



steady-state economics



Basic explanation

As an economy grows, it brings benefits in terms of health, happiness and fulfilment. Infant mortality rates fall and life expectancy increases. Welfare states appear, along with health care, education and reliable infrastructure. But as an economy grows past a certain *per capita* size, benefits stop increasing, then start to fall, and we get more stress, congestion, crime, pollution, noise, ugliness, boring work and lack of community. But it's the ecological damage that growth causes that presents the greatest threat to humans. It's impossible for us to live in harmony with nature *and* to have a constantly growing economy. One of these aspirations has to go – we suggest it's the latter. If you don't find that self-evident, here's a simple, four-point explanation:

1. Material growth can't continue forever. This is uncontentious and nobody sane is disagreeing with it.
2. Economic growth always results in an increase in overall spending power. This is more difficult for some to understand, but it's uncontestable. If it doesn't increase overall spending power, then it's not economic growth, it's growth, or development, in something else – something intellectual, artistic, spiritual, or maybe a devaluation of the currency – but it's not economic growth.
3. It's not possible to ring-fence that increase in spending power so that it's never spent on material things. If people have more money, they buy more cars, TVs, clothes, foreign holidays, second homes etc. This is obvious, surely; in an interview with footballer Andrey Shevchenko, he explained that he had nine Ferraris. I'm sure he would have had ninety if he'd had more money.
4. Therefore it's not possible to de-link economic growth from material growth, which makes perpetual economic growth impossible without destroying ourselves.



Miniaturisation can help extend growth – but many things need to be human scale, and can only be miniaturised to a certain point.



Herman Daly developed his steady-state theories as a senior World Bank economist

Limits to growth

Meadows *et al.* in *Limits to Growth* call the combination of human resource use and waste 'throughput'. The main barrier to the stabilisation of the global economy is that people believe that a combination of technology and innovation will increase resource efficiency – i.e. will reduce throughput for the same amount of output. This doesn't work for two reasons.

Firstly, it's never happened before, so why should it happen in the future? Throughput (and therefore ecological damage) has been growing steadily each year for the last 200 years, because although technology improves efficiency, the reduction in throughput that could have been achieved in a stable economy is completely reversed because of economic growth.

And secondly, it doesn't work because of the Jevons paradox. Check this on Wikipedia, but basically, any technological improvement that increases efficiency in the use of a particular resource, actually increases the use of that resource, because it becomes more financially and technologically viable to use it. The classic example is James Watt's steam engine. At the time of its invention, it was thought that it was going to reduce the use of coal, because it did the same work as the Newcomen engine with a fraction of the amount of coal. But of course, there was a massive increase in the use of coal because there was a massive increase in the number of engines and in human activity generally. There have been similar studies for other technologies and resources, but the results are the same. Khazzoom & Brookes, for example, showed that energy efficiency measures increase energy use at the macro level.

This idea only works in a stable economy, not a growing one.



How to achieve a steady-state economy

Steady-state economics is not just about giving monetary value to the environment – that means that you can still trash it if you can afford to; and it's not just green taxes either – the government will spend the tax income on something else, and the economy still grows. And not recession. We're talking about stabilising the economy in a controlled way. Some economists are already proposing alternatives.

Herman Daly's *Steady-State Economics* involves working out how much ecological impact is sustainable, then ensuring that we stay below that level with (tradeable) resource depletion quotas for each resource and a 'maximum wealth' policy. Income from depletion quotas would then be used to build the infrastructure to move to a renewable, low-carbon society. It also involves moving taxation to throughput and away from income.

Richard Douthwaite (in *the Growth Illusion*) proposes that governments tweak interest rates until they're in effect zero, so there's no incentive to invest. Banks would still be used for security, cashpoints, cheques, transfers, salaries etc, and this can be loaned to small businesses (for a fee, rather than for interest). Islamic banking goes a step further and bans interest altogether.

No country can abandon its quest for economic growth unilaterally, because other countries will then outcompete them for resources and markets, which will lead to poverty. Contraction and convergence and the Simultaneous Policy are just two ways that this problem could be addressed. Poor countries need growth, but rich countries still behave like poor countries. In the West, we don't need material growth - we are far enough down the road of bland consumerism as it is.

Economics is a subset of ecology

Herman Daly puts it very well - conventional economists view the economy as an isolated system, and don't recognise that it is a subset of the environment, completely dependent on inputs from it (low-entropy, or useful raw materials), and outputs to it (high-entropy, or useless waste). The earth (plus its ecology) is a finite, non-growing system, so any subset of it must be finite and eventually non-growing. We can stabilise ourselves, or resist until it is imposed by nature, in which case it will be extremely dangerous.

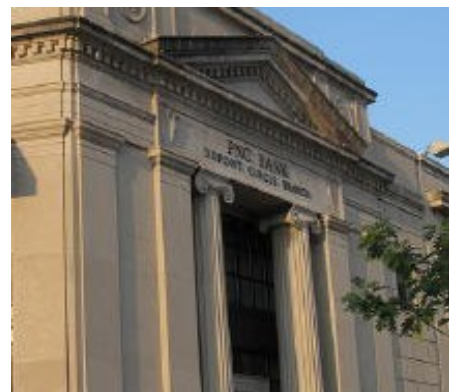
Powerful civilizations have come to a sticky end due to overexploitation of their surrounding

environment. We're doing the same thing globally now, and we have nowhere else to go. The world spends over \$100 billion annually on advertising to persuade, cajole, pester and shame people into buying more stuff. No amount of green technology, organic food or recycling will stop environmental destruction as long as our economy is constantly growing – it will be one step forward, two back until ecology just won't support us any more.

The aim of steady-state economics is human and ecological well-being, rather than just more material goods, so a happiness index has been suggested to replace GDP, to indicate how well we are doing. GDP includes things like cleaning up pollution, weapons manufacture, prisons, insurance claims, cigarettes and car accidents, but doesn't include things that are free, like love, growing veg, sunbathing, reading library books, walking in the countryside or just chatting with friends – so how can it measure well-being?

resources

- see lowimpact.org/economics for more information, including '10 myths about economic growth', links and books, including:
- Herman Daly, *Steady-state Economics*
- Tim Jackson, *Prosperity Without Growth*
- Brian Czech, *Supply Shock*
- Meadows et al, *Limits to Growth*
- CASSE – steadystate.org
- NEF – neweconomics.org
- *Feasta* - feasta.org



The service sector can't grow forever - it needs buildings, computers, energy, paper, desks, phones etc; and salaries (and bonuses) in the service sector are spent on very material things.

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