# 1AC – NDT Round 3

## 1AC

### Innovation---1AC

#### Advantage 1 is Innovation.

#### Advertising prevents innovation by manipulating consumers away from best products---the information age makes positives obsolete.

Ramsi Woodcock 18. Assistant Professor of Law, University of Kentucky. The Obsolescence of Advertising in the Information Age (July 2, 2017). Yale Law Journal, Vol. 127, 2018, Available at SSRN: https://ssrn.com/abstract=3027662 or http://dx.doi.org/10.2139/ssrn.3027662

The view of advertising as fundamentally manipulative succumbed in the 1970s to the view that prevails today: that advertising does no more than convey useful product information to consumers.5 According to this view, the power of advertising to attract demand to a product arises only because advertising shows consumers that advertised products are better, not because advertising seduces with images, or overpowers through repetition.6 The Supreme Court embraced this informative view of advertising in 1976, extending First Amendment protection to advertising on the explicit ground that the “free enterprise economy” requires “informed” consumers.7 The FTC followed suit, terminating its remaining antitrust cases against advertising in the early 1980s and continuing only to regulate false or misleading advertising, the only forms of advertising that can harm markets when advertising functions only to convey information.8

The irony of the rise of the informative view is that its timing corresponded almost exactly with the dawn of the information age, that era of huge reductions in the cost of communication and data analysis, that has rendered almost completely unnecessary the provision of product information to consumers through advertising.9 Today, consumers can get more product information by reading “add to cart” pages on Amazon, or online product reviews on any number of platforms, than they can get from viewing advertisements on billboards or television, or through the advertising links placed by Facebook in its feeds and Google at points all across the web.10 Beyond the basic provision of product descriptions and specifications to online retailers, and display of this information on a seller’s own website, advertising is now obsolete as a useful source of product information. Consumers can get all the information that advertising provides, and much more, when and where they actually want it, on their own online.11

The persistence of advertising as a business despite its information obsolescence shows how far from the mark the informative view really is. The information age has ravaged newspaper advertising, the form of advertising that functioned most as a genuine provider of useful product information, replacing newspaper classifieds, for example, with free services like Craigslist.12 But the information age has otherwise failed to diminish the amount firms spend on advertising, even as it has shifted much advertising online, because advertising never was primarily about disseminating product information, but about manipulation, changing preferences rather than just informing them.13 The information obsolescence of advertising has laid this characteristic bare and in so doing undermined the foundation for the entire edifice of the contemporary legal treatment of advertising, from antitrust’s current unwillingness to condemn advertising, to First Amendment protection for commercial speech.

With the demise of the information function of advertising, the manipulative character of advertising must once again take center stage in the law, and the FTC must accordingly renew its antitrust campaign against advertising, with the goal of stamping out the practice except in those limited areas in which it provides information that cannot be had anywhere else.14 The best way for the FTC to do that is by challenging advertising as illegal monopolization in violation of section 2 of the Sherman Act, as the FTC once did in an earlier era.15

Critics of advertising often attack advertising’s effect on culture, particularly the way advertising crowds public-spirited speech, like the arts and political debate, out of public fora, replacing them with speech aimed solely at serving the narrow pecuniary interests of private speakers.16 The virtue of an antitrust challenge to manipulative advertising is that it would focus not on what advertising does to culture but on what it does to the market, the very object that the pursuit of narrow pecuniary interests is supposed to nourish.17 Advertising in its manipulative guise, so far from smoothing the flow of commerce, threatens technological advance, by giving consumers a reason—image—to purchase a product that is distinct from the only reason for which a consumer should buy a product in a well-functioning market: that the product is actually better at doing what it purports to do.18 Tinkering with the decision-making processes of consumers prevents consumers from rewarding, through their purchase decisions, the innovators who best meet their needs, and thereby threatens the foundation of technological progress in a free market system.19 A firm that can win with advertising wins in the mind, and not in the market, delivering the firm from the discipline of competition on the merits. Shorn of its information function, advertising threatens not only culture, but commerce.

The notion that advertising blinds the consumer to genuine differences in product quality smacks of paternalism, because it suggests that consumers do not always know what is best for them.20 The power of manipulative advertising to make consumers buy products they do not really prefer cannot, however, be denied, either as a matter of common sense, or, increasingly, of neuroscience.21 Moreover, the paternalism of intervening to stop manipulative advertising is only the long-established, judicially-approved, congressionally-mandated paternalism of the antitrust laws, which have the rather libertarian goal of ensuring a level playing field for all products, so that the best rise to the top on their own, through the discerning choices of consumers.22

The notion that advertising manipulates also appears puritanical, because it suggests that seduction is not a good in itself for which consumers might be willing to pay.23 There can be no question, however, that whatever pleasure consumers might take in being seduced is not sufficient compensation for the harmful effects of buying products they do not really prefer. Antitrust has long accepted the teaching of economists that technological innovation, not image, is the single most important driver of consumer welfare, to be protected at all costs.24 For this reason, antitrust almost always exempts the monopoly built on technological innovation from censure, and must, a fortiori, reject anticompetitive conduct that threatens innovation, no matter how incidentally pleasurable to consumers that conduct might be.25 The assumption of the courts and the FTC in the mid-century cases, that uninformative advertising must be anticompetitive and consumer-harmful advertising, was right.26

#### Advertising diverts competition from product to influence---only antitrust solves.

Ramsi Woodcock 18. "Advertising Apologies – What am I missing?". No Publication. 10-11-2018. https://zephyranth.pw/2018/10/11/advertising-apologies/

Creates competition. Advertising certainly can create competition, by helping a startup, for example, challenge an entrenched brand. But advertising promotes competition in a way that deprives competition of the virtues we usually ascribe to it. The startup that advertises wins by influencing consumers, not by fielding a better product. When firms advertise to compete, they compete on advertising — which company has the more powerful influence campaign — and not exclusively on the variables that healthy competition is supposed to influence — price and quality.

In a world without advertising, startups have only one way to challenge the incumbent — by offering a better quality product at a lower price. That limitation ensures that competition will tend to minimize price and maximize quality. When firms compete on influence — via advertising — there is no guarantee that the firm that wins will offer the best product at the lowest price; the winner may win instead by advertising best. So while advertising may promote competition, it undermines healthy competition.

True, sometimes a brand is so entrenched that startups cannot enter the market without the aid of advertising, no matter how good their products and how low their prices. But the only solution to this problem that leads to health competition — competition that’s focused on price and quality — is to ban advertising and to use the antitrust laws to break up entrenched brands. Banning advertising itself undermines entrenched brands, because owners of those brands often use advertising to maintain their power. Action under the antitrust laws to compel licensing of iconic trademarks and other intellectual property would undermine brands that are entrenched for reasons other than advertising, such as advantages associated with being first to market. It has been done before.

#### Its reverse causal---the plan jump-starts innovation.

Shonagh Marshall interviewing Ramsi Woodcock 21. Ramsi Woodcock, Assistant Professor of Law Assistant Professor of Management, Gatton College of Business and Economics. "A conversation with Ramsi Woodcock — Denier". Denier. https://www.fashiondenier.com/conversations/a-conversation-with-ramsi-woodcock

Another part of my argument about advertising is that firms don't invest as much in innovation if they invest in advertising. In other words, in a world without advertising, how do you get your product to become successful? You simply must make it better than competitors’ products. There is no other way. But your product doesn't have to be better in a world in which you can advertise because you can now win simply by making your product better advertised, rather than better in fact. So you can imagine that a world without advertising would increase design-based competition in fashion and potentially lead to greater innovation, greater experimentation, and greater creativity in design than what we see now.

#### It’s the biggest driver of innovation---Advertising breaks the link between market and signal---manipulation chills tech innovation.

Ramsi Woodcock 18. Assistant Professor of Law, University of Kentucky. The Obsolescence of Advertising in the Information Age (July 2, 2017). Yale Law Journal, Vol. 127, 2018, Available at SSRN: https://ssrn.com/abstract=3027662 or http://dx.doi.org/10.2139/ssrn.3027662

That ultimately poses no great challenge for antitrust policy toward advertising, however, because both economics and prevailing antitrust doctrine make clear that the harm to consumers caused by advertising in its manipulative guise must far exceed any benefit conferred upon consumers by advertising operating as a product complement.70 The reason is that manipulation threatens technological innovation, which is recognized by economists as the most important driver of gains to consumers in the economy.71 In order for a free enterprise economy to deliver technological progress at the rate, and in the direction, preferred by consumers, consumers must be able to signal their preferences to firms through their purchase choices.72 Those choices reward firms that innovate in ways consumers prefer with revenues, and punish firms that sell disfavored products with bankruptcy. Manipulative advertising breaks the link between consumer preferences and the signals consumers send through their purchase choices, by preventing the seat of consumer preferences in the mind, the deliberative faculty, from controlling those decisions.73 The result is a threat to the ability of the free market to innovate technologically at the rate, and in the direction, that consumers prefer.74 When, under the influence of manipulative advertising, the preference signals received by markets fail to reflect true consumer preferences, markets respond by delivering technologies to consumers that are inferior in the sense of failing to satisfy consumers’ true preferences.

Whatever complements-pleasure advertising gives consumers in exchange for purchasing inferior products must fail fully to compensate consumers for this loss, because technological innovation contributes more to consumer welfare than does image.75 The pleasures of the best Super Bowl commercial pale in comparison to the value provided to consumers by the invention of the television itself, the glory of the billboards in Times Square to the invention of the lightbulbs that illuminate them.76 Antitrust recognizes the overriding importance of technological innovation.77 For this reason, antitrust almost never condemns innovation, despite the competitive disadvantage that innovation creates for rivals that have failed to innovate, and the higher prices for the innovative product that result from this undermining of competition.78 If antitrust is willing to restrain itself to avoid chilling innovation, then it has all the more reason to unleash itself against persuasive advertising, which always creates a risk of chilling innovation by preventing consumers from reflecting their preferences in their purchase decisions.79

#### Innovations solve global problems---there’s motive---the private sector is key.

Leon Howard-Spink and Paul Griffin 21. Leon Howard-Spink, Fund Manager at Schroders Investment Management. Paul Griffin, alternate portfolio manager for European equities at Schroders Investment Management. "Why Innovative Companies Are Crucial to Solving The World’s Problems". Traders' Insight. 12-20-2021. https://www.tradersinsight.news/traders-insight/securities/esg/why-innovative-companies-are-crucial-to-solving-the-worlds-problems/

The private sector’s expertise in developing new products will need to be harnessed if we’re to meet targets for sustainable development.

It’s hardly news to say the world is facing numerous urgent challenges. The experience of the global pandemic highlighted how vulnerable we all are to transmissible illnesses. The effects of climate change became more obvious than ever this year, from wildfires in Canada to floods in Germany. Toxic emissions and weather patterns combined this autumn in India, forcing Delhi into a form of lockdown due to air pollution.

The challenges don’t end there. We could add protecting biodiversity, improving health and education, and spurring economic growth to the mix. All are crucial for sustainable development as the global population grows.

These are big challenges but they’re not insurmountable. The political will is there as we can see from the increasing emphasis policymakers are putting on the UN’s Sustainable Development Goals (SDGs).

This is an opportunity for the private sector to show its value in coming up with new products and solutions to make a sustainable future a reality.

Innovation will be crucial. And investors in innovative companies could benefit.

Innovation turns goals into reality

Governments and policymakers have an important role to play in helping to set the agenda. We saw this last month at COP26 as countries firmed up their climate change commitments. But setting a target is one thing; achieving it is another.

The development of Covid-19 vaccines is an illustration of this. Public sector support was an essential part of the picture but ultimately it was private companies who had the scientific expertise to turn their cutting edge mRNA capabilities into an effective vaccine against the virus. And then they needed to partner with other private sector companies to test, produce, and package these vaccines at scale.

The success of the mRNA vaccines shows the importance of innovation. If we, as a society, are going to meet the SDGs, we can’t simply rely on tried and tested solutions. This is where the private sector comes in.

To our minds, the Boston Consulting Group expressed it well: “Of all the forces that the private sector can bring to bear in attempting to advance the 2030 SDGs, by far the most powerful is its unique capacity to innovate quickly, attract capital to innovative solutions, and drive innovations at scale. That combination is hard to find in the public sector or the social sector, but it’s the private sector’s lifeblood.”

Once-in-a-lifetime opportunity for investors

Achieving the SDGs will require the development of entirely new technologies that don’t currently exist, or not yet at scalable levels. The climate crisis in particular, and the target of reaching net zero by 2050, means innovation is urgently needed right now.

Developing new technology and products always contains an element of risk but taking risk – in anticipation of potential future reward – is what equity investing is all about:

“When a social need can be tackled with a profitable business model, the magic of capitalism is unleashed. Answers to the many deeply rooted societal problems we face become self-sustaining and scalable.” (from Where ESG Fails, Porter, Serafaim and Kramer, Harvard Business School)

Investors can make a positive impact by using their capital to support companies who contribute to finding these answers. We see a huge commercial opportunity for innovative businesses as demand for solutions to global problems will only intensify.

#### Threats are existential---innovation is key---specifically in medicine, environment, and food.

Felicia Jackson 19. Teaches @ University of London. Chief executive of SUFINDA C.I.C., works as a board advisor to a number of companies, and provides consultancy services to SMEs and multinationals. She was previously a co-founder of New Energy Finance (now owned by Bloomberg as Bloomberg NEF). Member of a UN Environment technical expert group developing a methodology for targets and indicators for SDG 17.7.1. She is also a member of the SOAS Centre for Sustainable Finance. "Top Ten Technologies To Save The World". Forbes. 1-17-2019. https://www.forbes.com/sites/feliciajackson/2019/01/17/top-ten-technologies-to-save-the-world/

The last few decades have seen incredible acceleration in innovative technology and deployment, but it is the current convergence of these technologies which could really transform our future.

Whether your greatest concern is climate change, air pollution, plastics, food security or one of the many existential threats the world is facing today, it seems that there are technological solutions that may actually help us meet the goals of the 2015 Paris climate agreement or achieve the Sustainable Development Goals by 2030.

Masdar, Abu Dhabi’s Future Energy Company, in partnership with The National newspaper and the World Future Energy Summit at Abu Dhabi Sustainability Week (ADSW) have launched a new report ‘The Future of Sustainability’, which highlights how innovations as disparate as carbon capture, energy storage, 3D printing, artificial intelligence (AI), and data analytics could fast track the global transition to a low carbon, sustainable world.

The report examined key technological advancements that will enhance sustainability across six sectors defined as energy and climate change, water, mobility, biotechnology, space, and tech for good. These include carbon capture and energy storage, renewable energy-powered seawater desalination, electric and autonomous vehicles, nanofabrication and advanced manufacturing, gene editing and biofuels, and robotics and sophisticated software systems.

Several technologies, such as 3D printing, nanotechnology, data analytics, blockchain, and AI, impact all six sectors. These technologies and others are converging to improve efficiencies, optimise electricity consumption, and produce smart systems that will reduce our carbon footprint.

The top ten technologies identified in the research include:

* blockchain systems that enable electricity sharing such as Germany's OLI has developed;
* renewable energy-powered blockchain computing facilities like that from Soluna;
* peer-to-peer solar energy sharing platforms that extend clean energy to remote areas like that of Bangladesh-based SOL-Share;
* a waste heat recovery system that recycles industrial byproducts into a value added carbon-free energy source from the UAE's Seramic;
* a 3D printable solid-state battery powered by vegetable oil that has potential applications in energy storage from Berekotry Ltd;
* a type of char made from biomass that can reduce the greenhouse gas emissions of coal-fired power plants from Agri-Tech Producers; ‘
* 'green’ briquettes made from biomass that reduce the felling of trees and reliance on dirty coal such as that created by Kenya's Kayole Environment Management Enterprise;
* a virtual reality system that inspires more sustainable behaviour from New York's Thinc Design;
* a city water fountain that saves water and avoids the use of millions of plastic bottles from ProAcqua Group;
* environmentally-friendly paints that protect surfaces and improve energy efficiencies such as those from zero-VOC.

Energy and climate change innovations remain some of the most critical to fast-tracking a more sustainable future, and the report argues that improved energy storage, including innovations in hydrogen storage, must be achieved for a successful energy transition. Meanwhile smart networks and connectivity are expected to facilitate improved energy management and less waste overall.

There are other areas too which require increased focused if they are to have an impact, with smart city transit technologies a key innovation for developing more sustainable mobility services.

With water a critical issue, both in terms of agriculture (which consumes 70% of global freshwater every year) and in terms of use in power generation, desalination is going to need to develop rapidly.

Biotechnology will become increasingly mainstream, with the potential to solve a broad range of medical, agricultural and environmental challenges. In industries that run the gamut from medical to manufacturing, 3-D printing will continue to play an increasingly important role while space-exploration is going to move from the realm of governments to the development of sustainable practices and industries.

One area that comes out clearly in the report is the importance of young people. While in the Global North the population is ageing, globally the demographics are shifting downwards. Most of today’s young people believe that climate change will be the biggest threat to the world within the next decade and are turning to innovation to solve the challenges. This in itself links to the last major finding of the report, and that is that education is absolutely central to the achievement of improved sustainable practices.

H.E. Dr Thani bin Ahmed Al Zeyoudi, UAE Minister of Climate Change and Environment, said, “The world today is witnessing a shift from the business-as-usual paradigm to a more sustainability-conscious one, and the UAE is leading the way, powered by its youth and the seamless collaboration between its public and private sectors. Platforms such as Abu Dhabi Sustainability Week provide a global stage for cutting-edge sustainability concepts and solutions by enabling networking between entrepreneurs and investors and the transfer of knowledge.”

#### Medical innovation is key to preparedness.

Tahir Amin and Rohit Malpani 20. Tahir Amin is the co-executive director of the Initiative for Medicines, Access & Knowledge (I-MAK) a global nonprofit organization working on systemic changes to intellectual property and the political economy of pharmaceutical innovation. \*\*Rohit Malpani is a public health consultant and former policy director of the Medecins Sans Frontieres/Doctors Without Borders Access Campaign. “Covid-19 has exposed the limits of the pharmaceutical market model” STAT News. 05-19-20. https://www.statnews.com/2020/05/19/covid-19-exposed-limits-drug-development-model/

That so much hope is being pinned on remdesivir, the drug Gilead is testing for Covid-19, reflects the failure of our system for new drug development rather than the unqualified success some commentators are making it out to be. If anything, remdesivir is the poster child for why we need a new model of drug development for pandemics and neglected diseases that isn’t restricted by the current market-based model. The Covid-19 pandemic has provided the pharmaceutical industry with a chance at bolstering its heavily tarnished image. Abbott Laboratories is winning effusive praise for its introduction of a rapid Covid-19 test. After decades of profiteering from the opioid crisis, Johnson & Johnson has ramped-up its advertising on Twitter to promote the company’s research into a vaccine for Covid-19. It is even airing an eight-episode reality television series showcasing its efforts. The marketing offensive appears to be working. Recent polling shows that public perception of pharmaceutical companies is on the upswing after years of historical lows. The narrative emerging from the Covid-19 pandemic is that the market is responding to rescue us from global catastrophe, a public relations coup for an industry that has long known about the potential for another pandemic but hasn’t meaningfully invested in research until now. Related: With remdesivir, Gilead finds itself at strategic crossroads, with its reputation (and far more) at stake Since 2002, epidemics caused by severe acute respiratory syndrome (SARS), swine flu (H1N1), Middle East respiratory syndrome (MERS), Zika, Ebola, and other viral diseases have killed nearly 600,000 people worldwide. Yet, in the aftermath of these outbreaks, and despite clear warnings that another viral pandemic could emerge, the pharmaceutical industry failed to sustain investment into new treatments and vaccines. That may surprise the public, but it doesn’t surprise those working on public health issues. In today’s capital-driven market, investments in pandemic preparedness and in neglected diseases like tuberculosis and malaria are not, and never have been, a priority for pharmaceutical company drug development even though neglected diseases cause more than 2 million deaths per year, almost seven times the number of deaths caused so far by Covid-19.

#### Disease causes extinction---the risk is categorically underestimated.

Dennis Pamlin & Stuart Armstrong 15. \*Executive Project Manager Global Risks, Global Challenges Foundation. \*\*James Martin Research Fellow, Future of Humanity Institute, Oxford Martin School, University of Oxford. February 2015, “Global Challenges: 12 Risks that threaten human civilization: The case for a new risk category,” Global Challenges Foundation, p.30-93. https://api.globalchallenges.org/static/wp-content/uploads/12-Risks-with-infinite-impact.pdf

A pandemic (from Greek πᾶν, pan, “all”, and δῆμος demos, “people”) is an epidemic of infectious disease that has spread through human populations across a large region; for instance several continents, or even worldwide. Here only worldwide events are included. A widespread endemic disease that is stable in terms of how many people become sick from it is not a pandemic. 260 84 Global Challenges – Twelve risks that threaten human civilisation – The case for a new category of risks 3.1 Current risks 3.1.4.1 Expected impact disaggregation 3.1.4.2 Probability Influenza subtypes266 Infectious diseases have been one of the greatest causes of mortality in history. Unlike many other global challenges pandemics have happened recently, as we can see where reasonably good data exist. Plotting historic epidemic fatalities on a log scale reveals that these tend to follow a power law with a small exponent: many plagues have been found to follow a power law with exponent 0.26.261 These kinds of power laws are heavy-tailed262 to a significant degree.263 In consequence most of the fatalities are accounted for by the top few events.264 If this law holds for future pandemics as well,265 then the majority of people who will die from epidemics will likely die from the single largest pandemic. Most epidemic fatalities follow a power law, with some extreme events – such as the Black Death and Spanish Flu – being even more deadly.267 There are other grounds for suspecting that such a highimpact epidemic will have a greater probability than usually assumed. All the features of an extremely devastating disease already exist in nature: essentially incurable (Ebola268), nearly always fatal (rabies269), extremely infectious (common cold270), and long incubation periods (HIV271). If a pathogen were to emerge that somehow combined these features (and influenza has demonstrated antigenic shift, the ability to combine features from different viruses272), its death toll would be extreme. Many relevant features of the world have changed considerably, making past comparisons problematic. The modern world has better sanitation and medical research, as well as national and supra-national institutions dedicated to combating diseases. Private insurers are also interested in modelling pandemic risks.273 Set against this is the fact that modern transport and dense human population allow infections to spread much more rapidly274, and there is the potential for urban slums to serve as breeding grounds for disease.275 Unlike events such as nuclear wars, pandemics would not damage the world’s infrastructure, and initial survivors would likely be resistant to the infection. And there would probably be survivors, if only in isolated locations. Hence the risk of a civilisation collapse would come from the ripple effect of the fatalities and the policy responses. These would include political and agricultural disruption as well as economic dislocation and damage to the world’s trade network (including the food trade). Extinction risk is only possible if the aftermath of the epidemic fragments and diminishes human society to the extent that recovery becomes impossible277 before humanity succumbs to other risks (such as climate change or further pandemics). Five important factors in estimating the probabilities and impacts of the challenge: 1. What the true probability distribution for pandemics is, especially at the tail. 2. The capacity of modern international health systems to deal with an extreme pandemic. 3. How fast medical research can proceed in an emergency. 4. How mobility of goods and people, as well as population density, will affect pandemic transmission. 5. Whether humans can develop novel and effective anti-pandemic solutions.

#### Environmental damage is accumulating---only tech can reverse it.

Paul Wensley 21. Degrees in Computer Science from the University of California, Berkeley. "Technology for good: helping restore planet earth". No Publication. 5-5-2021. https://www.ericsson.com/en/blog/2021/5/technology-for-good-how-tech-is-helping-us-restore-planet-earth

The environment is a mess: out-of-control wildfires, deforestation, the destruction of coral reefs, pollution. Can technology help reverse climate change and the environmental damage done by our ancestors? Unlike the industrial revolution, technological advancements are no longer primarily powered by steam, iron, and coal mines. Instead, new technologies have led to more sustainable methodologies, better stewardship of our natural resources, and conversion to solar and renewable energy sources. And these have been shown to have an enormous positive impact on the environment.

Naturally, in an ideal world all citizens and corporations would voluntarily adopt better practices to reduce environmental damage. After all, don’t we want to leave the planet a better place for future generations? But let’s face it - voluntary compliance is difficult to obtain and planet earth doesn’t have time to waste. Instead, technological developments, such as automation and artificial intelligence, are helping mankind take immediate steps towards sustainability. There has never been a more exciting time for environmental technologies and innovation.

#### Environmental collapse is existential---adaptation empirically fails.

Joe McCarthy & Erica Sanchez 18. Cites Cristiana Pașca Palmer, United Nations biodiversity chief, and Mike Barrett, executive director of science and conservation at WWF. "Humans Could Face Extinction if We Don't Protect Biodiversity: UN". Global Citizen. 11-8-2018. https://www.globalcitizen.org/en/content/biodiversity-loss-human-extinction/

As the sixth mass extinction event accelerates around the world, engulfing thousands of animal and plant species, humans risk facing a similar fate unless drastic interventions are made, according to Cristiana Pașca Palmer, the United Nations biodiversity chief, who recently spoke with the Guardian.

Palmer said that within the next two years, countries have to develop an ambitious plan to conserve land, protect animals, and stop practices that are harming wildlife. This effort is equally as urgent as the Paris climate agreement’s goal of mitigating climate change, she said.

“The loss of biodiversity is a silent killer,” she told the Guardian. “It’s different from climate change, where people feel the impact in everyday life. With biodiversity, it is not so clear but by the time you feel what is happening, it may be too late.”

Next month, countries will meet in Sharm el Sheikh, Egypt, to begin mapping out what such a plan would like. Palmer hopes that a final version will be formalized in Beijing in 2020.

If a binding global treaty fails to materialize, then humanity faces an uncertain future, she said. Past efforts to stop the loss of biodiversity have not proved successful, according to the Guardian.

In recent years, evidence of this staggering loss has begun accumulating.

Wild animal populations have declined by 60% since 1970, more than 26,000 plants and animals are close to extinction, nearly two-thirds of the world’s wetlands and half of all rainforests have been destroyed, more than 87% of the world’s ocean area is dying, and the planet needs an estimated 5 million years to recover from the biodiversity loss it has already sustained.

“We are sleepwalking towards the edge of a cliff,” Mike Barrett, executive director of science and conservation at WWF, recently told the Guardian. “If there was a 60% decline in the human population, that would be equivalent to emptying North America, South America, Africa, Europe, China, and Oceania. That is the scale of what we have done.”

“This is far more than just being about losing the wonders of nature, desperately sad though that is,” he said. “This is actually now jeopardising the future of people. Nature is not a ‘nice to have’ — it is our life-support system.”

The benefits of biodiversity are hard to overstate. The food chain, climate systems, atmospheric conditions, natural resources, and much more depend on the delicately structured interactions of ecosystems around the world.

The truly wild places in the world, meanwhile, are crucial to generating, cleaning, and distributing water around the world, and could help to mitigate the looming water crisis. These landscapes and marine environments also clean the air and act as carbon sinks, stabilize the global environment, and protect countries from natural disasters.

In addition to climate change, the biggest threats to biodiversity are deforestation, agriculture, over-development, and industrial pollution.

While Palmer sounded an urgent alarm bell while speaking with the Guardian, she’s hopeful that countries will recognize the threat of biodiversity loss and begin to take action.

The UN is calling for at least 30% of all land and 15% of all marine environments to be protected by 2030 and for targets to be lifted in the following years.

“Things are moving. There is a lot of goodwill,” Palmer said. “We should be aware of the dangers but not [stalled] ~~paralysed~~ by inaction. It’s still in our hands but the window for action is narrowing. We need higher levels of political and citizen will to support nature.”

#### Innovation can reverse harms.

Hans Vestberg 19. Chief Executive Officer, Verizon Communications. "Want a Sustainable Earth? Bring on the Fourth Industrial Revolution". World Economic Forum. 1-22-2019. https://www.weforum.org/agenda/2019/01/want-a-sustainable-earth-bring-on-the-fourth-industrial-revolution/

The more I’ve learned about the coming generation of high-speed, highly interactive technologies, the more convinced I’ve become that they could help the human race buy crucial time in the race against catastrophic worldwide climate change.

The Internet of Things, 3D printing, 5G networks, and other 4IR innovations have the potential to significantly reduce carbon emissions and resource usage across industrial and agricultural production cycles – from manufacturing, to shipment, to packaging, to reuse. At the same time, by using 4IR technologies, it is the only way to provide what is needed for sustainable growth for each and everyone on the planet in an equitable way.

Furthermore, 4IR networks, sensors, and autonomous devices can yield unprecedented levels of insight into how climate change is manifesting itself in locations around the world – and how we can most effectively mitigate its effects and adapt to its consequences.

The bottom line: in the fight against man-made climate change, 4IR could make a meaningful difference – and it can’t come soon enough.

As recent reports from the International Panel on Climate Change (IPCC) and the US government make clear, climate change and related environmental challenges are proceeding even faster than expected, with potentially grave consequences for humanity, natural habitats, and the global economy.

What makes the challenge even more daunting is the fact that the world population (and therefore the demand for energy and natural resources) is poised to expand significantly over the remainder of this century, reaching 9.8 billion human beings by 2050 and 11.2 billion by 2100.

And by the way, the preponderance of that growth will occur in the regions where climate change is likely to have its harshest effects – including Sub-Saharan Africa, the Middle East, and South Asia.

If we are to ensure a more sustainable and equitable future, we must take serious and concerted action. The exciting technologies of 4IR can by no means be considered a sole solution to a problem this massive and complex.

In fact, those of us who are introducing these innovations into the world must do all we can to ensure that they don’t actually worsen the problems of resource overuse and carbon emissions. I think our sector is capable of this – and of much more.

If we and our partners throughout industry, government, and academia can collaborate imaginatively on ways to maximize the sustainability benefits of these emergent technologies from the very start, the next few crucial decades could see cascading gains in momentum against both materials wastage and emissions.

This raises a truly thrilling possibility: that the grave environmental harms set in motion by earlier industrial revolutions could be reversed – at least partially – by another industrial revolution, the first in history to set sustainability as an objective from its very outset.

#### Extinction.

Peter Engelke 16. Senior fellow at the Atlantic Council’s Strategic Foresight Initiative. “Will the world's next wars be fought over water?” LA Times. <http://www.latimes.com/world/global-development/op-ed/la-fg-global-water-oped-story.html>

As evocative as this hypothesis is, the track record also shows that water wars are overblown – thankfully. Exhaustive research by Aaron Wolf, a geographer at Oregon State University, has documented the surprising fact that there have been no interstate wars fought directly over water for thousands of years. In fact, his team’s research indicates that states have cooperated over shared water resources far more often than they have fought over them.

But the absence of a historical record of interstate warfare over water does not mean that we have no reason for concern. On the contrary. There are two very good reasons why we should intensify our efforts to understand how water intersects with conflict and to build the structures necessary to ensure that water leads to peace and prosperity rather than war.

One reason is that the future is not going to look exactly like the past. This is a truism: No future ever looks exactly like any past. But in terms of how the Earth’s various systems operate, we likely are looking at a future that is very different from the past.

For years now, Earth scientists have been debating whether we should rename the geological epoch in which we live, whether we should drop the term Holocene (the period since the last ice age) and substitute for it the term Anthropocene. As the root of the word Anthropocene suggests, the scientists’ basic idea is that human interference in Earth systems has become so pervasive that we have, in effect, a new planet on our hands. Indicators such as climate change, ozone depletion, massive sedimentation, and ocean acidification are proof that human interference in Earth systems already has altered how the planet works.

So too with fresh water: Water cycling will become less predictable in the future. For example, a changing climate will create more droughts and floods more frequently in more places. As water systems become less reliable – say, transboundary river flows no longer follow historic, seasonal patterns – states will come under greater pressure to deal with the consequences. States might begin to take matters into their own hands and lay claim to water resources that others believe belong to them. No one can say whether such a causal chain will result in future water wars.

But the second reason we should remain concerned about the potential for water-based conflict is the overly narrow frame we use to understand the relationship in the first place. Interstate warfare represents only a small part, indeed the far less significant part, of a much larger equation involving conflict and water. We would be smart to focus on that larger equation rather than on the narrower if spectacular "water wars" hypothesis.

The smart frame is to think about how water can either contribute to peace and stability or, conversely, help destabilize vulnerable countries and regions around the world. Water is essential for all human activities, indeed for all life. When present in sufficient quantity and quality, water is an enabler of other good things, whether we are talking about human health or food production or energy production or a thousand other things. However, when water is not present in sufficient quantity and quality, the reverse becomes true: human health suffers, food cannot be grown, electricity cannot be produced, and so on. Under extreme conditions, society can begin to break down, and conflict becomes inevitable.

The current Syrian tragedy provides an important case study of what happens to a society under severe water stress. Between 2007 and 2010, Syria experienced one of the worst droughts in recorded history, the effect of which was to decimate rural communities and drive hundreds of thousands off the land and into Syria’s cities, where they were marginalized. When the "Arab Spring" began in 2011, Syria therefore was an especially vulnerable society. The effects of the drought combined with long-standing grievances against the Assad regime to create the conditions for violence. Once conflict began, rebel groups found willing recruits from those regions most affected by drought. Since the onset of civil war, moreover, combatants have "weaponized" water, meaning they have turned water into an instrument of war. The Islamic State has been the most egregious offender, alternatively flooding areas or deliberately withholding water in order to punish civilians or p prosecute their conflict against other combatants.

#### Food shortages are coming now---only innovation solves instability.

Jon Parr 21. President of Syngenta Crop Protection. "Modern chemical pesticides are needed more than ever to fight rising food prices, climate change and world hunger". MarketWatch. 11-1-2021. https://www.marketwatch.com/story/modern-chemical-pesticides-are-needed-to-fight-rising-food-prices-climate-change-and-world-hunger-11635781851

If you want a glimpse into the future, look up the U.N. Food and Agriculture Organization’s latest update to its global Food Price Index; it jumped over 3% in August and now stands almost 33% higher than this time last year.

Analysts attribute only part of this price surge to COVID-19 bottlenecks and labor shortages. The rest is simply because the world is not producing enough food to meet the needs of a growing population. Food prices have been moving steadily upward for two decades now, effectively erasing the dramatic gains in productivity and affordability made during the Green Revolution in the 1960s and 70s.

Too many policymakers don’t seem to be aware that, according to the U.N., nearly 40% of the global population cannot afford a healthy diet. Instead, many policy makers seem to assume that the agriculture industry has largely solved the extraordinarily complex problem of producing a healthy, abundant and secure food supply.

That assumption leads to demands on environmental grounds that we reject the technologies that have made modern agriculture so productive. These generally include efforts to ban genetic modification, synthetic fertilizers and pesticides, and sometimes even mechanization. But pesticides are usually the top candidate for elimination.

Now, with the U.N. Climate Change Conference that began on Oct. 31 in Glasgow, these demands are certain to become more strident in the name of combating climate change. Agriculture will be in the crosshairs at Glasgow because it accounts for about 10% of all greenhouse gas emissions. That’s a number the world farming community needs to continue reducing by making agriculture more efficient and less energy-intensive and through use of cover crops and methods like no-till cultivation that help sequester the main greenhouse gas — carbon dioxide.

And yet, unless we can also continue making agriculture more productive on the land already under cultivation, farmers around the globe will have little choice but to clear more forests and natural vegetation to produce the additional food the world will require in coming years. And clearing that land would only make the climate problem worse, because forests and other natural plants are nature’s chief way of removing carbon dioxide from the atmosphere.

Hundreds of NGOs have already called for the abolition or drastic curtailment of pesticides, usually without much advice about how we should replace the crops that would be lost to pests as a result — which can be up to 50% for wheat, up to 70% for corn and up to 80% for rice, for example– except that we should all eat less.

There’s scant acknowledgment that unless we can use modern methods to increase crop productivity on existing farmland, global hunger could join climate change as an existential problem.

The campaign against modern pesticides escalated last year when the European Commission announced that as a centerpiece of its new agricultural policy it would cut pesticides by 50% and triple the amount of farmland under organic production.

The Commission seemed not to notice that the two goals are directly at odds with each other. Organic farmers are heavy users of pesticides; they just prefer older chemicals like copper sulfate, which is more broadly toxic and has to be used in much greater quantity because it is less effective. There was no acknowledgment that because organic farming is much less productive than conventional methods – about one-third less productive, typically — it would become necessary to convert much more natural habitat to farmland if Europeans are going to have enough to eat.

Europe and North America once experienced levels of chronic malnutrition comparable to the world’s poorest regions today. It was only the crop productivity revolution begun after World War II, enabled by modern pesticides that created the abundance so many now take for granted. Crop yields, which had remained essentially stagnant for the previous century, turned dramatically upward after the war, with farmers growing two, three, and even five times as much on each acre of land in subsequent decades.

Advanced hybrids, GMOs, and synthetic fertilizer are given much of the credit. And yet without innovation in chemical crop protection, the other advances would have simply made all those plants more inviting to the 90,000 pests and diseases that have plagued agriculture throughout human history.

With climate change encouraging pest and disease migration as well as the development of new strains of threats, the world’s farmers are now fighting an increasingly elusive set of foes.

Even with modern pesticides, farmers lose up to 40% of their crops because of pests and disease. Without pesticides, the losses would be catastrophic: as much as 50% for wheat, almost 70% for corn, and nearly 80% for rice.

That’s why farmers dating back to the ancient Sumerians have used pesticides. It’s why all farmers today who grow food as a business use chemical pesticides — although the lower efficacy of organic pesticides is a key reason why organic yields average 30% below those of conventional farming methods.

From an environmental perspective, the hostility to modern pesticide technology makes little sense. Since the 1960s, in response to consumer concerns, the chemical industry has worked hard with farmers to reduce unnecessary use of pesticides. Chemical innovation has slashed pesticide toxicity by 98%, reduced the amount applied per acre by 60% and curtailed pesticide persistence in the environment by more than half.

A study of pesticides used in California, a highly diverse agricultural state, found 97% were less toxic than the caffeine in coffee.

Meanwhile, the yield benefits mean that U.S. farmers grow three times as much food as in 1950 on 10% less land, sparing 120 million acres. That’s twice the combined area of all U.S. National Parks. And a study by Stanford researchers found that modern farming technologies had also saved 590 gigatons of CO2 equivalent emissions from being released in the atmosphere, equal to about one-third of all greenhouse gases from all sources between 1850 and 2005.

The world stopped making any real progress against hunger 10 years ago, and now the numbers are rising again. That grim trend portends declining health, including rising levels of infant mortality, child stunting and compromised immune systems, leading to a whole host of life-crippling illnesses.

Lest anyone believe that such suffering in faraway places is not their problem, food insecurity breeds political and social instability on a widespread scale. In 2008, temporary food price spikes set off riots across Africa, Asia and the Middle East. It was the high cost of bread that famously ignited the Arab Spring in 2011 and the refugee crisis that engulfed Europe a few years later.

It’s estimated that we will need to grow 70% more food by 2050 to feed the 10 billion people who will be inhabiting out planet.

Only though continued innovation in agriculture can we meet the extraordinary environmental and food-security challenges ahead. Those innovations include biologicals and other forms of crop protection, digitally precise farming, genetic improvements in plants, new and improved kinds of fertilizer and — yes, when and where necessary — environmentally responsible use of chemical pesticides.

#### Food wars escalate.

JohnCastellaw 17. 36-year veteran of the U.S. Marine Corps and the Founder and CEO of Farmspace Systems LLC. “Opinion: Food Security Strategy Is Essential to Our National Security.” 5-1-2017. https://www.agri-pulse.com/articles/9203-opinion-food-security-strategy-is-essential-to-our-national-security

The United States faces many threats to our National Security. These threats include continuing wars with extremist elements such as ISIS and potential wars with rogue state North Korea or regional nuclear power Iran. The heated economic and diplomatic competition with Russia and a surging China could spiral out of control. Concurrently, we face threats to our future security posed by growing civil strife, famine, and refugee and migration challenges which create incubators for extremist and anti-American government factions. Our response cannot be one dimensional but instead must be a nuanced and comprehensive National Security Strategy combining all elements of National Power including a Food Security Strategy. An American Food Security Strategy is an imperative factor in reducing the multiple threats impacting our National wellbeing. Recent history has shown that reliable food supplies and stable prices produce more stable and secure countries. Conversely, food insecurity, particularly in poorer countries, can lead to instability, unrest, and violence. Food insecurity drives mass migration around the world from the Middle East, to Africa, to Southeast Asia, destabilizing neighboring populations, generating conflicts, and threatening our own security by disrupting our economic, military, and diplomatic relationships. Food system shocks from extreme food-price volatility can be correlated with protests and riots. Food price related protests toppled governments in Haiti and Madagascar in 2007 and 2008. In 2010 and in 2011, food prices and grievances related to food policy were one of the major drivers of the Arab Spring uprisings. Repeatedly, history has taught us that a strong agricultural sector is an unquestionable requirement for inclusive and sustainable growth, broad-based development progress, and long-term stability. The impact can be remarkable and far reaching. Rising income, in addition to reducing the opportunities for an upsurge in extremism, leads to changes in diet, producing demand for more diverse and nutritious foods provided, in many cases, from American farmers and ranchers. Emerging markets currently purchase 20 percent of U.S. agriculture exports and that figure is expected to grow as populations boom. Moving early to ensure stability in strategically significant regions requires long term planning and a disciplined, thoughtful strategy. To combat current threats and work to prevent future ones, our national leadership must employ the entire spectrum of our power including diplomatic, economic, and cultural elements. The best means to prevent future chaos and the resulting instability is positive engagement addressing the causes of instability before it occurs. This is not rocket science. We know where the instability is most likely to occur. The world population will grow by 2.5 billion people by 2050. Unfortunately, this massive population boom is projected to occur primarily in the most fragile and food insecure countries. This alarming math is not just about total numbers. Projections show that the greatest increase is in the age groups most vulnerable to extremism. There are currently 200 million people in Africa between the ages of 15 and 24, with that number expected to double in the next 30 years. Already, 60% of the unemployed in Africa are young people. Too often these situations deteriorate into shooting wars requiring the deployment of our military forces. We should be continually mindful that the price we pay for committing military forces is measured in our most precious national resource, the blood of those who serve. For those who live in rural America, this has a disproportionate impact. Fully 40% of those who serve in our military come from the farms, ranches, and non-urban communities that make up only 16% of our population. Actions taken now to increase agricultural sector jobs can provide economic opportunity and stability for those unemployed youths while helping to feed people. A recent report by the Chicago Council on Global Affairs identifies agriculture development as the core essential for providing greater food security, economic growth, and population well-being. Our active support for food security, including agriculture development, has helped stabilize key regions over the past 60 years. A robust food security strategy, as a part of our overall security strategy, can mitigate the growth of terrorism, build important relationships, and support continued American economic and agricultural prosperity while materially contributing to our Nation’s and the world’s security.

#### Regulated capitalism is key---alternative systems fail to innovate sufficiently.

Philippe Aghion, Céline Antonin, & Simon Bunel 21. Professor at the Collège de France, INSEAD, and the London School of Economics and Political Science and was previously Professor of Economics at Harvard. Senior Researcher at OFCE, the French Economic Observatory at Sciences Po in Paris, and Research Associate in the Innovation Lab at the Collège de France. Senior Economist at INSEE, the French National Institute of Statistics and Economic Studies, and at the Bank of France. “The Power of Creative Destruction: Economic Upheaval and the Wealth of Nations.” Harvard University Press.

Nonetheless, the abolition of capitalism is not the solution. The last century witnessed a large-scale experiment with an alternative system—a system of central planning in the Soviet Union and other communist countries of Central and Eastern Europe. This system failed to offer individuals the freedom and economic incentives necessary for frontier innovation, and so these nations were unable to get beyond an intermediate level of development. Henri Weber, a well-known figure of the French movement of May 1968, was a former Trotskyist leader in the 1960s and 1970s but later became a leader of the French Socialist Party and Socialist member of the European Parliament. He explained his personal conversion to the free market economy and social democracy, looking to the Scandinavian experience: “Having witnessed from a front-row seat the disaster of collectivization of agriculture and firms in the Soviet Union, the Scandinavian Socialists were the first to break with the dogma of socializing means of production and managing the economy by a central planning committee. To control and humanize the economy, it is altogether unnecessary to expropriate management, to nationalize firms, or to eradicate the market . . . altogether unnecessary to deprive society of the creativity, knowhow, and dynamism of entrepreneurs. Under certain conditions, entrepreneurial talent can be mobilized to serve the common good.” A market economy, because it induces creative destruction, is inherently disruptive. But historically it has proved to be a formidable engine of prosperity, hoisting our societies to levels of development unimaginable two centuries ago. Must we therefore resign ourselves to the serious pitfalls and defects of capitalism as the necessary price to pay to generate prosperity and overcome poverty?

In this book, we have sought to better understand how growth through creative destruction interacts with competition, inequality, the environment, finance, unemployment, health, happiness, and industrialization, and how poor countries catch up to rich ones. We have analyzed to what degree the state, with appropriate control of the executive, can stimulate the creation of wealth while at the same time tackling the problems mentioned above. We have seen how, by moving from laissez-faire capitalism, with market forces given free rein, to a form of capitalism in which the state and civil society play their full role, it is possible to stimulate social mobility and reduce inequality without discouraging innovation. We have also seen how appropriate competition policies can curb the decline of growth and how we can redirect innovation toward green technologies to combat global warming. We have seen that, without forgoing globalization, a country can improve its competitiveness through innovative investments and put in place effective safety nets to protect individuals who lose their jobs. Lastly, we have seen how, with the indispensable support of civil society, it is possible to prevent yesterday’s innovators, in collusion with public officials, from pulling up the ladder behind themselves to block the path of tomorrow’s innovators.

### Costs---1AC

#### Advantage 2 is Costs.

#### Advertising generates wastes---increases consumer prices and diverts resources from social value.

Ramsi Woodcock 18. "Advertising Apologies – What am I missing?". No Publication. 10-11-2018. https://zephyranth.pw/2018/10/11/advertising-apologies/

First, the money that advertisers are willing to pay for advertising represents waste, in the form of profits generated from inducing consumers to pay higher prices for products that those consumers do not actually prefer. In the information age, you don’t advertise to inform, but rather to manipulate (or as Cook would have it, to influence, of which more below), and you should never invest more in manipulation than you can hope to recover from being able to charge higher prices for lower quality products as a result of your promotional efforts. But those higher prices and reduce product quality represent waste — an advertising-induced misallocation of consumer resources. Consumers would be better off paying less for unadvertised products.

The second source of waste from funding through advertising is the expenditure of resources on advertising infrastructure itself. Given that advertising serves only to distort consumer choices, all the money required to actually create advertisements and target them at consumers itself represent a waste — a diversion of productive resources away from more socially

#### Higher prices are the largest danger to the economy.

Lawrence Summers 21. A professor at and past president of Harvard University. He was treasury secretary from 1999 to 2001 and an economic adviser to President Barack Obama from 2009 through 2010. "Opinion: The inflation risk is real." *Washington Post*. 5-24-2021. <https://www.washingtonpost.com/opinions/2021/05/24/inflation-risk-is-real/>

But new conditions require new approaches. Now, the primary risk to the U.S. economy is overheating — and inflation.

Even six months ago, it was reasonable to regard slow growth, high unemployment and deflationary pressures as the predominant risk to the economy. Today, while continuing relief efforts are essential, the focus of our macroeconomic policy needs to change.

#### Eroding financial resilience causes war---that overcomes traditional barriers to conflict.

Jomo Kwame Sundaram & Vladimir Popov 19. Former economics professor, was United Nations Assistant Secretary-General for Economic Development, and received the Wassily Leontief Prize for Advancing the Frontiers of Economic Thought in 2007. Former senior economics researcher in the Soviet Union, Russia and the United Nations Secretariat, is now Research Director at the Dialogue of Civilizations Research Institute in Berlin “Economic Crisis Can Trigger World War.” <http://www.ipsnews.net/2019/02/economic-crisis-can-trigger-world-war/>.

Economic recovery efforts since the 2008-2009 global financial crisis have mainly depended on unconventional monetary policies. As fears rise of yet another international financial crisis, there are growing concerns about the increased possibility of large-scale military conflict.

More worryingly, in the current political landscape, prolonged economic crisis, combined with rising economic inequality, chauvinistic ethno-populism as well as aggressive jingoist rhetoric, including threats, could easily spin out of control and ‘morph’ into military conflict, and worse, world war.

Crisis responses limited

The 2008-2009 global financial crisis almost ‘bankrupted’ governments and caused systemic collapse. Policymakers managed to pull the world economy from the brink, but soon switched from counter-cyclical fiscal efforts to unconventional monetary measures, primarily ‘quantitative easing’ and very low, if not negative real interest rates.

But while these monetary interventions averted realization of the worst fears at the time by turning the US economy around, they did little to address underlying economic weaknesses, largely due to the ascendance of finance in recent decades at the expense of the real economy. Since then, despite promising to do so, policymakers have not seriously pursued, let alone achieved, such needed reforms.

Instead, ostensible structural reformers have taken advantage of the crisis to pursue largely irrelevant efforts to further ‘casualize’ labour markets. This lack of structural reform has meant that the unprecedented liquidity central banks injected into economies has not been well allocated to stimulate resurgence of the real economy.

From bust to bubble

Instead, easy credit raised asset prices to levels even higher than those prevailing before 2008. US house prices are now 8% more than at the peak of the property bubble in 2006, while its price-to-earnings ratio in late 2018 was even higher than in 2008 and in 1929, when the Wall Street Crash precipitated the Great Depression.

As monetary tightening checks asset price bubbles, another economic crisis — possibly more severe than the last, as the economy has become less responsive to such blunt monetary interventions — is considered likely. A decade of such unconventional monetary policies, with very low interest rates, has greatly depleted their ability to revive the economy.

The implications beyond the economy of such developments and policy responses are already being seen. Prolonged economic distress has worsened public antipathy towards the culturally alien — not only abroad, but also within. Thus, another round of economic stress is deemed likely to foment unrest, conflict, even war as it is blamed on the foreign.

International trade shrank by two-thirds within half a decade after the US passed the Smoot-Hawley Tariff Act in 1930, at the start of the Great Depression, ostensibly to protect American workers and farmers from foreign competition!

Liberalization’s discontents

Rising economic insecurity, inequalities and deprivation are expected to strengthen ethno-populist and jingoistic nationalist sentiments, and increase social tensions and turmoil, especially among the growing precariat and others who feel vulnerable or threatened.

Thus, ethno-populist inspired chauvinistic nationalism may exacerbate tensions, leading to conflicts and tensions among countries, as in the 1930s. Opportunistic leaders have been blaming such misfortunes on outsiders and may seek to reverse policies associated with the perceived causes, such as ‘globalist’ economic liberalization.

Policies which successfully check such problems may reduce social tensions, as well as the likelihood of social turmoil and conflict, including among countries. However, these may also inadvertently exacerbate problems. The recent spread of anti-globalization sentiment appears correlated to slow, if not negative per capita income growth and increased economic inequality.

To be sure, globalization and liberalization are statistically associated with growing economic inequality and rising ethno-populism. Declining real incomes and growing economic insecurity have apparently strengthened ethno-populism and nationalistic chauvinism, threatening economic liberalization itself, both within and among countries.

Insecurity, populism, conflict

Thomas Piketty has argued that a sudden increase in income inequality is often followed by a great crisis. Although causality is difficult to prove, with wealth and income inequality now at historical highs, this should give cause for concern.

Of course, other factors also contribute to or exacerbate civil and international tensions, with some due to policies intended for other purposes. Nevertheless, even if unintended, such developments could inadvertently catalyse future crises and conflicts.

Publics often have good reason to be restless, if not angry, but the emotional appeals of ethno-populism and jingoistic nationalism are leading to chauvinistic policy measures which only make things worse.

At the international level, despite the world’s unprecedented and still growing interconnectedness, multilateralism is increasingly being eschewed as the US increasingly resorts to unilateral, sovereigntist policies without bothering to even build coalitions with its usual allies.

Avoiding Thucydides’ iceberg

Thus, protracted economic distress, economic conflicts or another financial crisis could lead to military confrontation by the protagonists, even if unintended. Less than a decade after the Great Depression started, the Second World War had begun as the Axis powers challenged the earlier entrenched colonial powers.

They patently ignored Thucydides’ warning, in chronicling the Peloponnesian wars over two millennia before, when the rise of Athens threatened the established dominance of Sparta!

Anticipating and addressing such possibilities may well serve to help avoid otherwise imminent disasters by undertaking pre-emptive collective action, as difficult as that may be.

#### And go nuclear.

Stein Tønnesson 15. Research Professor, Peace Research Institute Oslo; Leader of East Asia Peace program, Uppsala University, 2015. “Deterrence, interdependence and Sino–US peace.” International Area Studies Review, Vol. 18, No. 3, p. 297-311.

Several recent works on China and Sino–US relations have made substantial contributions to the current understanding of how and under what circumstances a combination of nuclear deterrence and economic interdependence may reduce the risk of war between major powers. At least four conclusions can be drawn from the review above: first, those who say that interdependence may both inhibit and drive conflict are right. Interdependence raises the cost of conflict for all sides but asymmetrical or unbalanced dependencies and negative trade expectations may generate tensions leading to trade wars among inter-dependent states that in turn increase the risk of military conflict (Copeland, 2015: 1, 14, 437; Roach, 2014). The risk may increase if one of the interdependent countries is governed by an inward-looking socio-economic coalition (Solingen, 2015); second, the risk of war between China and the US should not just be analysed bilaterally but include their allies and partners. Third party countries could drag China or the US into confrontation; third, in this context it is of some comfort that the three main economic powers in Northeast Asia (China, Japan and South Korea) are all deeply integrated economically through production networks within a global system of trade and finance (Ravenhill, 2014; Yoshimatsu, 2014: 576); and fourth, decisions for war and peace are taken by very few people, who act on the basis of their future expectations. International relations theory must be supplemented by foreign policy analysis in order to assess the value attributed by national decision-makers to economic development and their assessments of risks and opportunities. If leaders on either side of the Atlantic begin to seriously fear or anticipate their own nation’s decline then they may blame this on external dependence, appeal to anti-foreign sentiments, contemplate the use of force to gain respect or credibility, adopt protectionist policies, and ultimately refuse to be deterred by either nuclear arms or prospects of socioeconomic calamities. Such a dangerous shift could happen abruptly, i.e. under the instigation of actions by a third party – or against a third party.

Yet as long as there is both nuclear deterrence and interdependence, the tensions in East Asia are unlikely to escalate to war. As Chan (2013) says, all states in the region are aware that they cannot count on support from either China or the US if they make provocative moves. The greatest risk is not that a territorial dispute leads to war under present circumstances but that changes in the world economy alter those circumstances in ways that render inter-state peace more precarious. If China and the US fail to rebalance their financial and trading relations (Roach, 2014) then a trade war could result, interrupting transnational production networks, provoking social distress, and exacerbating nationalist emotions. This could have unforeseen consequences in the field of security, with nuclear deterrence remaining the only factor to protect the world from Armageddon, and unreliably so. Deterrence could lose its credibility: one of the two great powers might gamble that the other yield in a cyber-war or conventional limited war, or third party countries might engage in conflict with each other, with a view to obliging Washington or Beijing to intervene.

#### Even if growth is imperfect, the transition away fails.

Hubert Buch-Hansen 18. Associate Professor, Department of Business and Politics, Copenhagen Business School. “The Prerequisites for a Degrowth Paradigm Shift: Insights from Critical Political Economy.” *Ecological Economics* 146: 157-63. Emory Libraries.

Still, the degrowth project is nowhere near enjoying the degree and type of support it needs if its policies are to be implemented through democratic processes. The number of political parties, labour unions, business associations and international organisations that have so far embraced degrowth is modest to say the least. Economic and political elites, including social democratic parties and most of the trade union movement, are united in the belief that economic growth is necessary and desirable. This consensus finds support in the prevailing type of economic theory and underpins the main contenders in the neoliberal project, such as centre-left and nationalist projects. In spite of the world's multidimensional crisis, a pro-growth discourse in other words continues to be hegemonic: it is widely considered a matter of common sense that continued economic growth is required.

It is also noteworthy that economic and political elites, to a large extent, continue to support the neoliberal project, even in the face of its evident shortcomings. Indeed, the 2008 financial crisis did not result in the weakening of transnational financial capital that could have paved the way for a paradigm shift. Instead of coming to an end, neoliberal capitalism has arguably entered a more authoritarian phase (Bruff, 2014). The main reason the power of the pre-crisis coalition remains intact is that governments stepped in and saved the dominant fraction by means of massive bailouts. It is a foregone conclusion that this fraction and the wider coalition behind the neoliberal paradigm (transnational industrial capital, the middle classes and segments of organized labour) will consider the degrowth paradigm unattractive and that such social forces will vehemently oppose the implementation of degrowth policies (see also Rees, 2014: 97).

While degrowth advocates envision a future in which market forces play a less prominent role than they do today, degrowth is not an antimarket project. As such, it can attract support from certain types of market actors. In particular, it is worth noting that social enterprises, such as cooperatives (Restakis, 2010), play a major role in the degrowth vision. Such enterprises are defined by being ‘organisations involved at least to some extent in the market, with a clear social, cultural and/or environmental purpose, rooted in and serving primarily the local community and ideally having a local and/or democratic ownership structure’ (Johanisova et al., 2013: 11). Social enterprises currently exist at the margins of a system, in which the dominant type of business entity is profit-oriented, shareholder-owned corporations. The further dissemination of social enterprises, which is crucial to the transitions to degrowth societies, is – in many cases – blocked or delayed as a result of the centrifugal forces of global competition (Wigger and Buch-Hansen, 2013). Overall, social enterprises thus (still) constitute a social force with modest power.

Ougaard (2016: 467) notes that one of the major dividing lines in the contemporary transnational capitalist class is between capitalists who have a material interest in the carbon-based economy and capitalists who have a material interest in decarbonisation. The latter group, for instance, includes manufacturers of equipment for the production of renewable energy (ibid.: 467). As mentioned above, degrowth advocates have singled out renewable energy as one of the sectors that needs to grow in the future. As such, it seems likely that the owners of national and transnational companies operating in this sector would be more positively inclined towards the degrowth project than would capitalists with a stake in the carbon-based economy. Still, the prospect of the “green sector” emerging as a driving force behind degrowth currently appears meagre. Being under the control of transnational capital (Harris, 2010), such companies generally embrace the “green growth” discourse, which ‘is deeply embedded in neoliberal capitalism’ and indeed serves to adjust this form of capitalism ‘to crises arising from contradictions within itself’ (Wanner, 2015: 23).

In addition to support from the social forces engendered by the production process, a political project ‘also needs the political ability to mobilize majorities in parliamentary democracies, and a sufficient measure of at least passive consent’ (van Apeldoorn and Overbeek, 2012: 5–6) if it is to become hegemonic. As mentioned, degrowth enjoys little support in parliaments, and certainly the pro-growth discourse is hegemonic among parties in government.5 With capital accumulation being the most important driving force in capitalist societies, political decision-makers are generally eager to create conditions conducive to production and the accumulation of capital (Lindblom, 1977: 172). Capitalist states and international organisations are thus “programmed” to facilitate capital accumulation, and do as such constitute a strategically selective terrain that works to the disadvantage of the degrowth project.

The main advocates of the degrowth project are grassroots, small fractions of left-wing parties and labour unions as well as academics and other citizens who are concerned about social injustice and the environmentally unsustainable nature of societies in the rich parts of the world. The project is thus ideationally driven in the sense that support for it is not so much rooted in the material circumstances or short-term self-interests of specific groups or classes as it is rooted in the conviction that degrowth is necessary if current and future generations across the globe are to be able to lead a good life. While there is no shortage of enthusiasts and creative ideas in the degrowth movement, it has only modest resources compared to other political projects. To put it bluntly, the advocates of degrowth do not possess instruments that enable them to force political decision-makers to listen to – let alone comply with – their views. As such, they are in a weaker position than the labour union movement was in its heyday, and they are in a far weaker position than the owners and managers of large corporations are today (on the structural power of transnational corporations, see Gill and Law, 1989).

6. Consent

It is also safe to say that degrowth enjoys no “passive consent” from the majority of the population. For the time being, degrowth remains unknown to most people. Yet, if it were to become generally known, most people would probably not find the vision of a smaller economic system appealing. This is not just a matter of degrowth being ‘a missile word that backfires’ because it triggers negative feelings in people when they first hear it (Drews and Antal, 2016). It is also a matter of the actual content of the degrowth project.

Two issues in particular should be mentioned in this context. First, for many, the anti-capitalist sentiments embodied in the degrowth project will inevitably be a difficult pill to swallow. Today, the vast majority of people find it almost impossible to conceive of a world without capitalism. There is a ‘widespread sense that not only is capitalism the only viable political and economic system, but also that it is now impossible to even imagine a coherent alternative to it’ (Fisher, 2009: 2). As Jameson (2003) famously observed, it is, in a sense, easier to imagine the end of the world than it is to imagine the end of capitalism. However, not only is degrowth – like other anti-capitalist projects – up against the challenge that most people consider capitalism the only system that can function; it is also up against the additional challenge that it speaks against economic growth in a world where the desirability of growth is considered common sense.

Second, degrowth is incompatible with the lifestyles to which many of us who live in rich countries have become accustomed. Economic growth in the Western world is, to no small extent, premised on the existence of consumer societies and an associated consumer culture most of us find it difficult to completely escape. In this culture, social status, happiness, well-being and identity are linked to consumption (Jackson, 2009). Indeed, it is widely considered a natural right to lead an environmentally unsustainable lifestyle – a lifestyle that includes car ownership, air travel, spacious accommodations, fashionable clothing, an omnivorous diet and all sorts of electronic gadgets. This Western norm of consumption has increasingly been exported to other parts of the world, the result being that never before have so many people taken part in consumption patterns that used to be reserved for elites (Koch, 2012). If degrowth were to be institutionalised, many citizens in the rich countries would have to adapt to a materially lower standard of living. That is, while the basic needs of the global population can be met in a non-growing economy, not all wants and preferences can be fulfilled (Koch et al., 2017). Undoubtedly, many people in the rich countries would experience various limitations on their consumption opportunities as a violent encroachment on their personal freedom. Indeed, whereas many recognize that contemporary consumer societies are environmentally unsustainable, fewer are prepared to actually change their own lifestyles to reverse/address this.

At present, then, the degrowth project is in its “deconstructive phase”, i.e., the phase in which its advocates are able to present a powerful critique of the prevailing neoliberal project and point to alternative solutions to crisis. At this stage, not enough support has been mobilised behind the degrowth project for it to be elevated to the phases of “construction” and “consolidation”. It is conceivable that at some point, enough people will become sufficiently discontent with the existing economic system and push for something radically different. Reasons for doing so could be the failure of the system to satisfy human needs and/or its inability to resolve the multidimensional crisis confronting humanity. Yet, various material and ideational path-dependencies currently stand in the way of such a development, particularly in countries with large middle-classes. Even if it were to happen that the majority wanted a break with the current system, it is far from given that a system based on the ideas of degrowth is what they would demand.

#### Extinction outweighs.

Seth D. Baum & Anthony M. Barrett 18. Global Catastrophic Risk Institute. 2018. “Global Catastrophes: The Most Extreme Risks.” Risk in Extreme Environments: Preparing, Avoiding, Mitigating, and Managing, edited by Vicki Bier, Routledge, pp. 174–184.

2. What Is GCR And Why Is It Important? Taken literally, a global catastrophe can be any event that is in some way catastrophic across the globe. This suggests a rather low threshold for what counts as a global catastrophe. An event causing just one death on each continent (say, from a jet-setting assassin) could rate as a global catastrophe, because surely these deaths would be catastrophic for the deceased and their loved ones. However, in common usage, a global catastrophe would be catastrophic for a significant portion of the globe. Minimum thresholds have variously been set around ten thousand to ten million deaths or $10 billion to $10 trillion in damages (Bostrom and Ćirković 2008), or death of one quarter of the human population (Atkinson 1999; Hempsell 2004). Others have emphasized catastrophes that cause long-term declines in the trajectory of human civilization (Beckstead 2013), that human civilization does not recover from (Maher and Baum 2013), that drastically reduce humanity’s potential for future achievements (Bostrom 2002, using the term “existential risk”), or that result in human extinction (Matheny 2007; Posner 2004). A common theme across all these treatments of GCR is that some catastrophes are vastly more important than others. Carl Sagan was perhaps the first to recognize this, in his commentary on nuclear winter (Sagan 1983). Without nuclear winter, a global nuclear war might kill several hundred million people. This is obviously a major catastrophe, but humanity would presumably carry on. However, with nuclear winter, per Sagan, humanity could go extinct. The loss would be not just an additional four billion or so deaths, but the loss of all future generations. To paraphrase Sagan, the loss would be billions and billions of lives, or even more. Sagan estimated 500 trillion lives, assuming humanity would continue for ten million more years, which he cited as typical for a successful species. Sagan’s 500 trillion number may even be an underestimate. The analysis here takes an adventurous turn, hinging on the evolution of the human species and the long-term fate of the universe. On these long time scales, the descendants of contemporary humans may no longer be recognizably “human”. The issue then is whether the descendants are still worth caring about, whatever they are. If they are, then it begs the question of how many of them there will be. Barring major global catastrophe, Earth will remain habitable for about one billion more years 2 until the Sun gets too warm and large. The rest of the Solar System, Milky Way galaxy, universe, and (if it exists) the multiverse will remain habitable for a lot longer than that (Adams and Laughlin 1997), should our descendants gain the capacity to migrate there. An open question in astronomy is whether it is possible for the descendants of humanity to continue living for an infinite length of time or instead merely an astronomically large but finite length of time (see e.g. Ćirković 2002; Kaku 2005). Either way, the stakes with global catastrophes could be much larger than the loss of 500 trillion lives. Debates about the infinite vs. the merely astronomical are of theoretical interest (Ng 1991; Bossert et al. 2007), but they have limited practical significance. This can be seen when evaluating GCRs from a standard risk-equals-probability-times-magnitude framework. Using Sagan’s 500 trillion lives estimate, it follows that reducing the probability of global catastrophe by a mere one-in-500-trillion chance is of the same significance as saving one human life. Phrased differently, society should try 500 trillion times harder to prevent a global catastrophe than it should to save a person’s life. Or, preventing one million deaths is equivalent to a one-in500-million reduction in the probability of global catastrophe. This suggests society should make extremely large investment in GCR reduction, at the expense of virtually all other objectives. Judge and legal scholar Richard Posner made a similar point in monetary terms (Posner 2004). Posner used $50,000 as the value of a statistical human life (VSL) and 12 billion humans as the total loss of life (double the 2004 world population); he describes both figures as significant underestimates. Multiplying them gives $600 trillion as an underestimate of the value of preventing global catastrophe. For comparison, the United States government typically uses a VSL of around one to ten million dollars (Robinson 2007). Multiplying a $10 million VSL with 500 trillion lives gives $5x1021 as the value of preventing global catastrophe. But even using “just" $600 trillion, society should be willing to spend at least that much to prevent a global catastrophe, which converts to being willing to spend at least $1 million for a one-in-500-million reduction in the probability of global catastrophe. Thus while reasonable disagreement exists on how large of a VSL to use and how much to count future generations, even low-end positions suggest vast resource allocations should be redirected to reducing GCR. This conclusion is only strengthened when considering the astronomical size of the stakes, but the same point holds either way. The bottom line is that, as long as something along the lines of the standard riskequals-probability-times-magnitude framework is being used, then even tiny GCR reductions merit significant effort. This point holds especially strongly for risks of catastrophes that would cause permanent harm to global human civilization. The discussion thus far has assumed that all human lives are valued equally. This assumption is not universally held. People often value some people more than others, favoring themselves, their family and friends, their compatriots, their generation, or others whom they identify with. Great debates rage on across moral philosophy, economics, and other fields about how much people should value others who are distant in space, time, or social relation, as well as the unborn members of future generations. This debate is crucial for all valuations of risk, including GCR. Indeed, if each of us only cares about our immediate selves, then global catastrophes may not be especially important, and we probably have better things to do with our time than worry about them. While everyone has the right to their own views and feelings, we find that the strongest arguments are for the widely held position that all human lives should be valued equally. This position is succinctly stated in the United States Declaration of Independence, updated in the 1848 Declaration of Sentiments: “We hold these truths to be self-evident: that all men and 3 women are created equal”. Philosophers speak of an agent-neutral, objective “view from nowhere” (Nagel 1986) or a “veil of ignorance” (Rawls 1971) in which each person considers what is best for society irrespective of which member of society they happen to be. Such a perspective suggests valuing everyone equally, regardless of who they are or where or when they live. This in turn suggests a very high value for reducing GCR, or a high degree of priority for GCR reduction efforts.

### Plan---1AC

#### The United States federal government should increase its antitrust prohibitions on advertising as an anticompetitive business practice.

#### The plan solves---prevents manipulation, lowers prices, and ends restrictive advertising.

Ramsi Woodcock 18. Assistant Professor of Law, University of Kentucky. The Obsolescence of Advertising in the Information Age (July 2, 2017). Yale Law Journal, Vol. 127, 2018, Available at SSRN: https://ssrn.com/abstract=3027662 or http://dx.doi.org/10.2139/ssrn.3027662

A ban on advertising outside of “add to cart” pages and firm websites would benefit consumers and improve efficiency in three ways.173 First, by eliminating the harmful effects of manipulative advertising on technological innovation, the prohibition would increase consumer welfare, as discussed in Part I. Second, the lower prices associated with a reduction in the anticompetitive effects of advertising would represent an efficiency gain because part of those lower prices would be made possible through the avoidance of wasteful advertising costs.174 Firms would no longer waste billions of dollars on seduction.

Third, a ban would create an immediate efficiency gain by eliminating what economists call obtrusive advertising, advertising that is forced on consumers, preventing them from consuming product information at the times and places that they prefer.175 Restricting advertising to firm websites and “add to cart” pages would enable consumers to consume advertising at their own option, using online search platforms to call forth advertising only when consumers really want it.176 The billboard may once have been necessary to get the word out about cornflakes, but the billboard is inconvenient, there when the consumer wants to watch the sunset, but not there when the consumer is writing up a grocery list. Online search allows consumers to get product information when they want it, but not when they do not want it.177 The demise of obtrusive advertising would also greatly reduce the power of any remaining persuasive advertising. The inability to engage in obtrusive advertising would deprive firms of the ability to subject consumers to repetitive messages, which is an important weapon in advertising’s arsenal of manipulation.178

#### Advertising diverts from innovation---increases costs and distorts competition---it must be deemed anticompetitive.

Ramsi Woodcock 19. Advertising as Monopolization in the Information Age (April 5, 2019). CPI Antitrust Chronicle (April 2019) , Available at SSRN: https://ssrn.com/abstract=3391841

But in the information age the firm that sells the inferior product retains an incentive to advertise, so long as the advertising is persuasive in function. The firm that sells the inferior product can mitigate its competitive disadvantage by manipulating consumer purchase decisions, causing consumers to buy the inferior product even though consumers do not really prefer it. If the manipulative advertising campaign is successful, then the seller of the inferior product will come to dominate the marketplace, and the seller of the superior product will fail, to the detriment of both competition and consumers.

Of course, firms selling superior products may now want defensively to engage in persuasive advertising in order to neutralize the persuasive advertising of competitors. But it would be a mistake to infer from this that advertising in the information age can sometimes be procompetitive. Defensive advertising leads to competition based on persuasion, rather than based on the socially useful characteristics of price and quality. The expectation of having to engage in competition along this other dimension reduces the willingness of firms to invest in product improvement in the first place, since advertising and not price or product quality will be necessary anyway to get firms across the finish line. Advertising wars may resemble competition, but in syphoning resources away from innovation and price competition, advertising wars are in fact competition’s antithesis.

Advertising in the information age is, in short, necessarily anticompetitive. In an information age in which advertising no longer serves an information function, the only thing advertising adds to markets is advertising’s manipulative function, which distorts consumer preferences, rolls back gains associated with consumers’ greater access to information in the information age, and places more efficient and innovative competitors at a competitive disadvantage.

# 2AC

### 2AC K

#### 3. Considering alternative futures is key.

Marina Favaro and Sara Z. Kutchesfahani 21. \*\*Marina Favaro is a Research Fellow at the Institute for Peace Research and Security Policy at the University of Hamburg. \*\*Sara Z. Kutchesfahani is the Director of the N Square DC Hub. N Square is a funders collaborative created in 2014 to introduce innovation and creative thinking into the nuclear risk reduction space. “We can’t prevent tomorrow’s nuclear wars unless we imagine them today” Bulletin of the Atomic Scientists. 08-26-21. https://thebulletin.org/2021/08/we-cant-prevent-tomorrows-nuclear-wars-unless-we-imagine-them-today/

The desire to anticipate what the future holds is not new. The Delphic oracle in the eighth century BC held a prestigious and authoritative position in the Greek world, providing predictions and guidance to both city-states and individuals. In 1555, Nostradamus’ Les Propheties attracted an enthusiastic following, and even today many credit him with predicting many major world events. During the Cold War, techniques designed to anticipate the future were instrumental in informing strategic decisions. Analysts at the RAND Corporation, for example, pioneered the development of foresight methods such as scenario development to predict the Soviet Union’s nuclear strategy during the Cold War in their seminal 1988 report, “How Nuclear War Might Start”. However, just as the Cold War ended, so too did the close relationship between foresight and nuclear weapons. Other sectors utilized and expanded upon futures methods in their work. The most well-known example is the use of scenario planning at Royal Dutch Shell, which has been in use since the 1970s to better prepare for an eventful decade of oil crises and economic turmoil. The objective of Shell-style scenario planning is **breaking** the habit of **assuming that the future will look much like the present.** Today, many parts of the private and public sectors increasingly use strategic foresight to explore the future as part of their decision-making process. In comparison, futures methods are no longer in the mainstream of nuclear policy making, **even though nuclear risks are rising**. This dearth of strategic foresight in nuclear policy making is **dangerous**, but fortunately there are some easy remedies. A fundamental challenge faces nuclear policy makers and scholars today: It is now **more important than ever** to anticipate what the future might hold due to the **uncertainty surrounding tomorrow’s strategic environment.** Moreover, the inherent—and growing—complexity of systems and new actors has made it increasingly difficult to predict the future simply by extrapolating from the past. Futures methods provide the tools to address this challenge, along with a good dose of humility about how much we can control our world. These methods can help **develop foresight**—insight into how and why the future could be different than today—which, in turn, helps to **improve policy, planning, and decision making**, all of which play an integral part in a world with nuclear weapons. We talk about futures in the plural because the objective is not to predict a single future, but to explore alternative futures. By **envisioning alternative futures**, we can **better sense, shape, and adapt** to the one that is emerging. Singapore’s foresight practice is an excellent example of how foresight readies us for change. For over 40 years, foresight has helped the Singapore government go beyond prevailing assumptions, better manage risk and uncertainty, and develop greater resilience to possible shocks. Futures methods also help to **engender ‘knowledge humility’**, where instead of seeking to deny or eliminate uncertainty, we learn to **live with it through reflexive governance.**

### AT: Innovation Wrong

#### Innovation isn’t a myth---alternatives fail.

Allison Schrager 20. is an economist, senior fellow at the Manhattan Institute, and co-founder of LifeCycle Finance Partners, LLC. “Why Socialism Won’t Work”. https://foreignpolicy.com/2020/01/15/socialism-wont-work-capitalism-still-best/

Yet the very ills that socialists identify are best addressed through innovation, productivity gains, and better rationing of risk. And capitalism is still far and away the best, if not only, way to generate those outcomes.

Today’s socialism is difficult to define. Traditionally, the term meant total state ownership of capital, as in the Soviet Union, North Korea, or Maoist China. Nowadays, most people don’t take such an extreme view. In Europe, social democracy means the nationalization of many industries and very generous welfare states. And today’s rising socialists are rebranding the idea to mean an economic system that delivers all the best parts of capitalism (growth and rising living standards) without the bad (inequality, economic cycles).

But no perfect economic system exists; there are always trade-offs—in the most extreme form between total state ownership of capital and unfettered markets without any regulation or welfare state. Today, few would opt for either pole; what modern socialists and capitalists really disagree on is the right level of government intervention.

Modern socialists want more, but not complete, state ownership. They’d like to nationalize certain industries. In the United States, that’s health care—a plan supported by Democratic presidential candidates Elizabeth Warren (who does not call herself a socialist) and Bernie Sanders (who wears the label proudly). In the United Kingdom, Labour Party leader Jeremy Corbyn, who was trounced at the polls in mid-December, has set his sights on a longer list of industries, including the water, energy, and internet providers.

Other items on the socialist wish list may include allowing the government to be the primary investor in the economy through massive infrastructure projects that aim to replace fossil fuels with renewables, as Green New Deal socialists have proposed. They’ve also floated plans that would make the government the employer of a majority of Americans by offering guaranteed well-paid jobs that people can’t be fired from. And then there are more limited proposals, including installing more workers on the boards of private companies and instituting national rent controls and high minimum wages.

For their part, modern capitalists want some, but less, state intervention. They are skeptical of nationalization and price controls; they argue that today’s economic problems are best addressed by harnessing private enterprise. In the United States, they’ve argued for more regulation and progressive taxation to help ease inequality, incentives to encourage private firms to use less carbon, and a more robust welfare state through tax credits. Over the past 15 years, meanwhile, capitalist Europeans have instituted reforms to improve labor market flexibility by making it easier to hire and fire people, and there have been attempts to reduce the size of pensions.

No economic system is perfect, and the exact right balance between markets and the state may never be found. But there are good reasons to believe that keeping capital in the hands of the private sector, and empowering its owners to make decisions in the pursuit of profit, is the best we’ve got.

One reason to trust markets is that they are better at setting prices than people. If you set prices too high, many a socialist government has found, citizens will be needlessly deprived of goods. Set them too low, and there will be excessive demand and ensuing shortages. This is true for all goods, including health care and labor. And there is little reason to believe that the next batch of socialists in Washington or London would be any better at setting prices than their predecessors. In fact, government-run health care systems in Canada and European countries are plagued by long wait times. A 2018 Fraser Institute study cites a median wait time of 19.8 weeks to see a specialist physician in Canada. Socialists may argue that is a small price to pay for universal access, but a market-based approach can deliver both coverage and responsive service. A full government takeover isn’t the only option, nor is it the best one.

Beyond that, markets are also good at rationing risk. Fundamentally, socialists would like to reduce risk—protect workers from any personal or economywide shock. That is a noble goal, and some reduction through better functioning safety nets is desirable. But getting rid of all uncertainty—as state ownership of most industries would imply—is a bad idea. Risk is what fuels growth. People who take more chances tend to reap bigger rewards; that’s why the top nine names on the Forbes 400 list of the richest Americans are not heirs to family dynasties but are self-made entrepreneurs who took a leap to build new products and created many jobs in the process.

Some leftist economists like Mariana Mazzucato argue that governments might be able to step in and become laboratories for innovation. But that would be a historical anomaly; socialist-leaning governments have typically been less innovative than others. After all, bureaucrats and worker-corporate boards have little incentive to upset the status quo or compete to build a better widget. And even when government programs have spurred innovation—as in the case of the internet—it took the private sector to recognize the value and create a market.

And that brings us to a third reason to believe in markets: productivity. Some economists, such as Robert Gordon, have looked to today’s economic problems and suggested that productivity growth—the engine that fueled so much of the progress of the last several decades—is over. In this telling, the resources, products, and systems that underpin the world’s economy are all optimized, and little further progress is possible.

But that is hard to square with reality. Innovation helps economies do more with fewer resources—increasingly critical to addressing climate change, for example—which is a form of productivity growth. And likewise, many of the products and technologies people rely on every day did not exist a few years ago. These goods make inaccessible services more available and are changing the nature of work, often for the better. Such gains are made possible by capitalist systems that encourage invention and growing the pie, not by socialist systems that are more concerned with how the existing pie is cut. It is far too soon, in other words, to write off productivity.

#### 2. Biomedical innovation solves all sustainability warrants---that’s a defense of our methodology and a disad to theirs.

Michael Chui 20. Partner at the McKinsey Global Institute (MGI), McKinsey's business and economics research arm. James Irvine Foundation and the Asia Society of Northern California, and a member of the Council on Foreign Relations. “The Bio Revolution Innovations transforming economies, societies, and our lives.” <https://www.mckinsey.com/~/media/McKinsey/Industries/Pharmaceuticals%20and%20Medical%20Products/Our%20Insights/The%20Bio%20Revolution%20Innovations%20transforming%20economies%20societies%20and%20our%20lives/MGI-Bio-Revolution-Report-May-2020.ashx>.

New biological capabilities have the potential to bring sweeping change to economies and societies. The effects will be felt across value chains, from how R&D is conducted to the physical inputs in manufacturing to the way medicines and consumer products are delivered and consumed. These capabilities include the following: — Biological means could be used to produce a large share of the global economy’s physical materials, potentially with improved performance and sustainability. Significant potential exists to improve the characteristics of materials, reduce the emissions profile of manufacturing and processing, and shorten value chains. Fermentation, for centuries used to make bread and brew beer, is now being used to create fabrics such as artificial spider silk. Biology is increasingly being used to create novel materials that can raise quality, introduce entirely new capabilities, be biodegradable, and be produced in a way that generates significantly less carbon emissions. Mushroom roots rather than animal hide can be used to make leather.11 Plastics can be made with yeast instead of petrochemicals. — Increased control and precision in methodology is occurring across the value chain, from delivery to development and consumption with more personalization. Advances in biological sciences have made R&D and delivery processes more precise and predictable; the character of R&D is shifting from discovery by accident to rational design. Increasing knowledge of human genomes and the links between certain genes and diseases is enabling the spread of personalized or precision medicine, which can be more effective than the one-size-fits-all therapies of the past.12 Precision also applies to agriculture, where insights from a plant or soil’s microbiome increasingly can be used to optimize yield as well as to offer consumers with, for instance, personalized nutrition plans based on genetic tests.13 — The capability to engineer and reprogram human and nonhuman organisms is increasing. Gene therapies could offer complete cures of some diseases for the first time. The same technical advances that are driving capabilities that improve human health can be used to introduce valuable new traits that, for instance, improve the output or yield of nonhuman organisms like microbes, plants, and animals. Crops can be genetically engineered to produce higher yields and be more heat- or drought-resistant, for instance. By permanently genetically altering the vectors spreading disease (such as mosquitoes), gene drives could be used to prevent vector-borne diseases, including malaria, dengue fever, schistosomiasis, and Lyme disease, although they also come with ecological risks.14 — New methodologies using automation, machine learning, and proliferating biological data are enhancing discovery, throughput, and productivity in R&D. Biology and computing together are accelerating R&D, thereby addressing a productivity challenge. McKinsey analysis in 2017 found that the ratio of revenue to R&D spending in the biopharmaceutical industry hit a low point in productivity between 2008 and 2011.15 An explosion of biological data due to cheaper sequencing can be used by biotech companies and research institutes that increasingly are using robotic automation and sensors in labs that could increase throughput up to ten times.16 Further, advanced analytics, more powerful computational techniques, and AI can be leveraged to provide better insights during the R&D process. — Potential is growing for interfaces between biological systems and computers. A new generation of biomachine interfaces relies on close interaction between humans and computers. Such interfaces include neuroprosthetics that restore lost sensory functions (bionic vision) or enable signals from the brain to control physical movement of prosthetic or paralyzed limbs. Biocomputers that employ biology to mimic silicon, including the use of DNA to store data, are being researched. DNA is about one million times denser than hard-disk storage; technically, one kilogram of DNA could store the entirety of the world’s data (as of 2016).17 While these are early days, the scope and scale of these emerging capabilities could have a broad impact on economies and societies, touching multiple domains both directly and indirectly. These applications may change everything from the food we consume to textiles to the types of health treatments we receive and how we build our physical world. The potential value is vast. As noted, as much as 60 percent of the physical inputs to the global economy could be produced biologically, and even modest progress toward that 60 percent number could be transformative. Beyond the physical world, innovations could transform prevention, diagnostics, and treatment of disease. At least 45 percent of the global disease burden could be addressed with capabilities that are scientifically conceivable today, according to our analysis. Bio innovations, such as high-throughput screening, CRISPR, and machine learning for analyzing large and complex biological data, have also begun to shape R&D. We estimate that roughly 30 percent of private-sector R&D in major economies is in industries where biological data, biological inputs, or biological means of production could be used.18

#### 3. It’s historically supported---but even if it isn’t, rejection is the worst option.

Mark Budolfson 21. PhD in Philosophy. Assistant Professor in the Department of Environmental and Occupational Health and Justice at the Rutgers School of Public Health and Center for Population–Level Bioethics "Arguments for Well-Regulated Capitalism, and Implications for Global Ethics, Food, Environment, Climate Change, and Beyond". Cambridge Core. 5-7-2021. https://www-cambridge-org.proxy.library.emory.edu/core/journals/ethics-and-international-affairs/article/arguments-for-wellregulated-capitalism-and-implications-for-global-ethics-food-environment-climate-change-and-beyond/96F422D04E171EECDEF77312266AE9DD

Discourse on food ethics often advocates the anti-capitalist idea that we need less capitalism, less growth, and less globalization if we want to make the world a better and more equitable place, with arguments focused on applications to food, globalization, and a just society. For example, arguments for this anti-capitalist view are at the core of some chapters in nearly every handbook and edited volume in the rapidly expanding subdiscipline of food ethics. None of these volumes (or any article published in this subdiscipline broadly construed) focuses on a defense of globalized capitalism.1

More generally, discourse on global ethics, environment, and political theory in much of academia—and in society—increasingly features this anti-capitalist idea as well.2 The idea is especially prominent in discourse surrounding the environment, climate, and global poverty, where we face a nexus of problems of which capitalism is a key driver, including climate change, air and water pollution, the challenge of feeding the world, ensuring sustainable development for the world's poorest, and other interrelated challenges.

It is therefore important to ask whether this anti-capitalist idea is justified by reason and evidence that is as strong as the degree of confidence placed in it by activists and many commentators on food ethics, global ethics, and political theory, more generally.

In fact, many experts argue that this anti-capitalist idea is not supported by reason and argument and is actually wrong. The main contribution of this essay is to explain the structure of the leading arguments against the anti-capitalist idea, and in favor of the opposite conclusion. I begin by focusing on the general argument in favor of well-regulated globalized capitalism as the key to a just, flourishing, and environmentally healthy world. This is the most important of all of the arguments in terms of its consequences for health, wellbeing, and justice, and it is endorsed by experts in the empirically minded disciplines best placed to analyze the issue, including experts in long-run global development, human health, wellbeing, economics, law, public policy, and other related disciplines. On the basis of the arguments outlined below, well-regulated capitalism has been endorsed by recent Democratic presidents of the United States such as Barack Obama, and by progressive Nobel laureates who have devoted their lives to human development and more equitable societies, as well as by a wide range of experts in government and leading nongovernmental organizations.

The goal of this essay is to make the structure and importance of these arguments clear, and thereby highlight that discourse on global ethics and political theory should engage carefully with them. The goal is not to endorse them as necessarily sound and correct. The essay will begin by examining general arguments for and against capitalism, and then turn to implications for food, the environment, climate change, and beyond.

Arguments for and against Forms of Capitalism

The Argument against Capitalism

Capitalism is often argued to be a key driver of many of society's ills: inequalities, pollution, land use changes, and incentives that cause people to live differently than in their ideal dreams. Capitalism can sometimes deepen injustices. These negative consequences are easy to see—resting, as they do, at the center of many of society's greatest challenges.3

And at the same time, it is often difficult to see the positive consequences of capitalism.4 What are the positive consequences of allowing private interests to clear-cut forests and plant crops, especially if those private interests are rich multinational corporations and the forests are in poor, developing countries whose citizens do not receive the profits from deforestation? Why give private companies the right to exploit resources at all, since exploitation almost always has some negative consequences such as those listed above? These are the right questions to ask, and they highlight genuine challenges to capitalism. And in light of these challenges, it is reasonable to consider the possibility that perhaps a different economic system altogether would be more equitable and beneficial to the global population.

The Argument for Well-Regulated Capitalism

However, things are more complicated than the arguments above would suggest, and the benefits of capitalism, especially for the world's poorest and most vulnerable people, are in fact myriad and significant. In addition, as we will see in this section, many experts argue that capitalism is not the fundamental cause of the previously described problems but rather an essential component of the best solutions to them and of the best methods for promoting our goals of health, well-being, and justice.

To see where the defenders of capitalism are coming from, consider an analogy involving a response to a pandemic: if a country administered a rushed and untested vaccine to its population that ended up killing people, we would not say that vaccines were the problem. Instead, the problem would be the flawed and sloppy policies of vaccine implementation. Vaccines might easily remain absolutely essential to the correct response to such a pandemic and could also be essential to promoting health and flourishing, more generally.

The argument is similar with capitalism according to the leading mainstream arguments in favor of it: Capitalism is an essential part of the best society we could have, just like vaccines are an essential part of the best response to a pandemic such as COVID-19. But of course both capitalism and vaccines can be implemented poorly, and can even do harm, especially when combined with other incorrect policy decisions. But that does not mean that we should turn against them—quite the opposite. Instead, we should embrace them as essential to the best and most just outcomes for society, and educate ourselves and others on their importance and on how they must be properly designed and implemented with other policies in order to best help us all. In fact, the argument in favor of capitalism is even more dramatic because it claims that much more is at stake than even what is at stake in response to a global pandemic—what is at stake with capitalism is nothing less than whether the world's poorest and most vulnerable billion people will remain in conditions of poverty and oppression, or if they will instead finally gain access to what is minimally necessary for basic health and wellbeing and become increasingly affluent and empowered. The argument in favor of capitalism proceeds as follows:

Premise 1. Development and the past. Over the course of recorded human history, the majority of historical increases in health, wellbeing, and justice have occurred in the last two centuries, largely as a result of societies adopting or moving toward capitalism. Capitalism is a relevant cause of these improvements, in the sense that they could not have happened to such a degree if it were not for capitalism and would not have happened to the same degree under any alternative noncapitalist approach to structuring society. The argument in support of this premise relies on observed relationships across societies and centuries between indicators of degree of capitalism, wealth, investments in public goods, and outcomes for health, wellbeing, and justice, together with econometric analysis in support of the conclusion that the best explanation of these correlations and the underlying mechanism is that large increases in health, wellbeing, and justice are largely driven by increasing investments in public goods. The scale of increased wealth necessary to maximize these investments requires capitalism. Thus, as capitalist societies have become dramatically wealthier over the past hundred years (and wealthier than societies with alternative systems), this has allowed larger investments in public goods, which simply has not been possible in a sustained way in societies without the greater wealth that capitalism makes possible. Important investments in public goods include investments in basic medical knowledge, in health and nutrition programs, and in the institutional capacity and know-how to regulate society and capitalism itself. As a result, capitalism is a primary driver of positive outcomes in health and wellbeing (such as increased life expectancy, lowered child and maternal mortality, adequate calories per day, minimized infectious disease rates, a lower percentage and number of people in poverty, and more reported happiness);5 and in justice (such as reduced deaths from war and homicide; higher rankings in human rights indices; the reduced prevalence of racist, sexist, homophobic opinions in surveys; and higher literacy rates).6 These quantifiable positive consequences of global capitalism dramatically outweigh the negative consequences (such as deaths from pollution in the course of development), with the result that the net benefits from capitalism in terms of health, wellbeing, and justice have been greater than they would have been under any known noncapitalist approach to structuring society.7

Premise 2. Economics, ethics, and policy. Although capitalism has often been ill-regulated and therefore failed to maximize net benefits for health, wellbeing, and justice, it can become well-regulated so that it maximizes these societal goals, by including mechanisms identified by economists and other policy experts that do the following:

* optimally8 regulate negative effects such as pollution and monopoly power, and invest in public goods such as education, basic healthcare, and fundamental research including biomedical knowledge (more generally, policies that correct the failures of free markets that economists have long recognized will arise from “externalities” in the absence of regulation);9
* ensure equity and distributive justice (for example, via wealth redistribution);10
* ensure basic rights, justice, and the rule of law independent of the market (for example, by an independent judiciary, bill of rights, property rights, and redistribution and other legislation to correct historical injustices due to colonialism, racism, and correct current and historical distortions that have prevented markets from being fair);11 and
* ensure that there is no alternative way of structuring society that is more efficient or better promotes the equity, justice, and fairness goals outlined above (by allowing free exchange given the regulations mentioned).12

To summarize the implication of the first two premises, well-regulated capitalism is essential to best achieving our ethical goals—which is true even though capitalism has certainly not always been well regulated historically. Society can still do much better and remove the large deficits in terms of health, wellbeing, and justice that exist under the current inferior and imperfect versions of capitalism.

Premise 3. Development and the future. If the global spread of capitalism is allowed to continue, desperate poverty can be essentially eliminated in our lifetimes. Furthermore, this can be accomplished faster and in a more just way via well-regulated global capitalism than by any alternatives. If we instead opt for less capitalism, less growth, and less globalization, then desperate poverty will continue to exist for a significant portion of the world's population into the further future, and the world will be a worse and less equitable place than it would have been with more capitalism. For example, in a world with less capitalism, there would be more overpopulation, food insecurity, air pollution, ill health, injustice, and other problems. In part, this is because of the factors identified by premise 1, which connect a turn away from capitalism with a turn away from continuing improvements in health, wellbeing, and justice, especially for the developing world. In addition, fertility declines are also a consequence of increased wealth, and the size of the population is a primary determinant of food demand and other environmental stressors.13 Finally, as discussed at length in the next section of the essay, capitalism can be naturally combined with optimal environmental regulations.14 Even bracketing anything like optimal regulation, it remains true that sufficiently wealthy nations reduce environmental degradation as they become wealthier, whereas developing nations that are nearing peak degradation will remain stuck at the worst levels of degradation if we stall growth, rather than allowing them to transition to less and less degradation in the future via capitalism and economic growth.15 In contrast, well-regulated capitalism is a key part of the best way of coping with these problems, as well as a key part of dealing with climate change, global food production, and other specific challenges, as argued at length in the next section. Here it is important to stress that we should favor well-regulated capitalism that includes correct investments in public goods over other capitalist systems such as the neoliberalism of the recent past that promoted inadequately regulated capitalism with inadequate concern for externalities, equity, and background distortions and injustices.16

Conclusion. Therefore, we should be in favor of capitalism over noncapitalism, and we should especially favor well-regulated capitalism, which is the ethically optimal economic system and is essential to any just basic structure for society.

This argument is impressive because, as stated earlier in the essay, it is based on evidence that is so striking that it leads a bipartisan range of open-minded thinkers and activists to endorse well-regulated capitalism, including many of those who were not initially attracted to the view because of a reasonable concern for the societal ills with which we began. To better understand why such a range of thinkers could agree that well-regulated capitalism is best, it may help to clarify some things that are not assumed or implied by the argument for it, which could be invoked by other bad arguments for capitalism.

One thing the argument above does not assume is that health, wellbeing, or justice are the same thing as wealth, because, in fact, they are not. Instead, the argument above relies on well-accepted, measurable indicators of health and wellbeing, such as increased lifespan; decreased early childhood mortality; adequate nutrition; and other empirically measurable leading indicators of health, wellbeing, and justice.17 Similarly, the argument that capitalism promotes justice, peace, freedom, human rights, and tolerance relies on empirical metrics for each of these.18

Furthermore, the argument does not assume that because these indicators of health, wellbeing, and justice are highly correlated with high degrees of capitalism, that therefore capitalism is the direct cause of these good outcomes. Rather, the analyses suggest instead that something other than capitalism is the direct cause of societal improvements (such as improvements in knowledge and technology, public infrastructure, and good governance), and that capitalism is simply a necessary condition for these improvements to happen.19 In other words, the richer a society is, the more it is able to invest in all of these and other things that are the direct causes of health, wellbeing, and justice. But, to maximize investment in these things societies need well-regulated capitalism.

As part of these analyses, it is often stressed that current forms of capitalism around the world are highly defective and must be reformed in the direction of well-regulated capitalism because they lack investments in public goods, such as basic knowledge, healthcare, nutrition, other safety nets, and good governance.20 In this way, an argument for a particular kind of progressive reformism is an essential part of the analyses that lead many to endorse the more general argument for well-regulated capitalism.

Although these analyses are nuanced, and appropriately so, it remains the case that the things that directly lead to health, wellbeing, and justice require resources, and the best path toward generating those resources is well-regulated capitalism. And on the flip side, according to the analyses behind premise 1 described above, an anti-capitalist system would not produce the resources that are needed, and would thus be a disaster, especially for the poorest billion people who are most desperately in need of the resources that capitalism can create and direct, to escape from extreme poverty.21

### AT: Thermodynamics---2AC

#### Tech solves thermodynamic minimums---infared radiation isn’t the only way. These are also high heat systems.

Freitas 15 (Robert, J.D. with degrees in physics, psychology, and law. Research fellow at the Institute for Molecular Manufacturing. Recipient of the 2009 Feynman Prize in nanotechnology and 2006 Guardian Award, “The Nanofactory Solution to Global Climate Change: Atmospheric Carbon Capture”,” IMM Report No. 45, December 2015)

Cost estimates on conventional technologies for atmospheric carbon capture optimistically estimate $70-$200/tonne CO2 and higher (Section 3.3). This range pushes the outer limits of what seems to be economically feasible.

The new carbon capture technology proposed here, built by molecular manufacturing using first-generation nano-factories at a manufacturing cost of ~$1000/kg, would enable the atmospheric capture of CO2 at a total lifetime cost of about $21/tonne CO2. The molecular filter approach is far less costly than other proposed technologies and will approach the thermodynamic minimum for energy consumption in the gas separation application. The same filtration technology is readily extended to include the extraction of other greenhouse gases and atmospheric pollution gases, at no appreciable increase in system cost or performance.

Even using a first-generation nanofactory, an initial installation cost of $2.74 trillion/yr for 10 years followed by a maintenance cost of $0.91 trillion per year would allow the establishment of a network of direct atmospheric CO2 capture plants that are powerful enough to reduce global CO2 levels by ~50 ppm per decade, easily overwhelming current anthropogenic emission rates. This is sufficient to return Earth’s atmosphere to pre-industrial carbon dioxide levels near 300 ppm within 40 years from launch of program, and thereafter to maintain the atmosphere in this ideal condition indefinitely, eliminating one of the primary drivers of global climate change on our planet. Advantages include a low environmental footprint and a fail-safe mode of operation.

Lower cost later-generation nano-factories will allow, within the same timeframe, the deployment of a global system of floating carbon capture islands, possibly sited in the stable ocean gyres, having comparable CO2 extraction and sequestration capabilities as the simpler system described above. The annual cost to deploy (assuming a 10-year rollout period) and later to indefinitely maintain a global atmospheric carbon capture system is about $4.04 billion per year. This system achieves capture and permanent sequestration of atmospheric CO2 at a total lifetime cost of about $0.08/tonne CO2. The cost can be driven so extraordinarily low because the mature nano-factory, manufacturing atomically precise product for ~$1/kg, can also manufacture a cheap source of solar energy to power the CO2 capture and sequestration process.

Extracted and sequestered carbon may become a valuable resource in future decades, providing a compact cheap source of carbon to be used as a key building material in the fabrication of diamond-based consumer, commercial, and industrial products that can be manufactured in a worldwide nanofactory-based economy.

#### Impact card is from a strawman and uses flawed evidence.

Phillip K Glass 19. “Exponential Economist Meets Finite Physicist” Y Hacker News. 05-29-19. https://news.ycombinator.com/item?id=20045380

I generally liked the Do The Math posts but I thought this was one of the weakest.

Physicist: "Right, if you plot the U.S. energy consumption in all forms from 1650 until now, you see a phenomenally faithful exponential at about 3% per year over that whole span."

**It's not phenomenally faithful.** There's an inflection point visible even in his large graph going back all the way to 1650. US primary energy consumption in 1977 was 78 quadrillion BTU (quads). At 2.9% annual growth it would have risen to 245 quads by 2017. Actual US primary energy consumption in 2017 was only 98 quads. The per capita primary energy consumption in the US was actually higher in 1977.

**Physicists don't need to imagine future limits to growth.** The limits are already visible in the historical record. But, contra the fears of many scientists circa 1960, the limits to growth showed up on the demand side before the supply side. We ended up with a world where widespread obesity is a problem and predicted gigadeaths from starvation **did not actually happen.**

For any product you can imagine consuming, there are "obesity"-type limits to how much more of that same product you can consume before the marginal utility goes negative. For any service you might use, similar limits apply since there are only 24 hours in a day.

The physicist character gives the more correct answer but **his supporting evidence is flawed.** The economist has the **much worse answers**, but only (I suspect) because **he's a strawman constructed for didactic purposes**. Economists generally don't make 1400 year forecasts of any sort.

#### 4. You can’t just wish away the current system.

Andrew SAYER 95, Reader in Social Theory and Political Economy at Lancaster University [*Radical Political Economy: A Critique*, 1995, p. 33-34]

Any criticism presupposes the possibility of a better way of life; to expose something as illusory or contradictory is to imply the possibility and desirability of a life without those illusions and contradictions. This much has been established by critical theorists such as Habermas and Apel. Yet the notion that critique implies a quest for the good is a highly abstract one. Up to a point, particular critiques do imply something a little more specific than the standpoint of a better life. The critique of capitalism's anarchic and uneven development implies a critical standpoint or contrast space of an imagined society with a rationally ordered and even process of development. The critique of class points to the desirability of a classless society. Naturally, society would be better if its illusions, conflicts and contradictions were reduced, but we naturally want to know how this could be achieved. The desirability of a life without contradictions or illusions does not make it feasible.

Critical social science does not merely identify illusions, irrationality or contradictions but attempts to provide explanations of their sources, locating the 'unwanted determinations' of behaviour, as Bhaskar (1989) puts it. It would be strange, to say the least, if an analysis of the causes of problems such as hunger and exploitation were unable to indicate anything about alternatives which would eliminate them. If a critical theory cannot begin to indicate how to eliminate problems we must inevitably be suspicious of its claims to have identified their causes. If the alternative implied by a critical standpoint is not feasible, then any critique made from that standpoint is thereby seriously weakened. Not to put too fine a point on it, the critique of, say, capitalism's anarchic and uneven development would lose much of its force if all [END PAGE 33] advanced economies were necessarily anarchic and uneven in their development, though one could still criticize advanced economies - not just capitalist ones - from the very different standpoint of a 'deep ecology', calling for a return to small-scale, more primitive economies (Dobson, 1990).

We need to know enough about the critical standpoint and the implied alternative to be able to judge first whether it really is feasible and desirable. Since knowledge is 'situated' and bears the mark of its author's social position, this includes assessing whose standpoint it is made from. Does it privilege the position of a particular group (e.g. male workers, advanced countries)? Does it imply a society without difference? If it suggests greater equality on whose terms is equality to be defined?7 We have also to ask whether remedying one set of problems would generate others (it usually does), and whether these would be worse than the original problems. This is rarely considered in radical political economy, the usual implicit assumption being that all bad things go together in capitalism and all good things under socialism/communism. Yet it is possible that some of the 'contradictions' involve dilemmas which can't be eliminated along with capitalism. Evaluations in terms of desirability therefore need to be cross-checked with assessments of feasibility, and optimistic assumptions of inevitable improvement suspended.

There are two kinds of feasibility which might be considered:

1 whether a certain desired end-state or goal can be realized - for example, how people can be politically mobilized to make it happen; and

2 whether, assuming enough people are willing to try to make it happen, the goal or end-state is feasible in itself, e.g. could one have an advanced economy without money?

It is usually only the first of these questions that radicals address, the standard response to utopian discussions being not 'would it work?' but 'yes but how are you going to get from here to there?' But while many might think it idle to ignore (1), it is surprising how little attention is given to (2), as if the journey mattered more than the destination. I fully accept that I am not offering suggestions on (1) in this book, and only ideas pertinent to (2): but then I don't see how large-scale political mobilization can precede a well-worked out conception of a feasible alternative.

#### 6. The left is ineffective at best and incoherent at worst.

Epstein 14 (Barbara, author, former Professor Emerita in the Humanities Division @ UC Santa Cruz, “Prospects for a Resurgence of the U.S. Left”, Tikkun, Volume 29, Number 2, Spring 2014, Project Muse)

The United States has no coherent, effective Left. Over the last four decades, since the movements of the sixties and seventies went into decline, the problem of the degradation of the environment has reached a level that threatens the existence of humans and other species on the planet. The neoliberal form of capitalism that has taken hold globally has caused the gap between the wealth and power of those at the top and the rest of us to widen dramatically, undermining the quality of life of the majority and threatening the public arena itself. Despite the depth of the economic crisis of 2008, there is no substantial movement for the abandonment of neoliberalism, the regulation of industry, or the creation of a more egalitarian economy. The environmental movement has grown, but not to the point of having the capacity to reverse environmental degradation. There are undoubtedly more people and projects devoted to economic and social justice—and to environmental sustainability—than there were in the sixties and seventies. The problem has to do with collective impact. No movements of the Left have emerged capable of making a real difference in the conditions that we face. Why is this? And what can be done about it?¶ A Fatalistic Approach to Gradual Crises¶ The weakness of the Left is partly due to the fact that these problems have come upon us gradually, allowing us to accommodate ourselves to them. The widening of the gap in wealth and power has been for the most part incremental; it is only in retrospect that one can see how dramatic the effect has been. The same is true of the working day, which has been lengthened, for most people, bit by bit, but at no point by enough to lead to a widespread revolt. Something similar could be said about the environment. Environmental crises for the most part take place somewhere other than where one lives. Such crises are increasingly severe and increasingly common, and there is widespread awareness that at some point in the future we are all likely to be directly affected. But a future crisis does not have the mobilizing capacity of a crisis that confronts one in the present. Most people, including those who are aware of the depths of these problems, go about their business, doing what they—we—have always done, though with increasing apprehension about the future.¶ “The environmental movement has grown, but not to the point of having the capacity to reverse environmental degradation,” Epstein writes. Environmental activists march in Detroit to protest its air-polluting incinerator.¶ “The environmental movement has grown, but not to the point of having the capacity to reverse environmental degradation,” Epstein writes. Environmental activists march in Detroit to protest its air-polluting incinerator.¶ A widespread sense that nothing can be done is probably an even more significant obstacle to effective, collective action than the gradual character of these changes. Mobilization against a system, an institution, or a ruling elite is most likely to take place when it seems not only oppressive but also outmoded, on the way out, or at least on the defensive. The Civil Rights Movement had existed since World War II but gained momentum in the late fifties and early sixties, when the international aspirations of the United States made racism at home a serious embarrassment. Feminism likewise took hold on a mass basis when the entry of women into the labor force on a large scale placed patriarchal authority in question and gave women the leverage to demand equality. Movements for change are most likely to take hold when change seems possible, when there are levers that can be grasped, as when oppressive institutions seem ready to collapse or are widely seen as illegitimate. It helps when some of those in positions of power agree that the existing system is not working and support change. The depression of the 1930s affected the corporate class as well as the rest of society, though not nearly as badly; fear of a continuing downward economic spiral led some among the elite to agree that changes of some sort were necessary. In the wake of 2008, while most people have suffered economic reverses, corporate profits have more than recovered. Neoliberal capitalism is thriving, at least if measured by corporate profits.¶ The Left is weakened by its deep generational divide and by the fact that “white leftists tend to know little about movements of the Left among people of color,” Epstein writes. Here, members of a Latina immigrant organization participate in a May Day rally in San Francisco.¶ Click for larger view¶ The Left is weakened by its deep generational divide and by the fact that “white leftists tend to know little about movements of the Left among people of color,” Epstein writes. Here, members of a Latina immigrant organization participate in a May Day rally in San Francisco.¶ This is not to argue that movements of the Left take shape and grow only when conditions are propitious. Left-led resistance movements formed in the major ghettos of German-occupied Central and Eastern Europe, despite the fact that the deaths of those involved seemed the most likely outcome. Slave revolts took place in the West Indies and the American South under similar circumstances. But when circumstances are difficult, oppositional movements are most likely to take hold when there are stable organizations that provide a sustained, reliable framework for action, and when such movements have compelling goals and a clear conception of how to achieve these goals—that is, a strategic perspective. The current U.S. Left has none of these.¶ Fragmentation and Generational Divides¶ The major organizations of the Left that once provided the framework for ongoing collective action and strategic discussion either no longer exist or have atrophied. There are large numbers of progressive nonprofits but few organizations that those who want to make a difference, but lack special skills or expertise, can join and work with. Among young people, leftist activist projects thrive, but they tend to come and go. The most stable and influential institutions of the Left are its media outlets: published and online journals, radio stations, a few left-wing presses, and books with a left-wing perspective published by mainstream presses. The central role of media leads to a Left that is defined more by what people read and what opinions they hold than by their associations or their practical activity.¶ We have a fragmented Left held together by a vague commitment to a more just, egalitarian, and sustainable world, but in practical terms lacking a common focus or basis for coordinated action. The fragmented and fluid character of the Left reflects the fragmentation and fluidity of contemporary society: there is probably no going back to the structured and stable organizations of the past (the Socialist Party, the Communist Party, or even the Students for a Democratic Society) consisting of members who were likely to remain active and engaged for many years. But a Left based on individuals with leftist views and a plethora of frequently ephemeral projects has little ability to consider its collective direction and less influence than its numbers would warrant.¶ The Left is weakened especially by the deep divide between the older generation, veterans of the movements of the sixties and seventies, now in their sixties or older, and the younger generation, in their early forties or younger. The outlook and vocabulary of the older generation, shaped for the most part by perspectives ranging from Marxism to social democracy, tends to clash with the outlook of the younger generation, among whom anarchism has been a major influence. The result is little contact and less cooperation between activists of the two generations. In addition, white leftists tend to know little about (and have little contact with) movements of the Left among people of color. And the sector of the Left that consists largely of professionals and intellectuals has little contact with the labor Left.¶ The most promising sector of the U.S. Left is the arena of youth activism that tilts toward anarchism and that was at the center of the Occupy movement. Activists in this arena share an opposition to all forms of oppression (racism, sexism, homophobia, and others), a dislike of hierarchy and a deep suspicion of the state, a vision of an egalitarian, cooperative, and decentralized society, and a desire to model that society in their political practice. Many would include an explicit opposition to capitalism.¶ The Occupy movement was shaped by the idealism, energy, and commitment of a politics influenced by what some call anarchism and others call anti-authoritarianism. Occupy’s protest against the consolidation of wealth and power among the few plus the utopian quality of Occupy communities led to explosive growth of the movement and massive public support. But when police closed the encampments, the movement, as a mass movement, soon collapsed. Valuable organizing projects spun off, but these are quite different from Occupy. One may criticize Occupy activists for not having given much thought to what form the movement would take after the inevitable police closures. But the episodic, fleeting character of Occupy is shared by movements around the world: an incident sets off protest over long-standing grievances, protest mushrooms into a mass movement, the protest is repressed, and the movement collapses, having altered public discourse but leaving no organization or institution capable of bringing about social change. This is the weakness of the ascendant form of leftist or protest politics that emphasizes spontaneity and avoids organizational forms able to last.

#### 8. Causes rationing and wait times---Venezuela, Canada and Britain prove. There’s no reason the US is different.

Conover, 17

(Christopher J. Conover is a Research Scholar in the Center for Health Policy & Inequalities Research at Duke University, an adjunct scholar at AEI, and a Mercatus-affiliated senior scholar. He has taught in the Terry Sanford Institute of Public Policy, the Duke School of Medicine and the Fuqua School of Business at Duke, PhD in Policy Analysis, Pardee RAND Graduate School (Santa Monica, CA), Article was originally written on 9/30, but was last updated 10/1, “The #3 Reason Bernie Sanders' Medicare-for-All Single-Payer Plan Is A Singularly Bad Idea”, https://www.forbes.com/sites/theapothecary/2017/09/30/the-3-reason-bernie-sanders-medicare-for-all-single-payer-plan-is-a-singularly-bad-idea/#13925a153a70)

The #3 reason Medicare-for-All as conceived by Senator Sanders is a bad idea is because of the inevitable rationing it will produce. In other well-known single-payer systems, this rationing takes several forms, including restrictions on the availability of treatments or, more commonly, rationing by waiting.

Rationing Availability of Services

Rationing of services can occur in two ways. The first is through deliberate administrative decisions not to cover certain expensive medical technologies.

The second is through the inevitable shortages that arise when monopoly public payers impose price controls that underpay providers. Venezuela is a classic illustration of this: "free" care there has resulted in an 85% shortage of medicines along with and a 90% deficit of other medical supplies used to treat severe conditions like cancer and hemophilia. USA Today reports that "more than 13,000 doctors — about 20% of medical personnel — have left the South American country in the past four years to find better opportunities elsewhere." Other estimates put the figure at 15,000 doctors who have left shortages of drugs and equipment and poor pay. Consequently, the situation has gotten to a point where thousands are dying early as the medical system implodes there.

While we might think or hope Venezuela is a worst-case outlier, the reality is that we already see signs of this in the U.S. where physician underpayment and red tape associated with Medicaid has resulted in physician non-participation rates as high as 32% in states such as NJ. Because it pays more generously than Medicaid, Medicare is not quite as bad, but Medicare non-participation exceeds 20% in states such as Nevada and Virginia. And the Medicare actuary has been warning for years that under Obamacare, this situation is likely to get far, far worse after 2030 as the law's payment restrictions ultimately force Medicare physician payment rates below those of Medicaid!

Source: Memo from John D. Shatto and M. Kent Clemens, “Projected Medicare Expenditures under an Illustrative Scenario with Alternative Payment Updates to Medicare Providers,” July 13, 2017, at https://www.cms.gov/Research-StatisticsData-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/2017TRAlternativeScenario.pdf.

And there is no question that rationing is such an enduring feature of Britain's National Health Service that the Nuffield Trust has written an entire report on the matter: Rationing in the NHS. As I explained recently, advisory committees to NICE (the National Institute for Health and Care Excellence) use a threshold for recommending treatments of between £20,000 and £30,000 per quality adjusted life year (QALY). Since 1 British pound currently equals $1.29 in American currency, that translates into roughly $26,000 to $39,000 per QALY.

This is not a hard and fast ceiling: as explained in the Nuffield Trust report: "NICE recommends when people should and should not receive treatment, but its general guidance (in contrast with its technology appraisals) is not binding. 15 Clinical Commissioning Groups (CCGs) are responsible for planning and commissioning of health care services for their local geographic area. So there ends up being differences across CCGs in terms of the circumstances under which caesarean births are covered, for example. That said, there are unquestionably instances in which medications are denied altogether on

grounds they are too expensive.

Medicare currently spends approximately $88,000 a year on kidney dialysis for each patient who has end-stage renal disease. Without it, such patients would die. So Americans evidently are willing to pay $88,000 for one added year of life. But taking into account the average quality of life of kidney dialysis patients implies a cost/QALY of $185,000 [1].

This amount is substantially larger than the NICE cost-effectiveness threshold. In fairness, U.S. GDP per capita is 34% higher than in the UK, but even if we adjust the threshold to account for this (lifting it to between $35,000 and $52,000), the cost/QALY for kidney dialysis still would fall quite far beyond its upper limit. If Senator Sanders is such a fan of the NHS, he probably should explain whether he favors following their stringent cost-effectiveness guidelines by denying coverage for kidney dialysis or whether instead he believes the NHS instead has made a terrible mistake in setting its threshold too low.

Rationing by Waiting

Rationing by waiting also is a persistent feature of both the NHS and Canada's single-payer health system. According to the most recent annual report from the Fraser Institute "The median wait time in Canada in 2016 was 20 weeks—the longest ever recorded—and more than double the 9.3 weeks Canadians waited in 1993, when the Fraser Institute began tracking wait times for medically necessary elective treatments." In short, this is a problem that is non-trivial in magnitude but which also appears to be systematically growing over time.

We also have solid evidence from Canada that under single-payer health systems, physicians deliberately reduce the supply of their services. That is, the waiting time problem is a combination of the excess demand that arises under "free" care (discussed in Part 2) and a shrinkage of supply, which simply aggravates the situation [2]. As summarized by Wharton School chaired professor Patricia Danzon a quarter century ago: "In Quebec, in the two years immediately after the introduction of universal health insurance, home visits dropped by 63 percent, telephone consultations fell by 41 percent, physician time spent per office visit declined by 16 percent, and office visits rose by 32 percent." I cannot think of any reason to believe that American physicians would respond any differently were a single-payer system adopted here.

Single-payer enthusiasts claim that single-payer systems provide more physician care than in the U.S. In Japan, for example, the latest OECD data show that annual physician visits per capita in Japan (12.8), for example, is three times as high as in the U.S. (4.0). But as Prof. Danzon astutely points out, the average Japanese patient sees the doctor for a mere 5 minutes per visit, whereas the average American's doctor visit is 15-20 minutes. So the total amount of MD face-time appears to be comparable in both countries, but in Japan it is inefficiently allocated across 3 times as many visits, each of which has a hidden time cost. A recent Harvard study shows that a typical American doctor appointment (average length 20 minutes) actually took 121 minutes inclusive of travel, waiting, paying, and completing paperwork.

Even if this figure is only half as large in Japan due to lower administrative costs (an assumption, not a proven fact), it implies that the average Japanese patient incurs 50 minutes of time costs per visit, so the "excess" 8.5 visits they receive each year translate into about 7 hours of wasted time every year. Multiply this times 250 million adults in the U.S. and the result would be 1.75 billion wasted hours. At the most recent U.S. average hourly wage of $26.52, this would translate into $46 billion a year of wasted time just for physician care alone.

But time spent waiting is not limited to physician services. In Canada, hospitals are paid a fixed budget per year giving the perverse incentive to fill their beds with low-cost "bed-blockers" (the mere fact this problem has a name illustrates its pervasiveness). Canada has the same supply of hospital beds per capita as the U.S. (2.7/1,000 population). But the average length of stay in Canada is 36% higher (7.5 vs. 5.5 days) in part because, as Prof. Danzon explains, "more hospital beds in Canada are occupied by elderly patients with average length-of-stay of over sixty days, despite waiting lists for acute care admissions." The consequence is avoidable suffering as patients wait months rather than weeks for various types of surgery.

How Much Rationing Would There Be Under Medicare-for-All?

Prof. Danzon's study is a quarter-century old, but it is the best stab I've seen at trying to quantify the hidden burden imposed by rationing in the Canadian health system.

On the physician side, she concluded that patient time costs under a single-payer health system likely amounted to anywhere from 10 to 110 percent of spending on physician services. This is a conservative calculation insofar as it assumes that care is rationed to its highest-valued uses. If this is incorrect, then there would be an additional hidden cost associated with failures or delays in treating the most serious illnesses. Government actuaries project we will spend $717 billion on physician services in 2017, meaning Medicare-for-All would impose anywhere from $72 to $789 billion in hidden costs not included in the Urban Institute estimates of the cost of the Sanders plan.

On the hospital side, she synthesized findings from several Canadian studies to conclude that the foregone health benefits of excessive waiting times likely amounted to at least 7 percent of hospital spending but possibly could be as high as 11 percent. In light of projected 2017 hospital expenditures of $1.141 trillion in 2017, this implies a hidden cost of between $80 and $126 billion were we to bring Canadian-style health care to the U.S.

So the grand total hidden cost associated with the kinds of rationing typical in the Canadian-style single-payer approach proposed by Senator Sanders would range from $152 to $914 billion a year.

These are extremely conservative figures, as they do not even attempt to account for the adverse effects on health and longevity from the exclusion of certain high-cost medications that would be likely under single-payer health care.

#### Growth is good and there’s no transition---industrial ag feeds billions and degrowth won’t persuade anybody.

Collin Chambers 21. Writer for the Liberation School. "Degrowth: An environmental ideology with good intentions, bad politics." Liberation School. 7-20-2021. https://liberationschool.org/degrowth-a-politics-for-which-class/

Proponents of degrowth argue that there are absolute “planetary limits” and a fixed “carrying capacity” that cannot be surpassed by humans if we want to avoid ecological collapse. This is not only pessimistic in that it dismisses the idea that, under socialism, we could figure out new sustainable ways to grow, but it’s also completely devoid of class analysis. There’s no distinction between socially-produced limits and natural limits.

Degrowth is anti-modern, anti-technological, and anti-large scale production and infrastructure. Kallis argues that “only social systems of limited size and complexity can be governed directly rather than by technocratic elites acting on behalf of the populace… Many degrowth advocates, therefore, oppose even ‘green’ megastructures like high-speed trains or industrial-scale wind farms[!]” [13].

The same can be said about degrowth solutions to the problems the capitalist agricultural system creates. Proponents of degrowth propose small scale (both urban and rural) methods of agriculture production to replace industrial-scale agriculture. They, in fact, glorify and romanticize “peasant economies.”

Despite the problems of capitalist industrial agriculture, there are two main benefits of industrial-scale agriculture. First, it has drastically increased yields. At the present moment, there is enough food produced to feed 11 billion people. Second, industrial farming has thoroughly decreased the backbreaking labor needed for agricultural and food production. In 1790, 90 percent of the U.S. workforce labored on farms. In 1900, it was 35 percent[.] At the present moment, only one percent of the U.S. workforce works on farms [14].

Certainly, in any just society we would want to spread out food production more evenly amongst the population. But getting rid of industrial-scale agriculture and reverting to small-scale peasant and small landowner agriculture would require massive numbers of workers to go back to the land and perform backbreaking agricultural work. Such a transformation would inevitably reduce agricultural yield substantially, increasing the possibility of food insecurity and hunger among vast swathes of the population. And what would we do with the commodities and infrastructure we’d have to destroy to create such plots of land? Moreover, such a vision necessitates the redistribution of land from private ownership of large landholders. Is this achieved through revolution or through governmental reforms? In either case, if we’re struggling to reclaim land then why not broaden our horizons and redistribute land in the interests of the environment and the people, including Indigenous and other oppressed nations in the U.S.?

Degrowth is, furthermore, idealist and divorced from the material reality within which U.S. workers currently live. Matt Huber, a Marxist environmental geographer, argues that a “truly humane society must commit to relieving the masses from agricultural labor,” and that we cannot act as if “small-scale agricultural systems are much of a ‘material basis’ for a society beyond industrial capitalism” [15]. This is not to say that small-scale and urban farming are undesirable, but that they’re insufficient in a country like the U.S. The Cuban model of urban farming and agriculture–which is a heroic achievement of the Cuban Revolution–can’t simply be mapped onto this country or the rest of the world.

Additionally, we shouldn’t forgo modern technologies that already exist just because they are “large scale” or because they currently contribute to environmental degradation within capitalist society. Doing so would in effect produce more ecological waste!

In an important piece on capitalism and ecology, Ernest Mandel writes: “it is simply not true that modern industrial technology is inevitably geared towards destroying the environmental balance. The progress of the exact sciences opens up a very wide range of technical possibilities” [16]. Increased rates of pollution and environmental degradation occur because capitalists pursue profits at the expense of the environment, not because of the technologies themselves. Socialists have to distinguish between instruments of production and their use under capitalism.

Degrowth and building the class struggle

In the U.S., degrowth remains an ideology that is relatively socially isolated but gaining influence among environmentalists and some on the left. It’s an ideology of guilt rather than revolutionary action. The ideas from degrowth will not appeal to masses of exploited and oppressed people who actually need more, not less. Imagine, for example, canvassing and talking to people in working-class neighborhoods, trying to get them on board with a degrowth political platform. How do degrowth proponents think workers in oppressed neighborhoods respond if they were told they needed to consume less to fight climate change? Many of us already wait as long as possible in the winter to turn on our heat! As organizers, we would not get the time of day, and we wouldn’t even believe ourselves. Can you imagine organizing homeless and unemployed workers around a program of less consumption? Degrowth is an ideology fit for the privileged, and if they want to consume less, they should.

From the perspective of the practical class struggle, degrowth is particularly problematic. Degrowth has a rhetorical strategy problem. In an unequal country such as the U.S., is the discourse of less and “self-limitation” realistic and inspiring? Is this tactic energizing, does it speak to the needs of the exploited and oppressed, can it mobilize people into action?

#### More evidence.

Lusk 16 — Jayson Lusk (PhD, professor of agricultural economics at Oklahoma State University), “Why Industrial Farms Are Good for the Environment,” NYT, <https://www.nytimes.com/2016/09/25/opinion/sunday/why-industrial-farms-are-good-for-the-environment.html>, [accessed: 8/30/18]

There is much to like about small, local farms and their influence on what we eat. But if we are to sustainably deal with problems presented by population growth and climate change, we need to look to the farmers who grow a majority of the country’s food and fiber. Large farmers — who are responsible for 80 percent of the food sales in the United States, though they make up fewer than 8 percent of all farms, according to 2012 data from the Department of Agriculture — are among the most progressive, technologically savvy growers on the planet. Their technology has helped make them far gentler on the environment than at any time in history. And a new wave of innovation makes them more sustainable still. A vast majority of the farms are family-owned. Very few, about 3 percent, are run by nonfamily corporations. Large farm owners (about 159,000) number fewer than the residents of a medium-size city like Springfield, Mo. Their wares, from milk, lettuce and beef to soy, are unlikely to be highlighted on the menus of farm-to-table restaurants, but they fill the shelves at your local grocery store. There are legitimate fears about soil erosion, manure lagoons, animal welfare and nitrogen runoff at large farms — but it’s not just environmental groups that worry. Farmers are also concerned about fertilizer use and soil runoff. Continue reading the main story That’s one reason they’re turning to high-tech solutions like precision agriculture. Using location-specific information about soil nutrients, moisture and productivity of the previous year, new tools, known as “variable rate applicators,” can put fertilizer only on those areas of the field that need it (which may reduce nitrogen runoff into waterways). GPS signals drive many of today’s tractors, and new planters are allowing farmers to distribute seed varieties to diverse spots of a field to produce more food from each unit of land. They also modulate the amount and type of seed on each part of a field — in some places, leaving none at all. Many food shoppers have difficulty comprehending the scale and complexity facing modern farmers, especially those who compete in a global marketplace. For example, the median lettuce field is managed by a farmer who has 1,373 football fields of that plant to oversee. For tomatoes, the figure is 620 football fields; for wheat, 688 football fields; for corn, 453 football fields. How are farmers able to manage growing crops on this daunting scale? Decades ago, they dreamed about tools to make their jobs easier, more efficient and better for the land: soil sensors to measure water content, drones, satellite images, alternative management techniques like low- and no-till farming, efficient irrigation and mechanical harvesters. Today, that technology is a regular part of operations at large farms. Farmers watch the evolution of crop prices and track thunderstorms on their smartphones. They use livestock waste to create electricity using anaerobic digesters, which convert manure to methane. Drones monitor crop yields, insect infestations and the location and health of cattle. Innovators are moving high-value crops indoors to better control water use and pests. Before “factory farming” became a pejorative, agricultural scholars of the mid-20th century were calling for farmers to do just that — become more factorylike and businesslike. From that time, farm sizes have risen significantly. It is precisely this large size that is often criticized today in the belief that large farms put profit ahead of soil and animal health. But increased size has advantages, especially better opportunities to invest in new technologies and to benefit from economies of scale. Buying a $400,000 combine that gives farmers detailed information on the variations in crop yield in different parts of the field would never pay on just five acres of land; at 5,000 acres, it is a different story. These technologies reduce the use of water and fertilizer and harm to the environment. Modern seed varieties, some of which were brought about by biotechnology, have allowed farmers to convert to low- and no-till cropping systems, and can encourage the adoption of nitrogen-fixing cover crops such as clover or alfalfa to promote soil health. Herbicide-resistant crops let farmers control weeds without plowing, and the same technology allows growers to kill off cover crops if they interfere with the planting of cash crops. The herbicide-resistant crops have some downsides: They can lead to farmers’ using more herbicide (though the type of herbicide is important, and the new crops have often led to the use of safer, less toxic ones). But in most cases, it’s a trade-off worth making, because they enable no-till farming methods, which help prevent soil erosion. These practices are one reason soil erosion has declined more than 40 percent since the 1980s. Improvements in agricultural technologies and production practices have significantly lowered the use of energy and water, and greenhouse-gas emissions of food production per unit of output over time. United States crop production now is twice what it was in 1970. That would not be a good change if more land, water, pesticides and labor were being used. But that is not what happened: Agriculture is using nearly half the labor and 16 percent less land than it did in 1970. Instead, farmers increased production through innovation. Wheat breeders, for example, using traditional techniques assisted by the latest genetic tools and information, have created varieties that resist disease without numerous applications of insecticides and fungicides. Nearly all corn and soybean farmers practice crop rotation, giving soil a chance to recover. Research is moving beyond simple measures of nitrogen and phosphorus content to look at the microbes in the soil. New industrywide initiatives are focused on quantifying and measuring soil health. The goal is to provide measurements of factors affecting the long-term value of the soil and to identify which practices — organic, conventional or otherwise — will ensure that farmers can responsibly produce plenty of food for our grandchildren.

### AT: Inequality/War

#### Growth solves poverty---the world’s been getting better---poverty and literacy rates prove.

Dylan Matthews 19. Senior Correspondent for Vox. "Bill Gates tweeted out a chart and sparked a huge debate about global poverty." Vox. 2-12-2019. https://www.vox.com/future-perfect/2019/2/12/18215534/bill-gates-global-poverty-chart

So the share of humanity in extreme poverty — measured at either a $1.90 a day or $7.40 line — is falling. People below either line are also doing better in terms of poverty; they have more money, are spending more, etc. But there’s more to life than measurable consumption, ending $7.40-a-day poverty will take many many decades, and there’s more we could do to speed up that process.

While not included in the Hickel-Kenny consensus document, I would note that Hickel agrees with Gates, Pinker, Roser, etc. that some material living standards outside of poverty and consumption have improved in recent decades. According to the UN Population Division’s numbers (compiled by Our World in Data, naturally), life expectancy in China rose from only 43 years in 1950 to 76 in 2015 (in a fact convenient to no one but Bob Avakian’s politics, it even grew while Mao was killing tens of millions of people). India’s life expectancy grew from 35 to 68 over the same period; in the Democratic Republic of Congo, it grew from 38 to 59. Likewise, literacy rates and years of schooling have increased.

“Yes, of course I agree that life expectancy has increased and child mortality has decreased,” Hickel wrote in an email to me. “Those data are not controversial, although I differ from Gates and Pinker in my assessment of the causes of those improvements. … As for the graphs on literacy and years of schooling: the data are accurate, but I believe these are very narrow indicators of education, and that a broader, more holistic view reveals a more complicated story.”

In his letter to Pinker, too, Hickel agrees that life expectancy and education have seen gains. “In your work you have invoked gains in life expectancy and education as part of a narrative that seeks to justify neoliberal globalization,” Hickel writes. “But ... that’s intellectually dishonest. What contributes most to improvements in life expectancy is in fact simple public health interventions (sanitation, antibiotics, vaccines), and what matters for education is, well, public education.”

So while there is obviously vociferous disagreement about what political narrative the facts on life expectancy and education supports, everyone appears to agree that the world has made major progress on both.

#### Capitalism increases quality of life.

Josh Swan 20. Policy and Data Analyst, City-REDI. "Capitalism and Its Impact on Global Living Standards – City REDI Blog". No Publication. 3-18-2020. https://blog.bham.ac.uk/cityredi/capitalism-and-its-impact-on-global-living-standards/

In a world where living standards have dramatically risen in the developed nations, technology and science are often credited with this outcome. Advancements in technology have created better farming techniques and increased food production. Medical science has eliminated disease and prolonged life through organ transplants, keyhole surgery and pacemakers. So how has capitalism impacted on global living standards?

Fundamentally, it must be said straight away that capitalism has been, and still is, an incredibly overwhelming positive force for the world and is easily the most successful economic system that has ever been produced. Since the time of Karl Marx, the embourgeoisement of populations has led to greater financial and social security, as well as, fulfilling careers that were once reserved for the elite. With the right saving plan, many will buy their own home, start their own business, save for their pension and enjoy unprecedented levels of leisure time. Just in case you are still not convinced why this is the single greatest economic system ever invented, let us examine the past. Technology has created more jobs than it has destroyed in the colossal world population boom in the last 144 years. Work is more fulfilling as dull jobs have been automated and creative careers becoming more numerous. Incredible advanced in medicine, accountancy and professional services were made under capitalism, and essential products like the television have seen a 98% fall in real-price since 1950.

Some would say this is a prerequisite to materialism; the making of commodities to fulfil our happiness and needs. You may say, so what if televisions have fallen in value meaning every family, including poor families that live in a home, can afford one? This isn’t a real argument to say it is the best system in the world… this hasn’t made a huge difference to reprimanding the suffering of Humankind. Well, is it enough to say capitalism has dramatically reduced child mortality rates and vastly increased the lifespan of old age? If that was not so then how would we explain an exponential world population increase? Whilst medical science has been credited for a positive difference with these two areas, the innovative nature of capitalism and the wealth it generated was able to fund and foster scrutiny of medical ideas which led to successful research. For example, in the Soviet Union, the goal of the central planners was to “catch up with and surpass the West”. Despite the Soviet Union in 1986 having a population 14% larger than the United States, they had 73% more hospitals than the US (23,100 vs 6229), 69% more beds for patients, 48% more physicians and 99% more midwives. However, the average life expectancy was 64 and 73 for males and females in the Soviet Union compared to 71 and 78 for males and females in the United States. It may be telling that despite far fewer staff and hospitals, the United States outspent the Soviets by more than $184 billion in 1979 ($645 billion in today’s money) and the US government paid less than half this amount compared to the 92% share the Soviet Union planners contributed. Capitalism enabled the United States to mobilise and efficiently allocate its resources, as well as, create far more efficient hospitals than its rival and was able to show a clear health benefit to its population as a result.

Other areas of living standards have skyrocketed such as education (and female education), skills, information and social mobility. But most of all, capitalism as a form of trade and enterprise has been the engine in the immense reduction of world absolute poverty as The Guardian writes “In the past 200 years, extreme poverty has collapsed from a whopping 94% of the entire world population to less than 10% today”. 60,000 people are escaping extreme poverty every day because of trade. But if capitalism is so good, why are there huge swathes of populations still poor and suffering today? Capitalism isn’t the cause of this poverty but rather that there is a lack of capitalism that affects these areas. Government corruption, war, political instability and other structural problems prevent power being placed into the markets and operating efficiently in these areas.

#### Economic decline causes great power war

Qian Liu 18. China-based economist. “From economic crisis to World War III.” Project Syndicate. 11-8-2018. <https://www.project-syndicate.org/commentary/economic-crisis-military-conflict-or-structural-reform-by-qian-liu-2018-11>

The next economic crisis is closer than you think. But what you should really worry about is what comes after: in the current social, political, and technological landscape, a prolonged economic crisis, combined with rising income inequality, could well escalate into a major global military conflict. The 2008-09 global financial crisis almost bankrupted governments and caused systemic collapse. Policymakers managed to pull the global economy back from the brink, using massive monetary stimulus, including quantitative easing and near-zero (or even negative) interest rates. But monetary stimulus is like an adrenaline shot to jump-start an arrested heart; it can revive the patient, but it does nothing to cure the disease. Treating a sick economy requires structural reforms, which can cover everything from financial and labour markets to tax systems, fertility patterns, and education policies. Policymakers have utterly failed to pursue such reforms, despite promising to do so. Instead, they have remained preoccupied with politics. From Italy to Germany, forming and sustaining governments now seems to take more time than actual governing. Greece, for example, has relied on money from international creditors to keep its head (barely) above water, rather than genuinely reforming its pension system or improving its business environment. The lack of structural reform has meant that the unprecedented excess liquidity that central banks injected into their economies was not allocated to its most efficient uses. Instead, it raised global asset prices to levels even higher than those prevailing before 2008. In the United States, housing prices are now 8% higher than they were at the peak of the property bubble in 2006, according to the property website Zillow. The price-to-earnings (CAPE) ratio, which measures whether stock-market prices are within a reasonable range, is now higher than it was both in 2008 and at the start of the Great Depression in 1929. As monetary tightening reveals the vulnerabilities in the real economy, the collapse of asset-price bubbles will trigger another economic crisis – one that could be even more severe than the last, because we have built up a tolerance to our strongest macroeconomic medications. A decade of regular adrenaline shots, in the form of ultra-low interest rates and unconventional monetary policies, has severely depleted their power to stabilise and stimulate the economy. If history is any guide, the consequences of this mistake could extend far beyond the economy. According to Harvard’s Benjamin Friedman, prolonged periods of economic distress have been characterised also by public antipathy toward minority groups or foreign countries – attitudes that can help to fuel unrest, terrorism, or even war. For example, during the Great Depression, US President Herbert Hoover signed the 1930 Smoot-Hawley Tariff Act, intended to protect American workers and farmers from foreign competition. In the subsequent five years, global trade shrank by two-thirds. Within a decade, World War II had begun. To be sure, WWII, like World War I, was caused by a multitude of factors; there is no standard path to war. But there is reason to believe that high levels of inequality can play a significant role in stoking conflict. According to research by the economist Thomas Piketty, a spike in income inequality is often followed by a great crisis. Income inequality then declines for a while, before rising again, until a new peak – and a new disaster. Though causality has yet to be proven, given the limited number of data points, this correlation should not be taken lightly, especially with wealth and income inequality at historically high levels. This is all the more worrying in view of the numerous other factors stoking social unrest and diplomatic tension, including technological disruption, a record-breaking migration crisis, anxiety over globalisation, political polarisation, and rising nationalism. All are symptoms of failed policies that could turn out to be trigger points for a future crisis. Voters have good reason to be frustrated, but the emotionally appealing populists to whom they are increasingly giving their support are offering ill-advised solutions that will only make matters worse. For example, despite the world’s unprecedented interconnectedness, multilateralism is increasingly being eschewed, as countries – most notably, Donald J. Trump’s US – pursue unilateral, isolationist policies. Meanwhile, proxy wars are raging in Syria and Yemen. Against this background, we must take seriously the possibility that the next economic crisis could lead to a large-scale military confrontation. By the logic of the political scientist Samuel Huntington, considering such a scenario could help us avoid it because it would force us to take action. In this case, the key will be for policymakers to pursue the structural reforms that they have long promised while replacing finger-pointing and antagonism with a sensible and respectful global dialogue. The alternative may well be global conflagration.

### AT: Anthro Evidence

#### No transition---degrowth assumes magic!

Branko Milanovic 2/3/21. Visiting Presidential Professor at the Graduate Center City University of New York and Senior Scholar at the Stone Center for Socio-economic Inequality. "Degrowth: Solving the Impasse by Magical Thinking". No Publication. 2-23-2021. https://www.globalpolicyjournal.com/blog/23/02/2021/degrowth-solving-impasse-magical-thinking

The difficulty of discussion with degrowers comes from the fact that they and the rest of us live in two different ideological worlds. Degrowers live in a world of magic, where merely by listing the names of desirable ends they are supposed to somehow happen. In that world, one does not need to bother with numbers or facts, trade-offs, first or second bests; one merely needs to conjure up what he/she desires and it will be there.

Now degrowers are not irrational people. The reason why they are pushed in this magical corner is because when they try to “do the numbers” they are led to an impasse. They do not want to allow for significant increase in world GDP because it will, even if decoupling (of which they are skeptical) happens, drive energy emissions too high. If one wants to keep world GDP more or less as now one must (A) “freeze” today’s global income distributions so that some 10-15% of the world population continue to live below the absolute poverty line, and one-half of the world population below $PPP 7 dollars per day (which is, by the way, significantly below Western poverty lines). This is however unacceptable to the poor people, to the poor countries, and even to degrowers themselves.

Thus they must try something else: introduce a different distribution (B) where everybody who is above the current mean world income ($PPP 16 per day) is driven down to this mean, and the poor countries and people are, at least for a while, allowed to continue growing until they too achieve the level of $PPP 16 per day. But the problem with that approach is that one would have to engage in a massive reduction of incomes for all those who make more than $PPP 16 which is practically all of the Western population. Only 14% of the population in Western countries live at the level of income less than the global mean. This is probably the most important statistic that one should keep in mind. Degrowers thus need to convince 86% of the population living in rich countries that their incomes are too high and need to be reduced. They would have to preside over economic depressions for about a decade, and then let the new real income stay at that level indefinitely. (Even that would not quite solve the problem because in the meantime, many poor countries would have reached the level of $PPP 16 per day and they too would have to be prevented from growing further.) It is quite obvious that such a proposition is a political suicide. Thus degrowers do not wish to spell it out.

#### Capitalism’s not monolithic---regs solve their impacts and preserve positives.

Laura Tyson and Lenny Mendonca 21. Laura Tyson, former chair of the US President's Council of Economic Advisers, is Professor of the Graduate School at the Haas School of Business and Chair of the Blum Center Board of Trustees at the University of California, Berkeley. Lenny Mendonca, Senior Partner Emeritus at McKinsey & Company, is a former chief economic and business adviser to Governor Gavin Newsom of California and chair of the California High-Speed Rail Authority. "Capitalism We Can Believe In". Project Syndicate. 1-15-2021. https://www.project-syndicate.org/commentary/what-to-do-about-declining-trust-in-us-capitalism-by-laura-tyson-and-lenny-mendonca-2021-01

Growing distrust of capitalism follows from its failure to address major socioeconomic challenges, not least climate change and inequalities in opportunity, income, and wealth. While private incentives under capitalism are good at stimulating efficiency, growth, and innovation, they also generate unequal income and wealth distributions (even in a context of intense competition), often at odds with social norms of fairness. Moreover, capitalist systems tend to underinvest in public goods like education, health care, and social insurance – all critical factors in the pandemic response – while also discounting negative externalities such as greenhouse-gas emissions.

These shortcomings of capitalism are predictable, but they are remediable through public policies and institutions. Tax and transfer policies and minimum wages can reduce income and wealth disparities, just as public investment in education, training, and health care can enhance opportunity by providing access to good jobs and fostering the creation of new enterprises. Likewise, a price on carbon dioxide and regulations limiting or banning carbon emissions can help the world avert the existential threat of climate change.

Critics of capitalism often miss (or choose to ignore) that there is no single canonical model. Europe’s various “social market” models differ significantly from the neoliberal variant in the US. And even within the US, there are important differences between states and localities.

Some of these distinctions have been highlighted in the responses to the COVID-19 pandemic and recession. All advanced economies have deployed unprecedented levels of fiscal and monetary stimulus in the face of “K-shaped” or “dual” recessions in which lower-wage workers have suffered disproportionately more than other cohorts. Unlike the US, Germany and several other European countries have deployed measures specifically designed to keep as many workers as possible in their jobs. Because these countries have generous social insurance and benefits, including sick leave and family leave, workers and their families have been able to cope with both COVID-19 and sudden drops in their incomes.

Differences in national health-care models have also become more apparent. Unlike European capitalist systems that provide universal coverage, 14.5% of America’s non-elderly population (ages 18-64) remains uninsured. Moreover, owing to America’s heavy reliance on employer-based insurance, the pandemic has pushed at least 15 million more workers at least temporarily into the uninsured pool.

With their strong public-health systems, many European countries were also better equipped to carry out widespread testing and vaccine distribution. The US, meanwhile, has utterly failed to contain the virus, and is now delegating the vaccination campaign to under-resourced state and local authorities.

In another contrast with the US, Europe has dedicated about one-third of its massive stimulus program to investments aligned with its commitment to achieve carbon neutrality by mid-century. America’s federal stimulus measures have been silent on climate with few conditions of any kind.

Within the US, individual states’ responses to the COVID-19 crisis reflect different variants of capitalism. In California, Governor Gavin Newsom’s recent 2021-22 budget proposal reveals some distinctive features. In terms of health-care coverage, California remains a national leader with a Medicaid program covering more than 13 million people. Despite the pandemic-induced recession, the state is increasing its minimum wage to $14 per hour in 2021, on track to realize the target of $15 per hour in 2022 for all businesses employing 26 or more workers; many municipalities, including Los Angeles and San Francisco, have already achieved or exceeded the $15 target. (On January 1, 2021, 20 other states also raised their minimum wages, whereas the US federal minimum wage has remained unchanged at $7.25 per hour since 2009.)

California has also expanded coverage of its Earned Income Tax Credit (EITC) and Young Child Tax Credit to include undocumented workers who are otherwise denied the benefits of federal stimulus packages. Together, these tax credits applied to 3.6 million California households in 2020, adding $1 billion in total income. The state also passed new legislation significantly expanding unpaid family-leave rights. Employers with as few as five employees now must provide this option as well as more time for paid sick leave for workers forced to self-isolate or quarantine as a result of COVID-19 exposure or diagnosis.

Looking ahead, Newsom has proposed an additional $600 one-time cash payment to all taxpayers who are eligible for the state’s EITC in 2021. His proposed 2021-22 budget also earmarks $372 million to expedite the distribution of COVID-19 vaccines, and includes $4.5 billion for programs to drive economic growth and job creation once restrictions on normal activities have been lifted. These programs include $575 million in grants to small businesses and nonprofits, in addition to the $500 million for such grants implemented in late 2020 amid forced business closures. The proposal also allocates up to an additional $50 million for the California Rebuilding Fund, a public-private partnership, to support up to an additional $125 million of low-interest loans to underserved small businesses throughout the state.

California’s distinctive approach to market capitalism also emphasizes climate sustainability, using both carbon pricing and efficiency standards to achieve ambitious decarbonization targets. Under a 2018 state law, 60% of electricity must come from renewable resources by 2030, and 100% by 2045. California runs the world’s fourth-largest cap-and-trade system and will be setting even lower caps (and thus a higher carbon price) next month. In September 2020, Newsom announced an executive order requiring that zero-emission vehicles account for 100% of new car sales by 2035. His proposed budget seeks $1.5 billion to accelerate the infrastructure investment needed to achieve this goal.

President-elect Joe Biden has just announced a $1.9 trillion emergency rescue plan to counter the pandemic’s surge and provide substantial relief to workers, families, small businesses, and state and local governments. Prompt congressional passage of this plan is a critical first step in the renovation of America’s outdated neoliberal version of capitalism. As the economy recovers from the deep and uneven COVID-19 recession, the US must “build back better” by strengthening its social safety net, increasing public investment in education, health care, and other public goods, and rejoining the global charge against climate change. Lessons from the more successful variants of market capitalism in Europe and California point the way forward.

# 1AR

## K

#### 2. We’re past the tipping point---only carbon capture solves warming.

Adele Peters 20. Staff writer. Citing Jorgen Randers, professor emeritus of climate strategy at BI Norwegian Business School. "We’re already past critical climate tipping points. Here’s why we still need to cut emissions now". Fast Company. 11-12-2020. https://www.fastcompany.com/90574545/were-already-past-critical-climate-tipping-points-heres-why-we-still-need-to-cut-emissions-now

If every country in the world cuts global greenhouse gas emissions to zero by the end of the century—or even if they managed to do it by the end 2020—the planet would still keep warming for hundreds of years, says a new study. Researchers found that humans would have had to stop all emissions sometime between 1960 and 1970 to stop the global temperature and sea levels from continuing to rise.

The study, published in Scientific Reports, modeled the global climate from 1850 to the year 2500, and found that we’ve already passed critical tipping points. The permafrost in the Arctic—which holds nearly twice as much carbon as the atmosphere now—is starting to melt, releasing both CO2 and methane, locking it into a cycle of warming even if emissions stop. As snow and ice melt, the surface of the Earth is getting darker, making it warmer, and triggering more melting. Water vapor is also keeping temperatures high. If human-caused emissions peak in the 2030s and reach zero by the end of the century, the study found, global temperatures will be 3 degrees Celsius hotter by 2500 than they were in 1850. The sea level will be more than 8 feet higher, putting current coastlines underwater.

That doesn’t mean, however, that it’s too late to act. In fact, it’s even more urgent to act quickly to cut emissions, and to take the additional step of large-scale carbon removal, using technology such as machines that can pull carbon from the atmosphere so it can be stored underground. If we suck 33 gigatons of CO2 from the atmosphere every year, warming could still stop. And the impacts of climate change get far worse by each half-degree the planet warms; the more we can slow the process down, the better. If the planet’s temperature is as low as possible when some of these warming cycles begin, it can mitigate some of their effects. If we do nothing now, they’ll be much more deadly.

#### 3. Data proves.

Rainer Zitelmann 10/12/21. Doctorates in history and sociology. "Capitalism is good, not bad, for the environment". Washington Examiner. 10-12-2021. https://www.washingtonexaminer.com/opinion/capitalism-is-good-not-bad-for-the-environment

Every year, the Heritage Foundation ranks countries around the world on their economic freedom. It's a kind of capitalism index .

But analysis shows that the most economically "free" countries also register the highest scores on Yale University’s EPI environmental index , averaging 76.1, while "mostly free" countries averaged 70.2. These two groups have a significant lead over the "moderately free" countries, which received much lower ratings (59.6 points) for their environmental performance.

The countries rated by the Heritage Foundation as either "mostly unfree" or "repressed" received by far the worst Environmental Performance Index scores (46.7 and 50.3, respectively). Researchers at Yale University found that there is not only a correlation between the Heritage Foundation’s index and their own EPI but also between the EPI and the "Ease of Doing Business Index." That latter index is published each year as part of the World Bank’s "Doing Business Report" and is generally regarded as the world’s most comprehensive and reliable gauge of the ease of doing business.

In 2016, researchers published a study in the journal Sustainability that included an evaluation of the correlation between the EPI and the "Open Market Index" compiled by the International Chamber of Commerce. The OMI measures a country’s openness to free trade and is thus an important indicator of economic freedom. The researchers found a high degree of overlap between the OMI index and the EPI:19 of the OMI’s 27 highest-scoring countries also appear in the top 27 of the EPI. The survey covered a total of 75 countries, including all G20 and European Union members. Together, these countries account for more than 90% of international trade and investment. The researchers found evidence for their "hypothesis that countries with an open economy score higher in environmental performance."

There are two real-world observations that also disprove the argument that stronger economic growth automatically leads to greater environmental pollution. First, in noncapitalist countries, environmental degradation has been a far more serious problem than in capitalist countries. Second, the correlation between economic growth and increasing resource consumption is becoming ever weaker in the age of dematerialization.

Put simply, these studies point in the same direction: Capitalism is not the problem. It is the solution — both economically and environmentally.

#### C) No threat con kritik---its massively caused by advertising which the plan solves!

Michael Rubin 20. Michael Rubin is a senior fellow at the American Enterprise Institute, where he specializes in Iran, Turkey, and the broader Middle East. "Capitalism is the solution, not the problem, for the pandemic world." American Enterprise Institute - AEI. 4-22-2020. https://www.aei.org/op-eds/capitalism-is-the-solution-not-the-problem-for-the-pandemic-world

The United States and the broader world are experiencing a shock not felt since World War II, if not before. U.S. gross domestic product may [plunge 34%](https://thehill.com/policy/finance/490327-goldman-sachs-unemployment-to-hit-15-percent-quarterly-gdp-to-fall-34-percent). A roll of toilet paper is now more valuable than a barrel of oil, and tens of millions of workers who were employed just a month ago now find themselves out of work. Whole industries from restaurants to airlines are decimated, and department stores may be a thing of the past. It has become tempting in a number of quarters to blame capitalism.

Capitalism has been under siege for some time. Last October, Pope Francis [wrote](http://www.vatican.va/content/francesco/en/messages/food/documents/papa-francesco_20191016_messaggio-giornata-alimentazione.html), “The battle against hunger and malnutrition will not end as long as the logic of the market prevails.” A commentary in Barron’s [concluded](https://www.barrons.com/articles/the-coronavirus-recession-should-be-the-end-of-shareholder-capitalism-51587377316), “Once the immediate public-health crisis has passed, there will be tremendous temptation to go back to the old ways. This must be rejected categorically,” suggesting that the pandemic recession should end shareholder capitalism. “Coronavirus stimulus and disaster plans reveal cruelty of capitalist and political ‘reality,’” a [headline](https://www.nbcnews.com/think/opinion/coronavirus-stimulus-disaster-plans-reveal-cruelty-capitalist-political-reality-ncna1166861) at NBC News read. Naomi Klein, chair of media, culture, and feminist studies at Rutgers University, [wrote](https://theintercept.com/2020/03/16/coronavirus-capitalism/) at the Intercept about “Coronavirus capitalism — and how to beat it.” Climate activist Eric Holthaus [tweeted](https://twitter.com/EricHolthaus/status/1253008042720927748), “We need a Green New Deal with a robust public safety net. … Capitalism is failing in front of us.” Famed primatologist Jane Goodall [said](https://www.cnet.com/news/earth-day-2020-we-desperately-need-hope-now-jane-goodall-says/) that the pandemic arose because of man’s disrespect for nature.

The list of such pronouncements is long.

**But capitalism is really the solution**, rather than the cause, of the human and economic catastrophe now underway. Economist Arthur Brooks, the former president of the American Enterprise Institute (where I work), [noted](https://www.americamagazine.org/politics-society/2017/02/06/confessions-catholic-convert-capitalism), “Grinding material poverty was the norm for the vast majority of people through the vast majority of human history. … In just the last few hundred years, that all changed for a few billion people. So the right question today is: ‘Why did whole parts of the world cease to be poor for the first time in history?’”

The answer is free market capitalism. President Barack Obama himself acknowledged as much when he [stated](https://obamawhitehouse.archives.gov/the-press-office/2015/05/12/remarks-president-conversation-poverty-georgetown-university), **“We don’t dispute that the free market is the greatest producer of wealth in history — it has lifted billions of people out of poverty.”**

Those who are condemning capitalism are mistaken in a number of ways. **Freedom and capitalism go hand in hand, whereas socialism often subordinates individual liberty not to the interests of the state but rather of those in the state’s leadership class**. There is no better case in point for this than COVID-19’s initial outbreak: It was the Chinese Communist Party that chose to obfuscate and hide the roots and reality of the Wuhan coronavirus.

Autocracies crave opacity. The World Health Organization is rightly under the microscope for its deference to Beijing amid Chinese lies. Capitalist [Taiwan is free China](https://www.aei.org/foreign-and-defense-policy/like-it-or-not-taiwan-is-free-china/), and the juxtaposition between its success and Communist China’s failure is huge.

It is easy to castigate President Trump for downplaying or distracting from the coronavirus threat. Leadership matters. So [does](https://www.factcheck.org/2020/04/bidens-false-claim-on-trumps-response-to-coronavirus/) [consistency](https://www.realclearpolitics.com/articles/2020/04/20/hypocrisy_in_nyts_reporting_on_a_covid-skeptics_death.html): Trump was not alone, nor were errors limited to one side of the aisle. Rather, what has most hampered the U.S. response has been a clunky and bloated bureaucracy.

While a Hillary Clinton presidency may have made marginal adjustments here and there, it would have been even more reluctant to curtail travel from China (racism!), and the same institutional interests would have paralyzed the interagency process. If partisans believe the U.S. government’s response would have been more efficient under Clinton, then that suggests politics rather than capitalism are the problem. Regardless, this is why federalism is so important. States took the lead while Washington fiddled — and within states, counties and municipalities have been at the forefront in responding to their own assessments of local conditions.

Environmentalists have sought to hijack the current crisis for various agendas, but by doing so, they diminish and disrespect science. Goodall, for example, should note that humans have confronted waves of pandemics throughout their history. There is also a border between “nature” and “civilization,” and transmissions occur. New diseases emerge not only because of human expansion but rather because of medical ingenuity. Many diseases from which people suffer now were unheard of decades or centuries ago — not because people now abuse the environment but rather because we live longer.

The pandemic in many ways shows what the Green New Deal would do to the economy and should be a warning rather than a reason. Across the globe, wealthier societies (China excepted) prioritize the environment more than impoverished ones do. Nor is it possible to separate ease of transportation from the past century’s global economic boom. To try to do so — for example, vis-a-vis air travel — would be like advising foot surgery after removing the spine. Nor would any scientist [true to the scientific method](https://www.aei.org/economics/us-economy/5-questions-every-presidential-candidate-should-answer-global-warming-and-energy-policy-edition/) advise policy based on historical models without predictive value.

The World Health Organization’s chief role is not as scientific enabler but rather as public cheerleader and disseminator of information. In this latter role, it failed. **The real scientific advances will come not from WHO bureaucrats or state-dominated societies such as China, Russia, or Iran but rather from the private companies and scientists unencumbered by state direction in countries such as the U.S., Germany, South Korea, and Israel. That these capitalist engines can pursue multiple solutions to the coronavirus problem set simultaneously is something capitalism enables — and is anathema to socialism.**

Capitalism-bashing may be the rage in certain segments of society, but capitalism alone provides the path forward — whereas bigger government not only will fail to prevent the next pandemic but will strangle recovery. It is right to pay essential workers in logistics and retail more as their labor becomes more critical at this time, but that is capitalism: The market adjusts more than ossified political interests. While there is a role for a social safety net, an economic boom follows every recession except when derailed by governments seeking to overregulate or micromanage that recovery. Inequality may be a problem, but then the solution is to create more wealth rather than redistribute or ration it.

[The COVID-19 pandemic](https://www.washingtonexaminer.com/tag/coronavirus) is causing immense suffering, and so it is important not to compound it. The current suffering does not change the truism that free markets create wealth while government suffocates it. Certainly, inequality can be a problem, but it is also critical to recognize that today’s poor remain wealthy by standards of decades past. Let us hope that free markets will craft a cure or containment of the coronavirus — because state bureaucrats most certainly will not.

#### 3. Zero incentive to innovate if there’s no one to compete against. Societies will turn inwards. Kevin’s description of the alt is the brochure for a right-wing populist movement or Methodist cult. You can’t rehabituate society!

James Pethokoukis 21. Senior Fellow @ AEI; Editor, AEIdeas Blog; and DeWitt Wallace Chair "The 21st-century degrowth movement makes the same mistake about human nature as 20th-century socialists". American Enterprise Institute - AEI. 6-28-2021. https://www.aei.org/economics/the-21st-century-degrowth-movement-makes-the-same-mistake-about-human-nature-as-20th-century-socialists/

After the collapse of the Soviet Empire, Harvard University history professor Richard Pipes wrote in the essay “Human Nature and the Fall of Communism” that “a government that monopolizes a nation’s wealth and prohibits its citizens from accumulating any property beyond mere personal effects ensures its own destruction — if not from social or political explosion, then from chronic apathy, the sociopolitical equivalent of pernicious anemia.”

In other words, the Marxist-Leninist socialist notion that humanity was a blank slate upon which the Communist Party would write and thus create a New Soviet Man was doomed to failure. It ignored both the reality of human nature and its resilience. Indeed, the result in Soviet Russia was an economy marked by apathy and stagnation, and a society marked by corruption and repression. Again, Pipes:

The Communists wanted their citizens to give up, along with private property, personal ambitions, and to dedicate themselves wholly to the collective good. This aspiration has proven very difficult to realize, even in small utopian communities composed of idealistic volunteers. It was utterly unattainable in a vast empire held together by force. Rather than devote themselves 100 percent to the good of all, the vast majority of Soviet citizens dedicated themselves 100 percent to their private welfare. To members of the elite, the regime was an inexhaustible cornucopia that they skimmed mercilessly. Ordinary citizens interpreted the nationalization of all assets to mean that they had no stake in the country, since it belonged to someone else: since “they” owned it, let “them” take care of it. As a Soviet joke had it, “They pretend to pay us; we pretend to work.” Such attitudes resulted in a progressive alienation of the citizenry from the body politic.

Another anti-capitalist movement also suffers from a misunderstanding of human nature: the degrowthers who decry economic growth as environmentally unsustainable and beneficial only to a sliver of humanity. Of course, this view ignores the billions of still quite impoverished humans who would like to live like those in OECD countries. And then there’s those of us who currently live in rich countries and also would like higher incomes to acquire new goods, services, experiences, and opportunities. But don’t we in rich countries already have enough? Wouldn’t we be fine with stagnation or even a bit less? Certainly anyone having lived through the slow post-financial crisis economy should know better than to even pose such questions. I would also point to this telling example from economist Branko Milanovic’s newsletter:

I think that it could be reasonably argued that no group of people in the history of the world has lived as pleasant lives as today’s Italians. The advantages are well-known: lots of wealth, peace, moderate working hours, strong family and friendship bonds, nice weather, beautiful historical and natural sights, excellent and healthy food. Who then needs to grow? And Italy did not. It has by now stagnated for a generation and while in 1999, its GDP per capita was 3.5 times the world average, it is today 2.5 times. One could say, “it does not matter if people are happy”. But the problem is that, while superficially people may be happy this Summer as they congregate on the beaches and drink aperol, there is a deep malaise induced precisely by the absence of growth. The young are not happy because of lack of opportunities, the middle-aged people are not happy by non-challenging jobs, the old are not happy because their pensions are stagnant. So even if you have achieved a stagnant Arcadia, you cannot be happy and stop running because others are overtaking you and the fundamental features of capitalism, in Italy and elsewhere, are as I have described them above.

Those excellent points are ones that advocates of universal basic income should keep in mind.

#### 4. None of their evidence is in the contest COVID recession proves.

C.J. Polychroniou interviewing Robert Pollin 21. Political scientist/political economist, author, and journalist who has taught and worked in numerous universities and research centers in Europe and the United States; Distinguished professor of economics and co-director of the Political Economy Research Institute at the University of Massachusetts-Amherst. "Degrowth Policies Cannot Avert Climate Crisis. We Need a Green New Deal." Truthout. 6-28-2021. https://truthout.org/articles/degrowth-policies-cannot-avert-climate-crisis-we-need-a-green-new-deal/?amp

In focusing on some critical specifics, I would also add that there is no way that a general project of degrowth can put the global economy onto a viable climate stabilization path. With the COVID-19 recession, the global economy just went through a powerful natural experiment to demonstrate this point. That is, during the pandemic in 2020, the global economy contracted by 3.5 percent, which the International Monetary Fund described as a “severe collapse … that has had acute adverse impacts on women, youth, the poor, the informally employed and those who work in contact-intensive sectors.” In other words, the pandemic produced an intense period of global “degrowth.” This recession did also produce a decline in emissions, as entire sections of the global economy were forced into lockdown mode. But the emissions decline amounted to only 6.4 percent over 2020. Remember, the IPCC tells us that we need to cut emissions by 45 percent as of 2030 and be at zero emissions by 2050. If the COVID recession only yields a 6.4 percent emissions reduction despite the enormous levels of economic pain inflicted, clearly “degrowth” cannot come close, on its own, to delivering a 45-percent emissions cut by 2030, much less a zero emissions global economy by 2050.

#### Kallis evidence is wrong---marked prior to a warrant AND---Decoupling is possible---here’s more empirics.

Leigh Phillips 19. Science writer and EU affairs journalist. He is the author of Austerity Ecology & the Collapse-Porn Addicts and The People's Republic of Walmart. "The degrowth delusion." openDemocracy. 8-30-2019. https://www.opendemocracy.net/en/oureconomy/degrowth-delusion/

We can see the first major error of the degrowth concept if we turn our attention to past environmental challenges that we have actually overcome. The evidence is clear that it is planning—typically regulation, but also via public-sector infrastructure spending and industrial policy—not reduction in economic growth, that was responsible for these victories.

It is worth remembering that we have solved a fair few ecological problems, from acid rain over the Great Lakes to air and water quality in many Western nations. Until the 1980s, sulphur dioxide pollution was tied tightly to economic growth in the OECD club of wealthier nations, but it is no longer. Not enough ecological problems have been solved to be sure, but we need to investigate where there has been success—largely thanks to the struggles of trade unions, impacted communities, and environmental groups—in order to learn the lessons of what works.

Where there has been subsequent deterioration after achieving such successes—such as the scandalously still-unresolved lead contamination of water in Flint, Michigan—this has been the result of neoliberal retreat from non-market intervention: privatisation, deregulation, regulatory capture, and underfunding or outsourcing of inspection. In the case of Flint, we can add to this list the neoliberal era's neglect of water infrastructure, particularly with respect to that servicing less-profitable minority and poor communities. Likewise, neoliberal racism that resulted in infrastructural breakdown and underconsumption of water resources by poor and racialised neighbourhoods was responsible for the water crisis in Cape Town, not overconsumption.

But perhaps the greatest environmental victory yet has been the healing of the ozone layer. In the 1980s, depletion of atmospheric ozone, particularly around the poles, was that era's version of existential ecological crisis. It was also no less threatening to humanity over the near term than climate change via an increase in skin cancer and immune deficiency disorders as well as negative impacts on terrestrial and near-surface aquatic food webs and biochemical cycles, and reduction in agricultural yields. And the cause was also anthropgenic [sic] emissions: this time primarily chlorofluorocarbons (CFCs) that were popularly understood, roughly correctly, as being used in refrigerators and aerosol sprays.

Since the 1987 Montreal Protocol ban on ozone-depleting substances, including CFCs, such emissions have declined by 98 percent (there has however been an uptick in unreported emissions since early this decade from east Asia, suggesting someone in the region is cheating). Ozone depletion reversed by the 2000s and full recovery is expected by 2075.

Having grown up in the 80s, I remember at the time bugging my mum to stop buying cans of hair spray. She did not follow my advice.

Thankfully my advice was not taken by policymakers either. Instead, the Montreal Protocol regulatorily intervened in the market against and over the wails and lobbying efforts of the industries affected.

Had we embraced degrowth with respect to ozone depletion by attempting to arrest growth in, say, the number of fridges in the world—or even reduce the total number—instead of regulation to enforce technology-switching, disaster would have befallen us. Saying "this many fridges and no more" would only have arrested the growth in emissions, not emissions tout court. (For the same reason today, it is not enough to keep greenhouse gas emissions steady, but eliminate them)

It simply would not have worked in any case, as by what right can developed nations tell the global south that they cannot keep their food fresh while they continue to do so? (Indeed, one might say that the socialist argument is instead: There still are not enough fridges in the world.)

Today there are more cans of hair spray and more fridges than ever before. The latter not least in the developing world, where refrigeration enhances quality of life through expansion of the range of food available, reducing food contamination, and improving nutrition. It also reduces food waste and therefore greenhouse gas emissions.

There has been an absolute decoupling of growth in the technologies that historically used ozone-depleting substances from growth in ozone depletion. The degrowth position maintains that absolute decoupling of growth from negative environmental impact is impossible, and that only relative decoupling—or reduced resource use per unit of production but increased production overall—is possible, but the story of ozone depletion shows this belief to be false. Economic growth has been absolutely, not relatively, decoupled from ozone depletion.

There are many, many other examples. Europe’s forests have grown by a third over the last century. Timber was used in almost every economic sector around 1900—for fuel, for furniture, house construction, even metal production—meaning that there was little forested areas left on the continent. But technological innovation in agriculture such as motorization, better drainage and irrigation reduced cropland as less area was needed to produce the same volume of food. In addition, there was a mass migration away from rural areas to the cities and, crucially, states after World War Two invested heavily in reforestation. Indeed, once a nation reaches a certain per capital income threshold, net deforestation ceases. Globally, tree cover has increased over the last 35 years.

Across the Atlantic, there were more dairy cows in the United States in 1870 than today, when the country has roughly ten times the population, according to the US Department of Agriculture. US crop production has increased even as agricultural inputs such as fertilizer, water and crop acreage have declined or plateaued, with the decline in fertilizer use being particularly sharp. Corn acreage has been absolutely decoupled from corn production. American potato yields continue to increase but the potato market is saturated, so potato production has plateaued, meaning that land is removed from production. Across the agricultural sector, this has meant an area of farmland the size of Washington State has been returned to nature, according to a forthcoming analysis by MIT business scholar Andrew McAfee.

McAfee also notes how US consumption of metals marched in lock-step with GDP until about the 1980s. Since then, consumption of important metals such as aluminium, nickel, copper, steel and gold have plateaued or declined. This takes into account imports and exports, so globalization is not the reason for this.

One important paper from degrowth advocates argues that this is simply because traded goods have a greater material impact than merely what is incorporated into them (think of the difference between an ingot of steel versus raw iron ore). Once this is taken into account, suggests another paper by a leading degrowth advocate, OECD absolute decoupling reveals itself to be a mirage, and globally economic growth remains as coupled to use of materials as ever—although, interestingly, that same paper notes this is primarily a result of offshoring of just construction materials.

But this is a global consideration of material inputs, so a range of sectoral absolute decouplings goes unnoticed, and global ones that are immaterial are likewise ignored. CFC absolute decoupling is global but unrecognized because measurement of material inputs doesn’t capture this. The sharp reduction in emissions of carbon monoxide, sulphur dioxide, nitrogen oxides, lead and particulate in Europe and America has come from regulation; they have not shifted overseas. US agricultural absolute decoupling has likewise not been a product of offshoring, as inputs here are primarily domestically sourced. A global decoupling of greenhouse gas emissions from growth (in principle feasible, but very far from being implemented) likewise would be missed by such an analysis.

And even more importantly, the very fact that there has already been a great many demonstrable examples of regional and global absolute decoupling in different sectors disproves the claim of the impossibility of absolute decoupling. The only question that remains is whether absolute decoupling can be extended across all sectors, or sufficient sectors as to eliminate undermining of ecosystem services.

Where free-market champions of absolute decoupling like McAfee are wrong however is their explanation for why it happens. McAfee believes it is vicious capitalist competition that drives technological innovation to reduce the costs of inputs. He concedes that some regulation is necessary, but fundamentally it’s market pressures that produce this of their own accord.

It is of course great when there is a happy coincidence of profitability and reduction of ecological harm, but if ever there is a conflict between these two, it’s profitability that wins out. And the reality is that America’s Clean Air Act, Clean Water Act and similar regulations across industry—in the face of furious opposition from private companies—have been responsible for most of the major environmental advances in the US. And the story is similar elsewhere. Since 2005, emissions had absolutely decoupled from global beef production, primarily as a result of the Brazilian Workers’ Party’s crackdown on the razing of forest for agricultural production—a magnificent success story currently being disastrously undone by that country’s hard-right government of Jair Bolsonaro. Denmark, a world leader in nitrogen pollution management, has achieved a reduction in fertilizer use even as agricultural output has increased through a muscular state-led nitrogen strategy across the agricultural sector that involves stringent regulation, RD&D funding and infrastructural build-out.

One might also respond that technology-switching away from fossil fuels is a much more difficult task than switching away from CFCs or nitrogen recycling. And the response must be that this is certainly true, as this shift affects almost every sector of the economy. But difficult is not the same thing as impossible. Eight major economies—France, Norway, Sweden, Switzerland, Ontario, Quebec, British Columbia and Paraguay—have already either largely or all-but completely decarbonized their electricity grids even as they enjoy economic growth (all by depending primarily on nuclear and/or hydroelectricity). These are models for the world. Cleaning up transport, industry and the built environment will likewise need a muscular public-sector interventionist approach.