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/sustainable-economy-we-need-own-initiative-opinion">https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/sustainable-economy-we-need-own-initiative-opinion</a>; Maurizio Reale, private correspondence.
- [\$5] APPG Limits to Growth letter to Chancellor <a href="https://limits2growth.org.uk/publication/letters/a-postgrowth-recovery-appg-letter-to-the-chancellor-7-july-2020/">https://limits2growth.org.uk/publication/letters/a-postgrowth-recovery-appg-letter-to-the-chancellor-7-july-2020/</a>.



- [S6] MoD 2018. Global Strategic Trends the Future Starts Today. London: Ministry of Defence. Online:
  <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment-data/file/771309/Global Strategic Trends The Future Starts Today.pdf.">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment-data/file/771309/Global Strategic Trends The Future Starts Today.pdf.
- [\$7] German Environment Agency 2020. Social Wellbeing within Planetary Boundaries: a precautionary postgrowth approach. Online at:

  <a href="https://www.umweltbundesamt.de/sites/default/files/medien/5750/publikationen/2020\_12">https://www.umweltbundesamt.de/sites/default/files/medien/5750/publikationen/2020\_12</a>

  14 texte 234-2002 precautionary post-growth.pdf.
- **[S8]** TacklingPoverty NZ 2015. Online at: <a href="http://tacklingpovertynz.org/about/">http://tacklingpovertynz.org/about/</a>. Wendy McGuinness, personal correspondence.
- [\$9] Rosa Galvez 2020. Building Forward Better. Online at: <a href="https://rosagalvez.ca/static/EN">https://rosagalvez.ca/static/EN</a> Building%20Forward%20Better%20-%20White%20Paper.pdf.
- **[S10]** Air NZ 2019. Sustainability Report 2019. Online at: <a href="https://p-airnz.com/cms/assets/PDFs/2019-sustainability-report-v7.pdf">https://p-airnz.com/cms/assets/PDFs/2019-sustainability-report-v7.pdf</a>.
- [S11] Deutsche Bank 2020. We need to talk about (sustainable) growth:

  <a href="https://www.dbresearch.com/PROD/RPS">https://www.dbresearch.com/PROD/RPS</a> EN-PROD/PROD0000000000504064.pdf; Is

  Growth an Illusion? <a href="https://www.db.com/what-we-do/focus-topics/davos--the-world-economic-forum?language">https://www.db.com/what-we-do/focus-topics/davos--the-world-economic-forum?language</a> id=1
- **[\$12]** NGFS 2019. Conference on 'the macroeconomic and financial stability impacts of climate change. See: <a href="https://www.bankofengland.co.uk/climate-change">https://www.bankofengland.co.uk/climate-change</a>; Sarah Breeden, personal communication.
- [\$13] CEE Bill Alliance 2020. The CEE Bill in Depth. Online at: https://www.ceebill.uk/bill