

The economics of enough

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This conceptual paper argues that economics is not a discipline well placed for dealing with the idea of transformation because it developed within one mode of society at a time of global population growth and hence also continuous demand growth. Today, in contrast, there is currently an acceleration in the fall of births, with birth rates having fallen steadily since the late 1960s but now falling faster than before. At the same time global awareness of environmental limits has risen greatly, although there is also a growth in more scepticism and ethno-nationalistic reactions to globalization and inequality. When surveyed, the populations of many countries are now more fearful than they were a few years ago. Trust in our current economic systems is falling. Concerns over poverty, inequality, the cost of living and the fear of unemployment have all risen. A search is on for better ways in which we might live in future but it is highly disjointed. A parallel is drawn in the paper between fears in the 1930s over the future of some societies (including concerning birth rates), and similar but more widespread fears today. When demand falls because there are fewer young people, and we also realise we who are rich need to consume less, to what paradigm do we turn? An economics of enough is about that concern but also touches on the increasing number of environmentalists, social scientists and younger activists, who have had enough of conventional economics.

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1. Introduction

Drastic and challenging societal transformations have happened many times in the distant past (Kemp 2025). Economics is not a discipline well placed for dealing with the idea of these transformations because it is a system of thinking developed almost entirely within just one society; the first society that spread to dominate the entire world (Scheidel 2018, 2025). The response of many social scientists today, to the knowledge claims of economists, is to say they have had enough of economics. Some of the most progressive social scientists return to John Maynard Keynes as being an adept architect, suggesting that the Bretton Woods era was compromised and not at all what Keynes had in mind and that economics *can* be helpful (Tily 2024). However, when it comes to the economics of enough—what to do when what we are doing can no longer carry on, economists have no safe model to present. Increasingly they are surprised by events

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such as recent rapid inflation (the onset of the ‘cost-of-living crisis’) or by renewed and emboldened calls that economic growth damages the environment. However, there are also some economists addressing issues such as the environmental crisis head-on ([Michell 2023](#)).

It is possible that an eco-command-economy can be seen emerging in China where carbon emissions fell in early 2025 and are set to soon fall by 7–10 per cent ([Myllyvirta 2025](#)). However, a simultaneously ageing and shrinking population and the consequential fall in internal demand drive this too, not just state action. Faster falls in carbon emissions have already occurred in Japan without such strict state control ([Reuters 2025](#)). A lengthy statement of what might be possible in future is used here to structure this paper, which tries to address larger questions that we tend to shy away from. Might an alignment of disparate interests, as occurred around Keynes a century ago, be possible today, in an era where demand is about to fall greatly as births continue to plummet worldwide? To help illustrate this argument, phrases attributed to the British social reformer William Beveridge are used because of the historical analogy when births fell in England briefly in the 1930s. Keynes and Beveridge were men of a particular social class, an English upper class, but both chose to attempt to control the greedy because of the folly of allowing untrammelled greed. However, both births and global demand for goods and services rose faster worldwide between 1945 and 1968 than at any other time in human history, so the solutions they proffered worked then partly because of that very different context. Full employment was possible because exports grew so much. Mention of ‘economic growth’ in papers in economics journals rose, fell and rose again in very close correlation with the global population rise ([Schmelzer 2016](#)).

As Tily explained recently, at the ‘... most fundamental level the General Theory shows—perhaps proves—that class rule by wealth is wholly and dangerously at odds with the interests of society as a whole. This conclusion was global in implication’ ([Tily 2024](#): 210). Although Keynes made common cause with the left, his approach which was only partially adopted through the Bretton Woods agreements, kept the current world system operating, albeit with extremes of greed moderated for a time. Tily concludes that the General Theory is still vital to resolving the present global disarray, a disarray that became starkly apparent in early 2025 when trade wars began as tariffs were raised by the USA. Those who argue against this approach point out that the era of the 2020s is very unlike 1920s even when they are in favour of some of what Keynes suggested ([Hickel 2021](#)).

Jason Hickel has been appreciative of Keynes: ‘Keynes was not obsessed with growth, but with stability. He wanted to raise the level of economic output, yes, but only for a specific defined purpose; he never thought that growth should continue forever. This is a perverse idea that Keynes himself never held.’ ([Hickel 2018](#), penultimate paragraph). That perverse idea of endless growth was only even slightly credible when human population growth was itself accelerating, an acceleration that ended in the late 1960s when annual global population was growing at just over 2 per cent a year (its highest ever growth rate). We are now long past ‘peak baby’ and human population growth is today much less than 1 per cent a year and rapidly falling. It only still rises, is still above zero, due to ageing (fewer deaths), not due to births. In that same article Hickel wrote that ‘... if the economy does end up contracting, it will be an absolute disaster unless we are prepared for it. An economy that is designed to need growth will collapse when it doesn’t get it. Firms will go bust, people will lose their jobs, families will be evicted from their

homes' (Hickel 2018). The global economy is about to contract, partly because we are having so few children, the question is how well managed will this be?

In November 2025 the European Bank for Reconstruction and Development published a report forecasting that demographic change will:

reduce annual GDP per capita growth by almost 0.4 percentage points on average between 2024 and 2050 in eastern Europe and the Caucasus ... [with an annual] 1.1 percentage point hit to GDP per capita over the same period for South Korea, over 0.7 percentage points for Italy and Spain, 0.5-0.6 percentage points for China and Japan, and 0.4 for Germany. (Romei 2025, second paragraph)

These were predictions of very large annual reductions in per capita GDP rises. In most cases declines in births will result in falls in GDP much more often than rises. There is currently no sign anywhere in the world of falls in birth rates abating. Furthermore, the Reconstruction Bank did not consider the recursive global negative multiplier effect of reduced demand within one country reducing demand for exports from others.

Consider the parallels with a century ago. Again, today it appears that attempts to create solidarity in the world, and to work together for common aims are being disarmed in the face of rising nationalism. As I write, the leaders of the United States of America, backed by plutocrats, are attempting to use what they consider to be the economic muscle of their country to get their own way. The trade wars we currently experience were predicted (Klein and Pettis 2020), as being one outcome of rising inequality resulting in overconsumption by the rich few and underconsumption for the many. The economic mechanisms in operation propel nationalists into power through the financial backing given to those nationalists and maintain them in power as wealth becomes more concentrated. In this situation, more fair-minded, science-minded advocates are unable to effectively suggest a plausible alternative. The parallels with the 1920s/30s are too close for comfort. At its most basic, Keynes' argument is that if the wealthy have too much and everyone else has too little, the system doesn't work and begins to break down. This fits into a wider argument that social systems in the past have often collapsed when inequalities have been very high.

Today, overconsumption by the very wealthy is not just critical for the future of the climate (and the wider physical environment we depend on), but makes the current economic systems of many countries much less efficient because so many people end up doing work that is not needed, other than to make the wealthy more wealthy, for a salary that is not enough to pay for the things that are needed. However, without a rival diagnosis we are left floundering and nationalism flourishes. The current rival diagnosis that is most often put forward, to care more about ecological collapse, is so Utopian, distant and vague as to be meaningless to most people.

Consider the following long quotation.¹ It is unusually long to include in an academic paper but is included here as it helps illustrate why the various alternatives put forward by economists can appear so limited in terms of their potential to achieve what now needs to be achieved. However, its advice about what we need to achieve reads a little like the recommendations of William Beveridge's 1942 report. So, when reconsidering the economics of enough, think of how economics could achieve the following:

¹ Note that the Millward-Hopkins *et al.* (2020) quotation will be referenced henceforth as 'the long quotation' and its replicated sections are italicised for identification purposes.

4 D. Dorling

To avoid catastrophic ecological collapse, it is clear that drastic and challenging societal transformations must occur at all levels, from the individual to institutional, and from supply through to demand. From an energy-use perspective, the current work suggests that meeting these challenges does not, in theory, preclude extending decent living standards, universally, to a population of ~10 billion. Decent living is of course a subjective concept in public discourse. However, the current work offers a response to the clichéd populist objection that environmentalists are proposing that we return to living in caves. With tongue firmly in cheek, the response roughly goes ‘Yes, perhaps, but these caves have highly efficient facilities for cooking, storing food and washing clothes; low-energy lighting throughout; 50L of clean water supplied per day per person, with 15L heated to a comfortable bathing temperature; they maintain an air temperature of around 20°C throughout the year, irrespective of geography; have a computer with access to global ICT networks; are linked to extensive transport networks providing ~5000–15,000 km of mobility per person each year via various modes; and are also served by substantially larger caves where universal healthcare is available and others that provide education for everyone between 5 and 19 years old.’ And at the same time, it is possible that the amount of people’s lives that must be spent working would be substantially reduced. (Millward-Hopkins *et al.* 2020: 8)

Consider how much the world is changing. In the 1930s the population of the world was not just growing, but that growth was accelerating. There were local concerns in countries like Britain that population growth was too low. Paragraph 413 of the 1942 Beveridge report read: ‘With its present rate of reproduction, the British race cannot continue; means of reversing the recent course of the birth rate must be found.’ That prediction was wrong, as was the idea that there was a peculiar ‘British’ race; but today’s population data and forecasts are more robust.

Keynes was concerned with underconsumption, with the fall in effective demand. The economic depression was the dominant issue among rich nations a century ago; alongside a renewed fear of insurrection from below which arose due to revolution in Russia, and by the unprecedented rise in strikes elsewhere; and in the UK, the general strike. All this created the circumstances in which some elites were willing to consider new ideas, albeit by taking up suggestions from the political left of their times. As William Beveridge (1942: 201) explained when proposing to introduce a welfare state in the UK, the security plan in his report proposed, above all else, a unified social insurance system under which, by paying a single weekly contribution through one insurance stamp, everyone would be able to get all the benefits that they or their family needed. The plan proposed a scheme of children’s allowances, so that all parents had enough to keep their children strong and healthy, and could have more children if wanted, without stinting the children that they had already. Third, the plan proposed: ‘a comprehensive health service covering the whole population of all ages ...’.

In the long term it would appear that those new ideas did not change the fundamentals of the system, partly because some of what was adopted was largely abandoned or watered-down, but also because (in hindsight) the reforms only provided a breathing space within which the very wealthy could regroup: a breathing space of a couple of generations. When workers in countries like the UK went on strike very often again in the 1970s, those strikes were much more muted than the strikes of the 1920s. The most recent wave of strikes that accompanied huge rises in the cost of living in the 2020s were minuscule in size compared to the past. Despite consumption by the poor falling, excessive consumption by many, especially the very rich, means that the amount of carbon we release into the atmosphere does not just usually rise every year but until

very recently has risen by a greater absolute amount than it did the year before ([Dorling 2020](#)). The pandemic which began in 2019 only had a small effect on denting this trend.

Economics is not about rationing scarcity. It was born in the countries that first accumulated the greatest of surpluses. When the surplus falls and there is great inequality, there is strife. In Britain in the years 1919 to 1939 some 400 million working days were lost to strike action ([ONS 2025](#)). In contrast, in the period 1949–1969 it was only 70 million working days lost to strikes despite a huge increase in the numbers of people working (*ibid*). The changed settlement meant that for Britain, industrial unrest and the associated agitation reduced almost six-fold, reversing what had been a rising trend.

The current set of crises in the world is sometimes said to mirror the situation a century ago. One description of what occurred then was that governments began to play a far more active part in the economy of their countries during and after the First World War. Governments did this because they had to. This had the effect of undermining the then dominant form of capitalism by reducing the profit motive for production and introducing more government-directed production, and undermining the supposed sanctity of private property as governments began to more often direct how property was used, especially in wartime.

Austerity, especially for (but also to support) the rich, was introduced—most obviously under Fascism ([Mattei 2022](#)). However, there were other factors at play, not least that the rise of Fascism was partly a response to the success of the revolution in Russia in 1917, the ‘red years’ of communist uprising in Italy in 1918 and 1919, and also a reaction to the Bavarian Soviet Republic that also existed for a short time in those years ([Konzelmann 2024](#)). Konzelmann suggests that if Mattei’s analysis is extended to include more of Europe and the United States, then a better explanation is achieved of the importance of austerity in the past, especially noting Keynes’ opposition to the imposition of austerity on Germany in 1919 and how (although the past was different in key respects) claims that welfare was unaffordable, growing insecurity in the population were similar to today.

Those 1918/1919 years also coincided with the largest and in absolute terms most deadly pandemic the human species had ever suffered in a short time period—influenza. There are parallels in that and the COVID-19 pandemic that began in 2019. Similarly, very high numbers of people being out of paid employment is also an echo of the past although today these high numbers are usually not due to people being formally unemployed and include younger people to a greater extent.

It is worth looking at the past to try to understand the present. However, if people in 1918 or 1919 had turned to a century earlier to try to understand the events of their lives, then they may not have learnt a great deal that would have been that useful to them. Similarly, interpretations of what occurred in the previous greatest period of global uncertainty, the period between the two world wars, have inevitably been made in hindsight and a great many arguments will partly be influenced by the greatest concerns not then, but at the time of writing now and by hopes for alternative futures.

There are obvious differences between now and the interwar period. The current dramatic slowing of the rise in global population is perhaps the key difference, as is the widespread realisation that we cannot continue to extract and pollute as we are doing, not least carbon pollution. Furthermore, we are now a far more fearful species than we were back then, global surveys reveal our common greatest fears to be of inequality, poverty, the costs of goods and services and unemployment ([Dorling 2025](#)).

If we consider the frequency of the use of the word ‘crisis’ in the English-speaking world, at least as reflected through the literature of the day, then there was no greater crisis in the years around 1918 than there had been in the years around 1848. The word ‘crisis’ became much more widely used in the run up to World War Two. Use of the word abated slightly after the war and then rose in popularity hugely from the mid 1960s onwards (Dorling 2025: Figure 1). In other words: this time it is different in that we are collectively much more afraid. This time we have been in a heightened sense of crisis for decades.

Fearfulness increased dramatically again during the COVID-19 pandemic, with the head of the WHO labelling it the most traumatic event since World War Two. Since then, we have seen yet another new rise in ‘fearfulness’ following President Trump’s second inauguration. There is a profound increase in fear (for the future of humanity) among those concerned about recent and continuing geopolitical developments, but that current rise is based on a trend that had become well established by the 1960s of ever greater fear each decade that passed. The same global surveys that say what we are most frightened of, also show our levels of fear rising.

Post-pandemic we are at a quandary. Dramatic cut-backs on government spending began in the USA in early 2025. The poorest fifth of households in the USA lost \$1,300 a year, or 7.4 per cent of their annual income, only the best-off one in one thousand households gained much from tax cuts (Gotbaum and Calame 2025). It is worth comparing those actions of a state today with what Keynes wrote in the 1930s: ‘If the State is able to determine the aggregate amount of resources devoted to augmenting the instruments and the basic rate of reward to those who own them, it will have accomplished all that is necessary’ (as quoted in Konzelmann *et al.* 2021: 594). Our increased international inter-dependence means that the idea that just pulling a few economic levers will solve our problems today seems foolhardy; but a state can still impoverish many of its citizens.

2. Deconstructing the alternative

You may well have read the long quote (above) by Millward-Hopkins *et al.* (2020) without great surprise because we tend to view similar suggestions nowadays. One great difference with the past is how common it is today to read statements that would have appeared extraordinary then (Dorling 2024). We are now used to hearing and often believing that the ‘end is nigh’, but we accept the status quo more readily than many of our ancestors did. In the nineteenth century people rallied much more against inhumanities such as believing that we should starve people into work (Graham 1887).

The author of those words was not a radical. What concerned Graham was his fears about socialism. And yet he was toying with economic possibilities against starvation that in many ways became realities in the century after he wrote. William Graham, Professor of Political Economy and Jurisprudence, of Queen’s College, Belfast in the 1880s was author of *The Social Problem in its Economical, Moral, and Political Aspects* (Graham 1886). The sixth chapter of that volume entitled ‘The Social Residuum’ expressed his fears that we were breeding more and more unable people. Eugenic ideas like that were in their infancy and were mostly discredited six decades later. Whereas a society that was very much an improvement on the 1880s did emerge.

Are we being too unimaginative? Take the long quote and dissect it, starting with its first line: *‘To avoid catastrophic ecological collapse, it is clear that drastic and challenging societal transformations must occur at all levels, from the individual to institutional, and from supply through to demand.’* There remain very large numbers of people in the world who believe that climate change is a hoax, and many who do not understand the concept of ecological collapse (Ibbetson 2021). They, like almost all of us, have never seen this phenomenon (‘the collapse’), they just hear of it. We are living through the sixth great extinction of species on the planet, the one caused by us, but it does not much affect us most of the time. We are not aware of the birdsong that our grandparents heard that we do not. We adapt.

For an economics of enough, a societal transformation is almost certainly required. There are still some who think that we should ‘starve people into work’ but such a view is almost unacceptable to make clear in public today. The extent of our public spending in rich countries, and increasingly in poorer countries on schemes to alleviate poverty, prevent starvation and destitution, would have been almost impossible to imagine just over a century ago. But there appears to be no clamour for an economics of enough that is strong enough today to break through.

3. Climate change and enough

‘As the world heats up, willingness to act is falling’ (Stinson 2024: 1). Most of us do not dwell much at all on the nature of our own inevitable death, let alone ponder at great length the literal collapse of the ecosystems around us. Some of us do chant, almost in a religious way, the mantra of current science: that a catastrophe awaits our great-grandchildren because of how we currently choose to behave, to pollute. And yet, we do not act as if we truly believe our new religion.

As Stinson revealed, a declining number of us are convinced of the importance of these issues of climate change and environmental threat. This is hardly surprising as it is a story now told so often it has become repetitive. Almost no one talked of imminent catastrophic ecological collapse in our childhoods. Today the world is awash with not just fears of environmental collapse but a wide variety of popular conspiracy theories. A quarter of the population of the USA, a fifth in Brazil and a tenth in the UK believe that climate change is a hoax (Ibbetson 2021).

At the time of writing, it is only clear to a very few, in their minds, that a drastic and challenging societal transformation must occur at all levels, as the main quotation being dissected in this paper contends. The 2020s are very unlike the 1920s. Peoples’ own lives are not yet being greatly affected by rising temperatures and fewer species, despite what is so often claimed. Mass unemployment does not appear to be looming. We fear it personally, (after inequality) as the second largest global concern over our societies, but we continue to over-work and over-produce (Dorling 2025). Production is not beginning to stall, but claims that it must be reduced, that we are at the ecological limits of consumption, are now increasingly received with incredulity by the majority—most people are not in favour of de-growth.

We tend to remain largely sanguine even when national governments produce reports that suggest that food will become scarce in future as parts of our natural environment collapse because of our past actions impacting global climate and water cycles, severely reducing future crop yields, available arable land and unsustainable fisheries.

To give only one example, DEFRA (2026) reports ‘With current trends, global ecosystem degradation is highly likely to continue to 2050 and beyond’ (DEFRA 2026: 2).

When the word ‘challenging’ is used to describe the transformation being suggested, it can appear a somewhat inadequate adjective, and its use suggests a lack of seriousness. To some people what is being asked for is seen as impossible and harmful rather than just ‘challenging’. When the change being demanded is something we are told must occur: ‘*at all levels, from the individual to institutional*’ this sounds like the call of an evangelist. Furthermore, it is not how such changes tended to occur in the past. Some part of society, some individuals, usually changed before others. Many never changed, but when they died the generation below them often had different views.

At the point that the words ‘*and from supply through to demand*’ are considered at the end of that sentence, what is being suggested is an end to mainstream economics as we have come to know it. So, a transformation is being called for in a part of the religion of science (economics) which largely has one gospel, that gospel being the supposedly good news of the idea of the ‘invisible hand’ and growth. The current calls are that this is to be replaced by a different set of apparently potentially good news about how the human world could, or should, work. It is hardly surprising that when such a transformation is presented as revolutionary, that it appears so unappealing to many in a democracy.

Democracy was introduced to address a problem that was as much economic as political. Many have argued that ‘democracy was designed [...] to stop the endless civil strife that came from gaps in personal and social security between richer and the rest. [...] before the modern era introduced a sharp ideological divide [...] between weakly and strongly regulated markets’ (Benner 2024). In the USA at the advent of its democracy: ‘Alexander Hamilton, and John Adams inveighed against Athenian institutions as both mob rule and instruments for plundering the well-off’ (Markoff 2025: 309). Democracy allowed the ‘have-some’ and ‘have-nots’ to be divided between political parties to reduce the risk of revolution. Not to make it possible to achieve revolutionary change.

Turn to the second sentence of the long quotation. This is the sentence that immediately follows the one just dissected: ‘*From an energy-use perspective, the current work suggests that meeting these challenges does not, in theory, preclude extending decent living standards, universally, to a population of ~10 billion.*’

Most positively, there is now a widespread acceptance of our future human population only peaking at a little over 10 billion before it falls relentlessly in size. It is also becoming widely understood that we are unlikely to ever be 11 billion in number, despite such a figure being projected just a decade ago by the United Nations (Dorling 2020). It can be argued that more than any other single factor, more than existing and projected technological change, more than all the imagined political futures, or economic arguments, or sociological imaginations, it is the slowdown in human population growth—the growth of ourselves, our total numbers, that could provide some hope that a new economics of enough may be realisable in the near future. That is because conventional economics has only ever operated in times of relatively rapid human population growth.

Until the year 1968 there was no sign of any deceleration in global human population numbers. Now our numbers are set to shrink. That shrinking is not a prophecy. We already know that fewer babies were born in 2024 than 2023, a trend that occurred for most pairs of years back to the late 1960s. By early 2026 it became clear that the fertility

rate in India had fallen below two, in the UK below one-and-a-half, and in China it had recently fallen to one child per couple (voluntarily) because of the largest ever recorded fall in births in 2025. In China 7.92 million babies were born in 2025, down from 9.54 million in 2024.

Recently fertility has not just been falling worldwide but has fallen a little faster than most demographers thought was possible. Because we are now facing rapidly falling numbers of young people, in future we cannot continue as we are economically even if we wanted to. Aggregate demand of the most basic kind—how many of us there are and will be—is falling. This is not a prophecy. The young adults and children of the future have largely not been born.

A falling young population and then a falling total human population is a reality that is only very slowly being factored into popular discourse and into scenarios regarding what a future economics will be. This is the current baseline predictions of the demographers of the United Nations, next to be updated in 2027. It is what is most likely to happen, but it has great implications that are rarely considered. One possible trend is that we begin to shift from ideas of maximising things, such as maximizing utility, towards ideas of sufficiency and what is enough to be happy and healthy. To continue the dissection of the long quotation, the next sentence to consider is: *‘Decent living is of course a subjective concept in public discourse. However, the current work offers a response to the clichéd populist objection that environmentalists are proposing that we return to living in caves.’*

To date, environmentalists have not been seriously considered by economists. But what if we were to consider their requests in a different light? What if we were to think of some of their suggestions as being one way in which we might now be able to cope better with a world of falling demand because every year there are now fewer young people? The fall is most evident today in affluent countries but also in both India and China, and will soon be the reality almost everywhere in the world. The current trend of women having fewer children than they did the previous year is now found to be the case wherever you look, with hardly any exceptions.

One effect of a shrinking population is lower aggregate demand and a possible negative multiplier effect. In other words, what is happening with our numbers may help an economics of enough to emerge without as much evangelicalism as is currently often called for. Alternatively, think of this as environmentalism becoming mainstream for educational rather than political reasons. A world in which more than a third of young people attend university is unlikely to be a world in which most of them will accept living with less than the arithmetic mean-average due to the greed of a few. One estimate is that 43 per cent of young people worldwide now attend university or its equivalent (UNESCO 2025). As births continue to fall, the percentage of young adults who are university educated will rise above a majority worldwide even if the total numbers of university students do not rise.

What then should, or could, the majority of young educated people begin to demand? Try to image the next sentence of the long quotation not as some fanciful wish of hair-shirted but unrealistic green utopians, but instead as the most probable future scenario: *‘With tongue firmly in cheek, the response roughly goes “Yes, perhaps, but these caves have highly efficient facilities for cooking, storing food and washing clothes; low-energy lighting throughout; 50L of clean water supplied per day per person, with 15L heated to a comfortable bathing temperature;”’*

By caves they of course mean homes, and the homes they are talking about would mostly be apartments, in tower blocks (or at least high-rise tenements) because that is the way we are already heading and apartments are heat efficient and, with lifts, avoid the problem of old joints, hips and knees, that the very elderly human population to come would have if too many of us tried to live in houses with stairs. The facilities they talk about are energy-efficient refrigerators, washing machines and most future lighting being via Light Emitting Diodes. The latter is already ubiquitous, but we need washing machines that last thirty years and not three. A bath might still be a luxury in future, in much of the world unless you shared the water with another. However, everything here described is technologically already in existence. Our problem is our understanding of economics, politics and sociology, not our understanding of physics. There is much that we could decide we no longer afford to do, not least supporting the global arms trade. In a world with fewer better educated young people now, and fewer overall people to come, aggregate realisable demand declines. Still trying to manufacture huge amounts of arms in these circumstances might appear especially foolhardy.

Technological solutions do not end wars or stop them occurring, an economics of enough might. When there is such high international interdependency for global food markets, for the components of the good that keep our food cool, for all of us to move about, for the batteries for electric bikes through to solar panels and air conditioners, to the huge movement of medicines around the world; war becomes more costly (as the USA learnt over its war on Iran in 2026). There may in future be more wars that are avoided simply because they are too expensive to have. But let us return to the eco-socialist utopia being described in that long quotation and the next sentence: ‘... *they maintain an air temperature of around 20°C throughout the year, irrespective of geography; ...*’

The end of Geography, like the ‘End of History’ is a fantasy that was once believed (Fukuyama 1992) and has been found wanting. But the mechanics of heating or cooling to 20°C is now well known and can be achieved with little energy use; but not if people are allowed to profit at the expense of others. The next technological step in heating should not be of great interest, controlling our indoor temperatures to an accuracy of a tenth of a degree Celsius. We really will hardly know the difference. We are not very good at counting our blessings and realising our achievements. Take, for example, the next sentence from the long quote: ‘... *have a computer with access to global ICT networks; ...*’

So, a future with enough does not mean the rationing of information—when we say an economics of enough, it is not a curtailing of knowledge. And if you are my age or older you will remember the world with no computers in schools and hardly any in universities, with no global ICT network (other than for the military). When people say that things cannot change, think of how much they do change. Due to its extreme energy uses, AI may be ecologically unaffordable as well as socially undesirable, but this is not the case for the Internet.

What we cannot tell, what we cannot predict, is how our world will change and so the tendency is to believe or suggest that change will be minor. We suggest that capitalism as we know it will continue, but that it will either be tempered to be slightly more social and progressive, or it will create even more of a dystopia. Neither of those two outcomes need be the most probable. Similarly, the formation of a world government—versus an anarchist arrangement of autonomous communes—may both not be especially fruitful avenues to imagine. They could happen, but more likely we will do something else that

at present we can only vaguely imagine. There will almost certainly be a sci-fi writer, someone who strikes lucky and paints a scenario that is the one that comes closest to what will actually occur. However, they will not have been prescient, just fortuitous. It could in fact be the tongue-in-cheek writers of the long paragraph that are those people; which is why I am so interested in this quotation.

So, consider the next sentence: ‘... *are linked to extensive transport networks providing ~5000–15,000 km of mobility per person each year via various modes*’. There is a degree of convincing exactness in this statement. Why five thousand to fifteen thousand? If most people were happy not to move about that much in future, a few could travel more. If solar panel power helium balloons could drift us slowly to other continents, we could have zero carbon long-distance slow journeys. Or, imagine the shock when teleportation becomes possible. Or if not that, then some other once thought impossible development.

All progress may require coordination and cooperation. In contrast to what an anarchist (Colin Ward) once claimed, the process by which a letter is delivered from one post-box to a letter box is not some anarchist assemblage of goodwill. The letter does not arrive with you by anarchy but by people putting their heads together and working out how to achieve that. If you do not believe me, put a letter in the post without a stamp on it. Colin Ward, in his book *Anarchy in Action*, argued the global postal service demonstrated ‘local groups and associations could combine for complex functions without any central authority’. Ward explained, ‘You can post a letter from here to China or Chile, confident that it will arrive, as a result of freely arrived-at agreements between different national post offices, without there being any central world postal authority at all’ (Ward 1996: chapter 5, 2nd paragraph). But you still need a great deal of organisation, not anarchy, and he was writing before the privatization of postal and delivery services had so greatly increased.

Let’s continue from the long quote: ‘... *and are also served by substantially larger caves where universal healthcare is available and others that provide education for everyone between 5 and 19 years old*.’ Universal basic services—universities, hospitals, all possible in the future even when enough is enough. We cannot afford in future to have a huge range of ‘choice’ is one implication. An economics of enough cannot work when choice is seen as so important. And, to bring this to a close: ‘... *And at the same time, it is possible that the amount of people’s lives that must be spent working would be substantially reduced*.’

The sunlit uplands—Keynes’ imaginary grandchildren—the ones who would not have to work as much. But there are naysayers to how well we might in future organise ourselves. At one extreme they are those that say that people are so naturally selfish and greedy that they will never achieve a kind of harmony in the short term that can avoid catastrophe (Milanovic 2025).

Other naysayers include Green party enthusiasts that would see the long quotation as fanciful and requiring far too much energy in future. They instead suggest that (in yet another study) access to the Internet in a utopian eco-socialist society might only be a maximum of 25 minutes a day, and that any printed newspaper would have to be shared between fifty people. This estimate for one in fifty is based on the experiment of ‘Kraftwerk 1’ one of many of Zurich’s ‘New Cooperatives’ that emerged in the last few decades with a cooperative housing policy, often in the countryside where: ‘residents self-govern their housing cooperatives as share-holding tenants with rents pegged at affordable levels. Residents drive the building and living of the housing cooperatives—

Table 1. *A summary of one eco-socialist utopia/dystopia*

Living the eco-socialist life?	
Private residential space per person	20–30 m ²
<i>Food—plant based</i>	
Meat	15 kg per year
Milk	20 litres per year
Water	70 litres a day
<i>Communications</i>	
Newspapers	1 hard copy shared between 50 people
Internet	25 minutes a day
<i>Transport</i>	
Bike riding	Unlimited
Car transport	0
Daily public transport	6 km per day
Air travel	0
Long-distance travel train/boat	1,000 km

Source: Haynes (2025).

typically vertical, environmentally-sound, building blocks with hundreds of residents, approaching the size of Widmer's autonomous neighbourhood.' (Nelson 2025: 65). For anyone enticed by such imaginations, Christian Kracht's novel *Eurotrash* and its description of an elderly mother and her son arriving at one such cooperative is a telling corrective (Kracht 2024).

Table 1 was produced by Mike Haynes (2025) as a Facebook post to make plain what the following paragraph implied:

The proposed aliquot shares aim to use Earth in ways such that every person in the world might have a similar one-planet standard of living yet diversity and choice in the ways that they produce and consume. The tract offers a 'typical lifestyle menu' that assumes eco-collaborative living with 1000-watt of energy and 20–30 square meters per person for private residential space along with free access to various communal spaces and facilities; bike riding unlimited but no car rides, 6 km train/tram travel per day and 1000 km each of boat and train travel in lieu of any plane flights; a strongly plant-based diet still allowing 15 kg of meat and 20 litres of milk per annum; just 70 litres of water daily; 180 min Internet use weekly and printed newspapers shared on the basis of one daily per 50 residents. (Nelson 2025: 66)

They are many current Utopian imaginations towards an economics of enough. In criticising one of them, conjured up by the economist Kate Raworth, another economist writes:

In many instances, Kate writes in the first-person plural, as if the entire world had the same 'objective': so 'we' have to make sure the economy does not exceed natural bounds of the Earth's 'carrying capacity', 'we' have to keep inequality within the acceptable limits, 'we' have an interest in a stable climate, 'we' need the commons sector. But in most of real-world economics and politics, there is no 'we' that includes 7.5 billion people. Different class and national interests are fighting each other. ... Short of magic, this is not going to happen. It then becomes apparent that Raworth's book is a book of miracles, as well as why in such a world of miracles, the real 'miracle' —that Chinese growth has

pulled some 700 million people out of abject poverty—goes all but unmentioned. The reason is that poverty was eliminated by ‘dirty’ growth, which has polluted Chinese cities and the countryside, disrupted the Arcadian idyll between man/woman and nature—and yet made the lives of millions incomparably better. (Milanovic 2025: 20–21)

So many people have their own ideas of what a better future will be, ranging from Milanovic squabbling with Raworth, to deep greens who want to see human numbers halve, or to those eco-socialists who believe it is possible for us to live comfortably within planetary means, versus others who call for growth, or at least temper it as green growth (Michell 2023).

4. Conclusion

What is most likely to occur? We cannot be sure. But we do know that all human conundrums eventually tend to sort themselves out. They largely do so despite, rather than because of, grand interventions, but often because of many small interventions. I will end with three examples.

- 1) People control their own population. Everywhere on the planet the number of births is falling. This is occurring even when governments are trying to make births rise. There have been grand interventions at times, mass sterilisation in India, the enforcement of contraception use in China (the one child policy), but it was not wider policies but micro policies and advocacy of the rights of women by women that was most important. Technological change helped, in rich countries having access to the pill, but it was social change that was more important. The winning of rights for women by women.
- 2) The number of deaths per year due to catastrophic climate-related weather events is falling every decade since the 1950s (Dorling 2025). This is despite there being many more severe weather events due to climate change. The number of people affected adversely by such events at first rose but now it too is falling as a proportion of all people. Again, it is not grand global policies that have achieved this or international coordination, but instead mostly better local action. Again, technological progress, especially the mobile telephone, was necessary—but not sufficient.
- 3) ‘Growth in solar and wind pushed the world past 30% renewable electricity for the first time in 2023, according to a report by global energy think tank Ember. Since 2000, renewables have expanded from 19% to more than 30% of global electricity, driven by an increase in solar and wind from 0.2% in 2000 to a record 13.4% in 2023. As a result, the CO₂ intensity of global power generation reached a new record low in 2023, 12% lower than its peak in 2007.’ (Broadbent 2024: 1)

For the first time in the history of our species, our human worldwide population is set to fall within the lifetimes of children today. A child born in 2026 will be 58 years old at the point of the most humans ever to live on the planet, and after that the number will fall, possibly, very likely for ever. That is what point one above is leading to.

The second example suggests we are quite adaptable. We almost certainly have the lowest proportion of people alive today to have ever been greatly adversely affected by a climate-related weather event (especially floods and storms).

The third example shows we may already be over the peak when it comes to global electricity carbon pollution. But we do need to be less stupid and not simply use cheap energy to run more AI server farms. Furthermore, the consumer is not benefitting from these changes (in a cost of living sense), given the present prominence of marginal pricing in electricity markets.

Most solutions have been local, not Bretton Woods style global agreements. There have been movements by people to demand rights and decency and the massive global rise in the popularity of having fewer children. We decided ‘enough is enough’ collectively when we began, over fifty years ago, to have fewer of us (Connelly 2008). Now we are trying to work out how to each not live with more products than we need in the rich world, while the majority of people still do not have quite enough to live a good life. The old ideal of a good life being ever greater consumption, is now being subsumed into something new but not yet fully formed. In the past some, economists celebrated that normal people could in some ways live as Roman emperors used to (at least in terms of food, warmth and sanitation). That kind of thinking has a shelf-life. The ideal that we must all aspire to have what only the rich in the very recent past had is now understood as unachievable. We are beginning a new and uncertain era.

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References

- Benner, E. (2024) ‘What the West Forgot About Democracy’, *Financial Times*, accessed 17 January 2024, <https://www.ft.com/content/f5fc04dd-6885-4835-8d5a-b07a344d51ee>
- Beveridge, W. (1942) *Social Insurance and Allied Service Report*. London: HMSO. accessed 1 July 2026, <https://ia600806.us.archive.org/26/items/in.ernet.dli.2015.275849/2015.275849.The-Beveridge.pdf>
- Broadbent, H. (2024) ‘World Passes 30% Renewable Electricity Milestone’, *Ember Energy*, accessed 7 May 2024, <https://ember-energy.org/latest-updates/world-passes-30-renewable-electricity-milestone/>
- Connelly, M. (2008) *Fatal Misconception: The Struggle to Control World Population*. Harvard: HUP. ISBN: 9780674034600
- Dorling, D. (2020) *Slowdown: The End of the Great Acceleration—and Why It’s Good for the Planet, the Economy, and Our Lives*. New Haven: Yale University Press. ISBN 9780300243406
- Dorling, D. (2024) ‘Inequality in the UK in Terms of Family Incomes—Implications for the Cost of Living Crisis’, *Transactions of the Manchester Statistical Society*, 190: 67–85. <https://manstatstatoc.org/2022/09/16/december-2022-danny-dorling/>
- Dorling, D. (2025) *The Next Crisis, Figure 1*. London: Verso. ISBN 978-1804294345
- DEFRA (2026) *Nature Security Assessment on Global Biodiversity Loss, Ecosystem Collapse and National Security*. London: Department for Environment, Food & Rural Affairs. Ac-

- cessed 20 January 2026, <https://www.gov.uk/government/publications/nature-security-assessment-on-global-biodiversity-loss-ecosystem-collapse-and-national-security>
- Fukuyama, F. (1992) *The End of History and the Last Man*. New York: Free Press. ISBN 9780743284554
- Gotbaum, J. and Calame, S. (2025) 'How Children Are Treated in the One Big Beautiful Bill Act', Brookings Institute Report, accessed 21 October 2025, <https://www.brookings.edu/articles/how-children-are-treated-in-the-one-big-beautiful-bill-act/>
- Graham, W. (1886) *The Social Problem in Its Economical, Moral, and Political Aspects*. London: Kegan Paul, Trench.
- Graham, W. (1887) 'Socialism: It's Argument and Aims', *Transactions of the Manchester Statistical Society*, 53: 1–28. <https://babel.hathitrust.org/cgi/pt?id=ucl.31175033417992&seq=7>
- Haynes, M. (2025) 'What Is an Eco-Socialist Life?', Facebook, accessed 18 March 2025, https://www.facebook.com/story.php?story_fbid=pfbid02u2Euhe4CUeVtSd6Z4UjEqeiuAE74b134hdvW5gFg6c3c8H5nEryQmZJ3j9P7yWBpl&id=286800212&_rdr
- Hickel, J. (2018) 'Stability without Growth: Keynes in an Age of Climate Breakdown', Center for Economic and Policy Research, accessed 3 December 2018, <https://www.resilience.org/stories/2018-12-05/stability-without-growth-keynes-in-a-n-age-of-climate-breakdown/>
- Hickel, J. (2021) *Less Is More: How Degrowth Will Save the World*. London: Windmill Books. ISBN 978-1786091215
- Ibbetson, C. (2021) 'Where Do People Believe in Conspiracy Theories?', YouGov, accessed 18 January 2021, <https://yougov.com/en-gb/articles/33746-global-where-believe-conspiracy-theories-true>
- Kemp, L. (2025) *Goliath's Curve: The History and Future of Societal Collapse*. London: Viking. ISBN 9780241741238
- Klein, M. and Pettis, M. (2020) *Trade Wars Are Class Wars: How Rising Inequality Distorts the Global Economy and Threatens International Peace*. New Haven: Yale University Press. ISBN 978-0300261448
- Kracht, C. (2024) *Eurotrash*. London: Serpent's Tail (Profile). ISBN: 9781805226598
- Konzelmann, S. J. (2024) 'Capitalism, Austerity, and Fascism', *Contributions to Political Economy*, 43: 113–47. <https://doi.org/10.1093/cpe/bzae006>
- Konzelmann, S. J., Chic, V. and Fovargue-Davies, M. (2021) 'Keynes, Capitalism and Public Purpose', *Cambridge Journal of Economics*, 45: 591–612. <https://doi.org/10.1093/cje/beab002>
- Markoff, J. (2025) 'Geographic Tunnel Vision and the Past and Future of Democracy', *New Global Studies*, 19: 303–32. <https://www.degruyterbrill.com/document/doi/10.1515/ngs-2024-0037/html>
- Mattei, C. (2022) *The Capital Order: How Economists Invented Austerity and Paved the Way to Fascism*. Chicago: University of Chicago Press. ISBN 9780226818399. <https://doi.org/10.7208/chicago/9780226818405.001.0001>
- Milanovic, B. (2025) *The World Under Capitalism: Observations on Economics, Politics, History and Culture*. Cambridge: Polity. ISBN 9781509567768
- Millward-Hopkins, J., Steinberger, J. K., Rao, N. and Oswald, Y. (2020) 'Providing Decent Living with Minimum Energy: A Global Scenario', *Global Environmental Change*, 65: 102168. <https://doi.org/10.1016/j.gloenvcha.2020.102168>
- Michell, J. (2023) 'Macroeconomic Policy at the End of the Age of Abundance', *European Journal of Economics and Economic Policies Intervention*, 20: 369–87. <https://doi.org/10.4337/ejeep.2023.0122>
- Myllyvirta, L. (2025) 'Analysis: China's CO₂ Emissions Have Now Been Flat or Falling for 18 Months', Carbon Briefing, accessed 11 November 2025, <https://www.carbonbrief.org/analysis-chinas-co2-emissions-have-now-been-flat-or-falling-for-18-months>
- Nelson, A. (2025) 'Marx, Work, Agency and Postcapitalist Prefiguration', *Human Geography*, 18: 59–69. <https://doi.org/10.1177/19427786241237434>
- ONS (2025) 'Labour Disputes; Working Days Lost Due to Strike Action; UK (Thousands)', Labour Market Statistics Time Series (LMS), accessed 13 May 2025,

- <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/timeseries/bbfbw/lms>
- Reuters (2025) 'Japan's Greenhouse Gas Emissions Fall 4% in FY23/24 to Record Low', Reuters, accessed 25 April 2025, <https://www.reuters.com/sustainability/climate-energy/japans-greenhouse-gas-emissions-fall-4-fy2324-record-low-2025-04-25/>
- Romei, V. (2025) 'Ageing Populations Will Lead to Lower Living Standards, Warns Study: Growth in Annual GDP Per Capita Will Fall by More than a Full Percentage Point in Some Countries over the Next 25 Years', *Financial Times*, accessed 25 November 2025, <https://www.ft.com/content/3a675f7f-ff46-4b8d-9744-08dfed18d23a?syn-25a6b1a6=1>
- Scheidel, W. (2018) *The Great Leveler—Violence and the History of Inequality from the Stone Age to the Twenty-First Century*. Princeton: PUP. ISBN 9780691165028
- Scheidel, W. (2025) *What Is Ancient History*. Princeton: PUP. ISBN 9780691236650
- Schmelzer, M. (2016) *The Hegemony of Growth: The OECD and the Making of the Economic Growth Paradigm*. Cambridge: CUP. ISBN 9781107130609 <https://doi.org/10.1017/CBO9781316452035>
- Stinson, J. (2024) 'Earth Day 2024: Changing Attitudes and Actions Towards Climate Change', Ipsos, accessed 19 April 2024, <https://www.ipsos.com/en-uk/earth-day-2024-changing-attitudes-and-actions-towards-climate-change>
- Tily, G. (2024) 'The General Theory as a Macroeconomics of Power', Chapter 14 in J. Jespersen, F. Olesen, & and M. R. Byrialsen (eds) *Post-Keynesian Economics for the Future: Sustainability, Policy and Methodology (New Directions in Modern Economics Series)*. Cheltenham: Edward Elgar. <https://www.elgaronline.com/edcollchap/book/9781035307517/book-part-9781035307517-23.xml>
- UNESCO (2025) 'Higher Education', UNESCO, accessed 27 August 2025, <https://www.unesco.org/en/higher-education>
- Ward, C. (1996) *Anarchy in Action*. London: Freedom Press. <https://theanarchistlibrary.org/library/colin-ward-anarchy-in-action>