

SUSTAINABLE ECONOMY

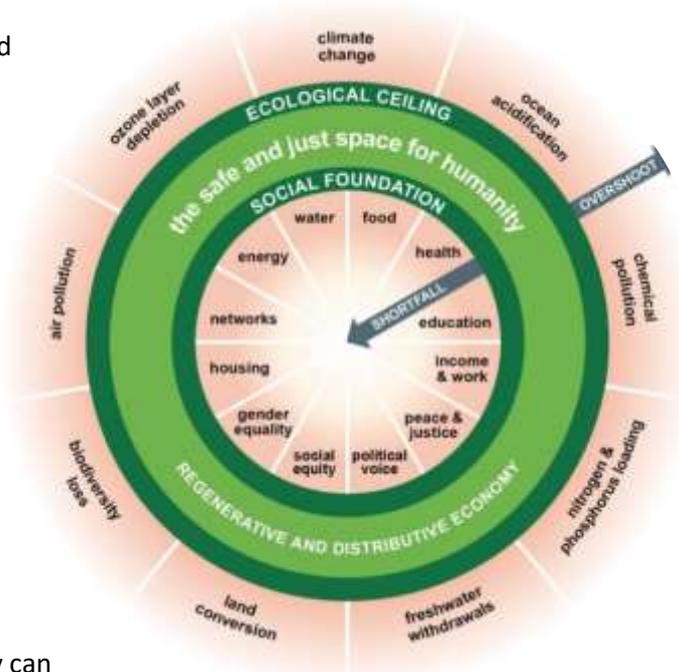
What is the economy?

'The state of a country or region in terms of the production and consumption of goods and services and the supply of money.'¹

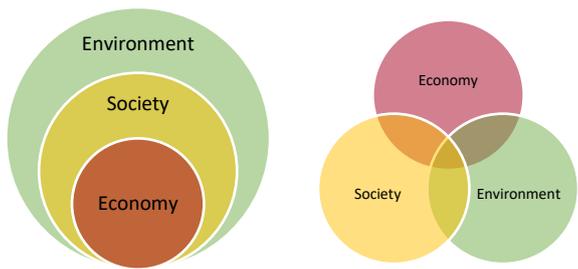
The economy has been defined as a 'social domain that emphasizes the practices, discourses, and material expressions associated with the production, use and management of resources.'²

What is a sustainable economy?

Kate Raworth's 'Doughnut Economics'³ suggests that '...Humanity's 21st century challenge is to meet the needs of all within the means of the planet.' She conceptualises this with the 'Doughnut of social and planetary boundaries (2017)' (pictured right). She depicts on the outer circle the 'ecological ceiling' into which we risk overshooting and in the centre the 'social foundation' which is derived from the Sustainable Development Goals 2015. In the green ring 'lies an environmentally safe and socially just space in which humanity can thrive.'



Strong sustainability model Weak sustainability model



There are differing perspectives on sustainability which form the basis of different approaches to the economy. The 'weak sustainability' model puts sustainability at the intersection of the three elements of environment, society and economy, which implies each can be considered separately. In contrast, the 'strong sustainability' model aims to recognise that the economy is a construct of society and the environment is the support that enables the other two.⁴

How are the economy, health and environment linked?

Some research would suggest that economic growth has supported increases in absolute standard of living across the world and is still required in many parts of the world to support improvements in health and wellbeing⁵. However there has also been a growth in inequalities^{6, 7}, which Wilkinson & Pickett⁸ have shown to be damaging to a range of public health and social outcomes. There are also satiation points beyond which wellbeing does not appear to improve⁹. Increases in income can 'promote a sedentary lifestyle and adverse eating habits, which may, in turn, result in an increase in non-communicable diseases such as obesity and diabetes.'¹⁰ This has led to arguments for 'inclusive growth' policies which aim to ensure that growth benefits all and reduces inequalities^{11, 12}.

Economic growth, built on increasing consumption, is a major driver of climate change¹³. Climate change has significant negative impacts on the health and wellbeing through, for example, lack of access to food, water, clean air and shelter¹⁴. Many actions to tackle climate have a range of direct health benefits, such as improvements in air quality, increased physical activity and healthier diets¹⁵ in addition to the health benefits yielded from reduced climate change. Climate change also costs the economy and will increasingly hamper opportunities for growth¹⁶.

There are numerous other ways in which the economy, health and the environment are linked. For example, the objectives pursued by businesses may include social and environmental goals (such as in the case of social or sustainable entrepreneurship) or countries may not take into account negative impacts of economic activity on people or the environment (known as externalities).

Helpful resources
 Animations on doughnut economics:
<https://www.kateraworth.com/animations/>
 WHO Health & Climate Change toolkit:
<http://www.who.int/globalchange/resource/s/toolkit/en/>

Can growth be sustainable?

Proponents of 'Green Growth,' for example OECD¹⁷, argue that it is possible, necessary and desirable to 'de-couple' growth and emissions and create a system of economic growth built around renewable energy and resources and significantly reduced levels of resources.

However, 'de-coupling' has so far been extremely limited in practice with overall increases in growth globally meaning that any efficiencies are only slowing the rate of overall growth in consumption¹⁸. Furthermore, Tim Jackson and others have argued that we need to challenge the 'growth imperative'¹⁹ and Kate Raworth that we should become 'growth agnostic,'²⁰ focusing our economies instead on supporting us and our world to thrive.

There is a justice and rights dimension to this discussion: 'Those hit hardest by climate change are generally the least responsible for causing it and have the least capacity to adapt.'²¹ Furthermore, in considering limits on growth globally, if those living in poorer countries are to benefit from the quality of living and health benefits that many others have already experienced, we may need to slow or cease growth in wealthier countries²².

'A Good Life for all within Planetary Boundaries,'²³ demonstrates that continued growth for all is not possible within a globally sustainable level of resource use. Sustainable degrowth is a downscaling of production and consumption that increases human well-being and enhances ecological conditions and equity on the planet. There is a growing literature on 'degrowth' including a useful overview from Weiss and Cattaneo.²⁴ A paper from Borowy & Aillon argues for active involvement of the health community in advocating for and developing degrowth approaches and conceptualises a public health framework for degrowth²⁵ comprising seven elements: index of current and future health status, reduction in resources used for medical treatment, productivity gains used to increase free time rather than material consumption, non-commercial knowledge and product exchange approaches, increase in freely available knowledge, 're-localisation' of people's lives and reduction of inequalities through redistribution.

What are the different dimensions of the economy that influence health and the environment?

Naik, Baker et al²⁶ in their proposal for an umbrella review of the macroeconomic determinants of health conceive of the economy as 'a complex interacting system which influences health through a number of mediators.' They suggest seven categories for economic factors influencing health and give some examples of how these may influence health. Below, we have included a summary of their initial framework²⁷ and added a further column to exemplify potential impact on the environment and climate change as well as an eighth category 'citizens, democracy and power.' These examples are intended to illustrate how different aspects of the economy can have an effect, whether negative or positive, they are not chosen for their scale.

Category	Examples of ways these can affect environment and any links to health
1: market regulation e.g. taxation	Carbon pricing – pricing negative externalities into the production of CO ₂ ²⁸ Mandated design standards for buildings ²⁹ and retrofitting to achieve energy neutral buildings – also potential to reduce fuel poverty, excess winter deaths and overheating
2: institutions e.g. banks	Role of governance and power sharing Insurers' role in responses to extreme weather ³⁰
3: supply of money, finance and loans	'Green New Deal' ³¹ type investment in renewable energy and the development of improved storage technology combined with changes in taxation and regulation The divestment movement as a lever to shift investment
4: balance between public, private and third sector	The importance of global target setting and accountability E.g. the negative impact of countries only being responsible for pollution they cause within their own borders and not for manufacturing that happens elsewhere but which they buy and/or consume ³²
5: labour, e.g. working conditions	Reduction in working hours and/or minimum basic incomes may offer potential for sustainable economic model with reduced inequalities ³³
6: production and consumption	Reduced consumption in wealthier countries who are 'beyond satiation' for wellbeing ³⁴ Economies that are regenerative and distributive by design – circular economy approaches
7: approaches to economy	Ecological economics attempts 'a more integrated picture of how humans have interacted with their environment in the past and how they might interact in the future... to look at humans embedded in their ecological life-support system, not separate from the environment.' ³⁵
8: citizens, democracy & power	Local energy ownership leading to significant increases in renewables in Germany ³⁶

Professional development questions

1. Is there a fundamental tension between improving health and living within the means of the planet?
2. Having read this paper, what are your reflections on the importance of sustainable economies for public health?

FPH General CPD Questions

1. What did I learn from this activity or event?
2. How am I going to apply this learning in my work?
3. What am I going to do in future to further develop this learning and/or meet any gaps in my knowledge, skills or understanding?

References

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- ³ Kate Raworth <https://www.kateraworth.com/> accessed 19.8.18
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- ¹⁰ Lange, S, Vollmer, S. The effect of economic development on population health: a review of empirical evidence, BMJ, 2017.
- ¹¹ <https://www.irf.org.uk/cities-towns-and-neighbourhoods/inclusive-growth> accessed 19.8.18
- ¹² <http://www.oecd.org/inclusive-growth/> accessed 19.8.18
- ¹³ Climate Change 2014: Mitigation of Climate Change, Intergovernmental Panel on Climate Change (this is listed as 'robust evidence, high agreement': pg 355)
- ¹⁴ WHO Climate Change and Health facts, <http://www.who.int/news-room/fact-sheets/detail/climate-change-and-health> accessed 19.8.18
- ¹⁵ For example, 5th assessment report of the IPCC (Working Group II) Ch 11. Human health: impacts, adaptation and co-benefits / The health benefits of tackling climate change: An Exec Summary for The Lancet Series.
- ¹⁶ Stern Review: The Economics of Climate Change, 2006
- ¹⁷ <http://www.oecd.org/greengrowth/> accessed 19.8.18
- ¹⁸ For example IPCC report 2014, Tim Jackson Prosperity without Growth
- ¹⁹ Tim Jackson, Prosperity without growth, Sustainable Development Unit, 2009
- ²⁰ Kate Raworth <https://www.kateraworth.com/> accessed 19.8.18
- ²¹ See for example Department of Economic & Social Affairs, UN report on Climate Change and Social Inequality, 2017
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- ²³ A Good Life for all within Planetary Boundaries, O'Neill, D, Fanning, A, Lamb, W & Steinberger, J 2018
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- ²⁵ Sustainable health and degrowth: Health, health care and society beyond the growth paradigm, Borowy, I and Aillon, J-L, 2017
- ²⁶ The macro-economic determinants of health and health inequalities—umbrella review protocol, Yannish Naik, Peter Baker, Ian Walker, Taavi Tillmann, Kristin Bash, Darryl Quantz, Frances Hillier-Brown and Clare Bamba, 2017
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- ²⁸ See the World Bank for examples and methods of approaching this: <http://www.worldbank.org/en/programs/pricing-carbon>
- ²⁹ See Mini Stern Reviews for examples of costs and benefits of insulation amongst other measures <http://www.climatesmartcities.org/sites/default/files/SCR%20Mini%20Stern%20Final%20Report.pdf>
- ³⁰ See for example: <https://www.cisl.cam.ac.uk/publications/sustainable-finance-publications/closing-the-protection-gap-climatewise-principles-independent-review-2016>
- ³¹ New Economics Foundation, A Green New Deal, 2008
- ³² EU CO2 Emissions Different Accounting Perspectives EU enviro agency tech report no20/2013 pp7-8
- ³³ Tim Jackson, Prosperity without growth, Sustainable Development Unit, 2009
- ³⁴ Kevin Anderson, quoted in Naomi Klein This Changes Everything, 2014 pg 91
- ³⁵ Robert Costanza, 2010, Director of the Gund Institute for Ecological Economics, University of Vermont

