## Framing

**The standard is maximizing expected wellbeing, or utilitarianism**

**1] Util is a lexical pre-requisite to any other framework: Threats to bodily security and life preclude the ability for moral actors to effectively utilize and act upon other moral theories since they are in a constant state of crisis that inhibit the ideal moral conditions which other theories presuppose – so, util comes first.**

**2] Use epistemic modesty for evaluating the framework debate: that means compare the probability of the framework times the magnitude of the impact under a framework. This maximizes the probability of achieving net most moral value**

**3] Default to util if there’s any uncertainty**

Walter **Sinnott-Armstrong 14** [American philosopher. He specializes in ethics, epistemology, and more recently in neuroethics, the philosophy of law, and the philosophy of cognitive science], "Consequentialism", The Stanford Encyclopedia of Philosophy (Spring 2014 Edition), Edward N. Zalta (ed), BE

Even if consequentialists can accommodate or explain away common moral intuitions, that might seem only to answer objections without yet giving any positive reason to accept consequentialism. However, **most people begin with the presumption that we morally ought to make the world better when we can. The question then is only whether any moral constraints or moral options need to be added to the basic consequentialist factor in moral reasoning.** (Kagan 1989, 1998) If no objection reveals any need for anything beyond consequences, then consequences alone seem to determine what is morally right or wrong, just as consequentialists claim.

**4] Extinction comes first under any framework**

**Pummer 15** [Theron, Junior Research Fellow in Philosophy at St. Anne's College, University of Oxford. “Moral Agreement on Saving the World” Practical Ethics, University of Oxford. May 18, 2015] AT

There appears to be lot of disagreement in moral philosophy. Whether these many apparent disagreements are deep and irresolvable, I believe there is at least one thing it is reasonable to agree on right now, whatever general moral view we adopt: that it is very important to reduce the risk that all intelligent beings on this planet are eliminated by an enormous catastrophe, such as a nuclear war. How we might in fact try to reduce such existential risks is discussed elsewhere. My claim here is only that we – whether we’re consequentialists, deontologists, or virtue ethicists – should all agree that we should try to save the world. According to consequentialism, we should maximize the good, where this is taken to be the goodness, from an impartial perspective, of outcomes. Clearly one thing that makes an outcome good is that the people in it are doing well. There is little disagreement here. If the happiness or well-being of possible future people is just as important as that of people who already exist, and if they would have good lives, it is not hard to see how reducing existential risk is easily the most important thing in the whole world. This is for the familiar reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. There are so many possible future people that reducing existential risk is arguably the most important thing in the world, even if the well-being of these possible people were given only 0.001% as much weight as that of existing people. Even on a wholly person-affecting view – according to which there’s nothing (apart from effects on existing people) to be said in favor of creating happy people – the case for reducing existential risk is very strong. As noted in this seminal paper, this case is strengthened by the fact that there’s a good chance that many existing people will, with the aid of life-extension technology, live very long and very high quality lives. You might think what I have just argued applies to consequentialists only. There is a tendency to assume that, if an argument appeals to consequentialist considerations (the goodness of outcomes), it is irrelevant to non-consequentialists. But **that is a huge mistake.** Non-consequentialism is the view that there’s more that determines rightness than the goodness of consequences or outcomes; **it is not the view that the latter don’t matter**. Even John Rawls wrote, “All ethical doctrines worth our attention take consequences into account in judging rightness. One which did not would simply be irrational, crazy.” **Minimally plausible versions of deontology and virtue ethics must be concerned in part with promoting the good**, from an impartial point of view. They’d thus imply very strong reasons to reduce existential risk, at least when this doesn’t significantly involve doing harm to others or damaging one’s character. What’s even more surprising, perhaps, is that even if our own good (or that of those near and dear to us) has much greater weight than goodness from the impartial “point of view of the universe,” indeed even if the latter is entirely morally irrelevant, we may nonetheless have very strong reasons to reduce existential risk. Even egoism, the view that each agent should maximize her own good, might imply strong reasons to reduce existential risk. It will depend, among other things, on what one’s own good consists in. If well-being consisted in pleasure only, it is somewhat harder to argue that egoism would imply strong reasons to reduce existential risk – perhaps we could argue that one would maximize her expected hedonic well-being by funding life extension technology or by having herself cryogenically frozen at the time of her bodily death as well as giving money to reduce existential risk (so that there is a world for her to live in!). I am not sure, however, how strong the reasons to do this would be. But views which imply that, if I don’t care about other people, I have no or very little reason to help them are not even minimally plausible views (in addition to hedonistic egoism, I here have in mind views that imply that one has no reason to perform an act unless one actually desires to do that act). To be minimally plausible, egoism will need to be paired with a more sophisticated account of well-being. To see this, it is enough to consider, as Plato did, the possibility of a ring of invisibility – suppose that, while wearing it, Ayn could derive some pleasure by helping the poor, but instead could derive just a bit more by severely harming them. Hedonistic egoism would absurdly imply she should do the latter. To avoid this implication, egoists would need to build something like the meaningfulness of a life into well-being, in some robust way, where this would to a significant extent be a function of other-regarding concerns (see chapter 12 of this classic intro to ethics). But once these elements are included, we can (roughly, as above) argue that this sort of egoism will imply strong reasons to reduce existential risk. Add to all of this Samuel Scheffler’s recent intriguing arguments (quick podcast version available here) that most of what makes our lives go well would be undermined if there were no future generations of intelligent persons. On his view, my life would contain vastly less well-being if (say) a year after my death the world came to an end. So obviously if Scheffler were right I’d have very strong reason to reduce existential risk. **We should also take into account moral uncertainty.** What is it reasonable for one to do, when one is uncertain not (only) about the empirical facts, but also about the moral facts? I’ve just argued that there’s agreement among minimally plausible ethical views that we have strong reason to reduce existential risk – not only consequentialists, but also deontologists, virtue ethicists, and sophisticated egoists should agree. But even those (hedonistic egoists) who disagree should have a significant level of confidence that they are mistaken, and that one of the above views is correct. Even if they were 90% sure that their view is the correct one (and 10% sure that one of these other ones is correct), they would have pretty strong reason, from the standpoint of moral uncertainty, to reduce existential risk. Perhaps most disturbingly still, even if we are only 1% sure that the well-being of possible future people matters, it is at least arguable that, from the standpoint of moral uncertainty, reducing existential risk is the most important thing in the world. Again, this is largely for the reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. (For more on this and other related issues, see this excellent dissertation). Of course, it is uncertain whether these untold trillions would, in general, have good lives. It’s possible they’ll be miserable. It is enough for my claim that there is moral agreement in the relevant sense if, at least given certain empirical claims about what future lives would most likely be like, all minimally plausible moral views would converge on the conclusion that we should try to save the world. While there are some non-crazy views that place significantly greater moral weight on avoiding suffering than on promoting happiness, for reasons others have offered (and for independent reasons I won’t get into here unless requested to), they nonetheless seem to be fairly implausible views. And even if things did not go well for our ancestors, I am optimistic that they will overall go fantastically well for our descendants, if we allow them to. I suspect that most of us alive today – at least those of us not suffering from extreme illness or poverty – have lives that are well worth living, and that things will continue to improve. Derek Parfit, whose work has emphasized future generations as well as agreement in ethics, described our situation clearly and accurately: “We live during the hinge of history. Given the scientific and technological discoveries of the last two centuries, the world has never changed as fast. We shall soon have even greater powers to transform, not only our surroundings, but ourselves and our successors. If we act wisely in the next few centuries, humanity will survive its most dangerous and decisive period. Our descendants could, if necessary, go elsewhere, spreading through this galaxy…. Our descendants might, I believe, make the further future very good. But that good future may also depend in part on us. If our selfish recklessness ends human history, we would be acting very wrongly.” (From chapter 36 of On What Matters)

### 1NC –Innovation DA(revised)

#### NASA is stepping down from spending on space – privatization is now k2 innovation

**Cooper 15**[science writer and contributer to Inside Science, Inside Science, “Space Privatization, Tourism And Morals”, March 24, 2015, <http://www.insidescience.org/content/space-privatization-tourism-and-morals/2701?utm_source=Folwd.com>] DD MN

And **space exploration is about to pick up**, according to Impey. The original 1960s space race that spawned the Apollo missions rose out of geopolitical strife during the Cold War. **Now, the** **federal funds for space travel are drying up. In the mid-1960s the NASA budget topped out at almost 4.5 percent of the U.S. Government's budget, a number that has now shrunk to roughly 0.5 percent.**

"**NASA has very little slack in its budget for new, clever initiatives**," said Impey. "**We are** now **witnessing a transition to a more private enterprise driven space program**."

He thinks the **rise of space travel will mirror the development of the Internet**. Impey explained, that people have forgotten many of the **first Internet pioneers**—those who came even before the military began investing in the Internet. **Since** then **[the first Internet pioneers], the Internet has expanded with the** commercial sector driving much of the innovation.

**Over the next 100 years**, **we could** decide to **tackle anything** **from building a**[**space elevator**](http://en.wikipedia.org/wiki/Space_elevator)**on the moon to sending nanobot probes to another star system or** **even** constructing **a space colony**, said Impey.

#### Innovation bolsters space exploration and research – prefer an empirical study of Europe

**Hufenbach 17**[ESA Directorate of Human & Robotic Exploration, ESTEC, “Engaging the private sector in space exploration”, 2017, <https://room.eu.com/article/engaging-the-private-sector-in-space-exploration>] DD MN

Fostering open technology **innovation is** **not only about promoting broader use of the International Space Station (ISS) but could also have a** **positive impact on future missions to the Moon and Mars**. **ESA is** committed to participating in the development of a market-driven economy in low Earth orbit and here Bernard Hufenbach explains the agency’s step-wise approach to **partnering with private companies** that are ready to share risks. He also highlights pilot projects that are aiming to demonstrate their feasibility and commercial viability.

**In 2015, ESA** launched a process for setting up **strategic partnerships with the private sector** to **facilitate its exploration ambitions - and to foster growth and competitiveness of the European space and non-space industrial base.**

**The initiative is** nurturing the gradual **establishment of private sector services**, led by European companies for low Earth orbit (LEO) exploitation **in** support of **lunar exploration. It aims to strengthen the competitiveness of European industry, stimulate research and development and integrate innovative solutions into ESA space exploration missions.**

#### Space is the sole solution to climate change

**Autry 19**[American space policy expert, educator, entrepreneur and author, Foreign Policy, “SPACE RESEARCH CAN SAVE THE PLANET—AGAIN”, July 20, 2019, <https://foreignpolicy.com/2019/07/20/space-research-can-save-the-planet-again-climate-change-environment/>] DD MN

Today conservationists and other critics are more likely to see space programs as militaristic splurges that squander billions of dollars better applied to solving problems on Earth. These well-meaning complaints are misguided, however. Earth’s problems—most urgently, **climate change**—**can be solved only from space. That’s where the tools and data already being used to tackle these issues were forged and where the solutions of the future will be too.**

**Space research has** already **been critical in averting one major environmental disaster. It was NASA satellite data that revealed a frightening and growing hole in the ozone layer over the South Pole, galvanizing public concern that, in 1987, produced the Montreal Protocol: the first international agreement addressing a global environmental problem. Since then, thanks to worldwide restrictions on damaging chlorofluorocarbons, the ozone situation has stabilized, and a full planetary recovery is expected. As this case showed, space can provide the vital information** needed **to understand a problem—and** a surprising range of ways to **solve it**.

Climate change is a poster child for the critical role of space data. **Trekking across the globe to measure ice sheets with drills and gauge sea temperatures from the sides of ships is an expensive, slow, and insufficient way to assay the state of the planet. Satellites operated by NASA, the U.S. National Oceanic and Atmospheric Administration, and an increasing number of commercial firms provide a plethora of multispectral imaging and radar measurements of developments such as coral reef degradation, harmful plankton blooms, and polar bears negotiating thinning ice. Much of the technology involved in observing the Earth today was initially developed for probes sent to explore other planets in our solar system.**

Indeed, **understanding the evolution of other planets’ climates is essential for modeling possible outcomes on Earth. NASA probes revealed how, roughly 4 billion years ago, a runaway greenhouse gas syndrome turned Venus into a hot, hellish, and uninhabitable planet of acid rain. Orbiters, landers, and rovers continue to unravel the processes that transformed a once warm and wet Mars into a frigid, dry dust ball—and scientists even to conceive of future scenarios that might terraform it back into a livable planet.** **Discovering** **other worlds’ history and** **imagining their future offers important visions for climate change mitigation strategies on Earth, such as mining helium from the moon itself for future clean energy.**

#### Climate change risks ‘extinction 'domino effect’

**Flinders 18**[public research university in Adelaide, South Australia, Flinders University, “Climate change risks 'extinction domino effect'”, November 29, 2018, <https://www.sciencedaily.com/releases/2018/11/181129122506.htm>] DD MN

This would be the worst-case scenario of what scientists call **'co-extinctions', where an organism dies out because it depends on another doomed species**, with the findings published today in the journal Scientific Reports.

**Think of a plant's flower pollinated by only one species of bee -- if the bee becomes extinct, so too will the plant eventually.**

"**Even the most resilient species will inevitably fall victim to** the synergies among **extinction** drivers **as extreme stresses drive ecosystems to collapse**." says lead author Dr Giovanni Strona of the European Commission's Joint Research Centre based in Ispra in northern Italy.

Researchers from Italy and Australia simulated 2,000 'virtual earths' linking animal and plant species. Using sophisticated modelling, they subjected the virtual earths to **catastrophic environmental changes** that ultimately **annihilate**d **all life**.

**Examples** of the kinds of catastrophes they simulated **include**d runaway **global** **warming, scenarios of 'nuclear winter' following the detonation of multiple atomic bombs, and a large asteroid impact.**

"What we were trying to test is whether the variable tolerances to extreme global heating or cooling by different species are enough to explain overall extinction rates,"

"But because all species are connected in the web of life, our paper demonstrates that even the most tolerant species ultimately succumb to extinction when the less-tolerant species on which they depend disappear."

"**Failing to take into account** these **co-extinctions** therefore **underestimates the** rate and **magnitude of** **the loss of entire species from events like** **climate change by up to 10 times**," says co-author Professor Bradshaw of Flinders University in South Australia

Professor Bradshaw and Dr Strona say that their virtual scenarios warn humanity not to underestimate the impact of co-extinctions.

"Not taking into account this domino effect gives an unrealistic and exceedingly optimistic perspective about the impact of future climate change," warns Professor Bradshaw.

It can be hard to imagine how the demise of a small animal or plant matters so much, but the authors argue that tracking species up to total annihilation demonstrates how the loss of one can amplify the effects of environmental change on the remainder.

"Another really important discovery was that in the case of global warming in particular, the combination of intolerance to heat combined with co-extinctions mean that 5-6 degrees of average warming globally is enough to wipe out most life on the planet," says Dr Strona.

Professor Bradshaw further warns that their work shows how **climate warming creates extinction cascades in the worst possible way, when compared to random extinctions or even from the stresses arising from nuclear winter.**

### Turn – Growth/Poverty

#### Capitalism is key to growth – and also reductions in poverty.

Skarbek, 10 – Research Fellow at the Independent Institute, founding Director of the Institute's Center on Entrepreneurial Innovation (COEI) and the COEI Government Cost Calculator, and Lecturer in the Department of Political Economy at King's College in London, England. She received her Ph.D. in economics from George Mason University, and she has been Assistant Professor of Economics at San Jose State University and an F.A. Hayek Scholar, and she is the recipient of the Don Lavoie Memorial Award.

Emily C. Skarbek, “Capitalism and Economic Growth,” Independent Institute. April 15, 2010. <https://www.independent.org/issues/article.asp?id=2769>

When the current administration talks of entrepreneurship, they speak of politically favored businesses and privileged recipients of the taxpayers’ dollars. To be clear, that is not entrepreneurship. It has become conventional to say that those who openly embrace capitalism, free markets and free trade are dogmatic, ideologues, idealistic, or market fundamentalists. And if you look to the media and our leaders, you get the impression that being in favor of free markets is somehow an unreasonable position.

Unless one is ashamed of unprecedented increases in income, rising life expectancy, greater education, and more political freedom, there is no reason to be a fair-weather fan of capitalism. Sprawling free markets in countries that became more capitalist over the last 25 years have meant many more people enjoy improvements in well being and opportunities to advance human capabilities.

There is no evidence that countries that eschewed freer markets and embraced substantially greater state control performed better on any of these major indicators. On the contrary, those countries that adopt increased taxation, increased regulation, fiscal mismanagement and enormous public debt have performed demonstrably worse.

From a global perspective, we have witnessed remarkable progress of mankind through the increased acceptance of free market policies in both rich and poor countries. Before the industrial revolution, 80% of the world’s population lived in abject poverty. By 1980, that number has fallen to 34.8% and by 2000, less than 20% of the population lives on less than $1 a day. In five years, the number is expected to fall to 10% if free trade is allowed to flourish.

In just the past 25 years increased private ownership, increased free trade, and lower taxes all came at the hands of politicians like Deng Xiaoping in China, Margaret Thatcher in England, and Ronald Reagan in United States. In the years following the adoption of these policies by these global leaders, per capita income nearly doubled from 1980 to 2005; Tariffs fell and trade increased; Schooling and life expectancy grew rapidly, while infant mortality and poverty fell just as fast.

In the average country that became more capitalist over the last 25 years, the average citizen gained a 43% increase in income, nearly half a decade in life expectancy, and a 2-year increase in the average years of schooling. In my lifetime alone, freer markets have improved the lives of billions of people from all walks of life.

When we look back at our own history, the tremendous economic growth that Americans experienced from the time of the original Tea Party up to 1914 was the result of economic freedom from government regulation, open boarders for free immigration, and very few trade restrictions on the global flow of goods, services, and capital. Anyone could get on a boat, land on Ellis Island and become an immigrant and this benefited both domestic Americans and the immigrant alike. Business and labor were free to be entrepreneurial—and entrepreneurship created wealth. But we don’t want wealth for wealth’s sake. Wealth allows for the improvement of the human condition.

For example, in 1905, our average life expectancy in the U.S. was 47. Today it is 78. A hundred years ago only 14% of homes had a bathtub; 8% had a phone; 95% of all births took place at home; most women washed their hair once a month; and the average worker made about $300 per year.

As recent as 1984, it took the average American wage earner 456 hours of labor to earn enough to purchase a cellphone. Today, it takes the average American 4 hours. A computer has fallen from costing 435 hours of labor to less than 20. None of this accounts for the tremendous improvements in technological capacity. There are several reasons that the costs of goods have dropped so drastically, but perhaps the biggest is increased international trade.

Simply put, the free market means the poor are less poor. Globalization extends and deepens a capitalist system that has for generations been lifting American living standards—for high-income households, of course, but for low-income ones as well. When the world embraces free market reforms, the world economy expanded greatly, the quality of life improves sharply for billions of people, and dire poverty was substantially scaled back. This is not a coincidence.

It is a well-established fact that when people are free to buy from, sell to, and invest with one another as they choose, they can achieve far more than when governments attempt to control economic decisions. Widening the circle of people with whom we transact—including across political borders—brings benefits to consumers in the form of lower prices, greater variety, and better quality, and it allows companies to reap the benefits of innovation, specialization, and economies of scale that larger markets bring. Free markets are essential to prosperity, and expanding free markets as much as possible enhances that prosperity.

Voluntary economic exchange is inherently fair and does not justify government intervention. When two free people come together on terms they have agreed upon to exchange peacefully, both benefit. Government intervention in voluntary economic exchange on behalf of some citizens at the expense of others is inherently unfair. One person is coerced in order to privilege another. It really is that simple.

When goods, services, labor and capital flow freely across U.S. borders, Americans can take full advantage of the opportunities of the international marketplace. They can buy the best or least expensive goods and services the world has to offer; they can sell to the most promising markets; they can choose among the best investment opportunities; and they can tap into the worldwide pool of capital. Study after study has shown that countries that are more open to the global economy grow faster and achieve higher incomes than those that are relatively closed. This is capitalism.

Growth is not guaranteed. It seems obvious that the central challenges facing America have to do with the with predatory regulatory and tax policies conducted by governments domestic and abroad. From an economic perspective, then, the case for unilateral trade liberalization—that is reducing our own trade barriers and subsidies without preconditions or reciprocal commitments from other countries—is the best policy to promote peace and prosperity globally.

Politically, however, the concentrated and organized beneficiaries of protectionism are powerful relative to the much larger, disorganized, beneficiaries of free trade. Politicians tend to be most responsive to the loudest interest groups and are therefore inclined to view free trade unfavorably. But we as Americans must be clear—capitalism is not evil. It has done more good for more people than any acts of state, any stimulus spending, any health program or welfare initiative. Americans can no longer afford to fear freedom.

Finally, acknowledging the relationship between free markets and economic prosperity does not make someone “dogmatic”. It is unreasonable to continue to ignore these facts. Capitalism’s superiority for economic growth and development deserves the unqualified support of everyone who believe that wealth is better than poverty, life is better than death, and liberty is better than oppression.

#### That outweighs---and turns sustainability.

Smith ’18 – assistant professor of finance at Stony Brook University

Noah. September 19. “Saving the Planet Doesn’t Mean Killing Economic Growth” <https://www.bloomberg.com/opinion/articles/2018-09-19/saving-the-planet-doesn-t-mean-killing-economic-growth>

In the 19th and 20th centuries, a few countries got fabulously rich. These included most of Europe, parts of East Asia, some small oil producing states and parts of the former British Empire. In recent decades, more of the world — large parts of China, portions of India, Southeast Asia and part of Latin America — have joined the rich world, thanks to an unprecedented explosion of global growth. But for large swathes of the world, life remains a grinding daily struggle. Women in poor countries spend hours every day carrying water. Hundreds of millions of people contract malaria every year. Almost a billion people still defecate outdoors.

The obvious solution to lifting these people out of poverty — without inflicting poverty on some of those who have already escaped it — is economic growth. But there is a small but vocal group of environmentalists telling us that growth is no longer possible — that unless growth ends, climate change and other environmental impacts will destroy civilization. Writing in Foreign Policy, anthropologist Jason Hickel declares:

Once we reach the limits of efficiency, pursuing any degree of economic growth drives resource use back up … Ultimately, bringing our civilization back within planetary boundaries is going to require that we liberate ourselves from our dependence on economic growth—starting with rich nations.

Hickel cites analyses by the United Nations Environment Program and others showing that even big improvements in resource efficiency, encouraged by very high carbon taxes, will be unable to halt overall resource use or global carbon emissions. But this evidence doesn’t support Hickel’s conclusions, which rely on several misconceptions about the nature and the importance of growth.

First, Hickel doesn’t seem to grapple with the fact that most economic growth now happens in countries that are relatively poor. The International Monetary Fund estimates that from 2010 to 2015, emerging markets and developing countries were responsible for about 70 percent of global output and consumption growth, while advanced economies were responsible for the rest. The World Bank’s forecasts for 2017-2019 are similar:

China’s contribution to global growth will be double that of the U.S., and India’s will be larger than that of the entire euro zone.

The same is true of greenhouse gas emissions. Since about 1990, emissions from the U.S. and EU have fallen, while emissions from developing countries, especially China and India, have exploded:

In 2017, the International Energy Agency estimated that the growth in energy-related carbon emissions in China and the rest of developing Asia was more than five times the growth in the European Union, while U.S. emissions declined.

In other words, if Hickel and others stop economic growth, it won’t be rich countries that bear the brunt of the change. It will be poor and middle-income countries like India and China. African countries that are still desperately poor will not even get their chance.

Hickel tries to avoid this outcome by declaring that “We can improve people’s lives right now simply by sharing what we already have more fairly,” but even total global redistribution — which is, of course, far outside of the realm of political and logistical possibility — would afford the average person a standard of living only slightly better than that now enjoyed in China. A realistic amount of redistribution would do far less for the global poor — meaning they’d be the ones on the hook in a zero-growth world.

The second thing that Hickel leaves out is the connection between growth and fertility. Once countries pass per-capita gross domestic product of $10,000, fertility rates rapidly drop to or below the replacement rate of 2.1 children per woman. Halting growth now would leave most African countries trapped well below that magic level, meaning their population growth — and thus, the world’s population growth — would continue without limit. That in turn would eventually overwhelm the world’s resources — if not in terms of the climate, then certainly in terms of fresh water and food.

Fortunately, Hickel and the zero-growth environmentalists ignore a third crucial factor — technology. In rich countries, growth has shifted somewhat from physical things to digital services, which require much less energy consumption. Even more importantly, green energy, especially solar power, has progressed by leaps and bounds:

In many regions, wind and solar are already cheaper than coal power, and electric vehicles are rapidly becoming more common. This incredible technological progress means that rich countries could see a renewable-powered electrical grid and fully electrified transportation before the century is out. More importantly, cheap renewable energy means that poor countries in Africa and South Asia will be able to follow a different, cleaner path to industrialization without sacrificing living standards. Ultimately, technological progress will be much more important for limiting global resource use than the energy-efficiency measures Hickel considers.

In the movie “Avengers: Infinity War,” the supervillain Thanos kills off half the universe in a misguided attempt to prevent resource overuse. The zero-growth environmentalists are embracing a solution only slightly less destructive. Thanos’s better course would have been to use his vast powers to provide the universe with renewable energy technology that would let them get rich — and lower their fertility rates — without destroying the environment. Environmentalists in the real world should take that approach as well.

### World Improving

#### Free market capitalism has drastically improved the world.

Empirical education in child mortality and increase in life expectancy, development of tech innovation in the private market k2 medical advances, food production increased with agriculture tech green revolution, also decreased armed conflicts

Feyman 14 Yevgeniy [adjunct fellow at the Manhattan Institute. He writes on health care policy, entitlement reform, and the Affordable Care Act. His research has focused on a variety of topics, including the physician shortage, the cost of health care reform, and consumer-directed health care. Feyman was previously the deputy director of health policy at the Manhattan Institute and is currently a research assistant in the department of health policy at the Harvard T.H. Chan School of Public Health] “The Golden Age Is Now” May 23, 2014. IB

In How Much Have Global Problems Cost the World? Lomborg and a group of economists conclude that, with a few exceptions, the world is richer, freer, healthier, and smarter than it’s ever been. These gains have coincided with the near-universal rejection of statism and the flourishing of capitalist principles. At a time when political figures such as New York City mayor Bill de Blasio and religious leaders such as Pope Francis frequently remind us about the evils of unfettered capitalism, this is a worthwhile message. The doubling of human life expectancy is one of the most remarkable achievements of the past century. Consider, Lomborg writes, that “the twentieth century saw life expectancy rise by about 3 months for every calendar year.” The average child in 1900 could expect to live to just 32 years old; now that same child should make it to 70. This increase came during a century when worldwide economic output, driven by the spread of capitalism and freedom, grew by more than 4,000 percent. These gains occurred in developed and developing countries alike; among men and women; and even in a sense among children, as child mortality plummeted. Why are we living so much longer? Massive improvements in public health certainly played an important role. The World Health Organization’s global vaccination efforts essentially eradicated smallpox. But this would have been impossible without the innovative methods of vaccine preservation developed in the private sector by British scientist Leslie Collier. Oral rehydration therapies and antibiotics have also been instrumental in reducing child mortality. Simply put, technological progress is the key to these gains—and market economies have liberated, and rewarded, technological innovation. People are not just living longer, but better—sometimes with government’s help, and sometimes despite it. Even people in the developing countries of Africa and Latin America are better educated and better fed than ever before. Hundreds of thousands of children who would have died during previous eras due to malnutrition are alive today. Here, we can thank massive advancements in agricultural production unleashed by the free market. In the 1960s, privately funded agricultural researchers bred new, high-yield strains of corn, wheat, and various other crops thanks to advances in molecular genetics. Globalization helped spread these technologies to developing countries, which used them not only to feed their people, but also to become export powerhouses. This so-called “green revolution” reinforced both the educational progress (properly nourished children tend to learn more) and the life-expectancy gains (better nutrition leads to better health) of the twentieth century. These children live in a world with fewer armed conflicts, netting what the authors call a “peace dividend.” Globalization and trade liberalization have surely contributed to this more peaceful world (on aggregate). An interdependent global economy makes war costly. Of course, problems remain. As Lomborg points out, most foreign aid likely does little to boost economic welfare, yet hundreds of billions of dollars in “development assistance” continue to flow every year from developed countries to the developing world. Moreover, climate change is widely projected to intensify in the second half of the twenty-first century, and will carry with it a significant economic cost. But those familiar with the prior work of the “skeptical environmentalist” understand that ameliorating these effects over time could prove wasteful. Lomborg notes that the latest research on climate change estimates a net cost of 0.2 to 2 percent of GDP from 2055 to 2080. The same report points out that in 2030, mitigation costs may be as high as 4 percent of GDP. Perhaps directing mitigation funding to other priorities—curing AIDS for instance—would be a better use of the resources. Lomborg’s main message? Ignore those pining for the “good old days.” Thanks to the immense gains of the past century, there has never been a better time to be alive.

#### We turn poverty.

Horwitz 16 Steven Horwitz is the Schnatter Distinguished Professor of Free Enterprise in the Department of Economics at Ball State University, where he also is a Fellow at the John H. Schnatter Institute for Entrepreneurship and Free Enterprise. He is the author of Hayek’s Modern Family: Classical Liberalism and the Evolution of Social Institutions. “Capitalism Is Good for the Poor” June 09, 2016. IB

Critics frequently accuse markets and capitalism of making life worse for the poor. This refrain is certainly common in the halls of left-leaning academia as well as in broader intellectual circles. But like so many other criticisms of capitalism, this one ignores the very real, and very available, facts of history. Nothing has done more to lift humanity out of poverty than the market economy. This claim is true whether we are looking at a time span of decades or of centuries. The number of people worldwide living on less than about two dollars per day today is less than half of what it was in 1990. The biggest gains in the fight against poverty have occurred in countries that have opened up their markets, such as China and India. If we look over the longer historical period, we can see that the trends today are just the continuation of capitalism’s victories in beating back poverty. For most of human history, we lived in a world of a few haves and lots of have-nots. That slowly began to change with the advent of capitalism and the Industrial Revolution. As economic growth took off and spread throughout the population, it created our own world in the West in which there are a whole bunch of haves and a few have-more-and-betters. For example, the percentage of American households below the poverty line who have basic appliances has grown steadily over the last few decades, with poor families in 2005 being more likely to own things like a clothes dryer, dishwasher, refrigerator, or air conditioner than the average household was in 1971. And consumer items that didn’t even exist back then, such as cell phones, were owned by half of poor households in 2005 and are owned by a substantial majority of them today. Capitalism has also made poor people’s lives far better by reducing infant and child mortality rates, not to mention maternal death rates during childbirth, and by extending life expectancies by decades. Consider, too, the way capitalism’s engine of growth has enabled the planet to sustain almost 7 billion people, compared to 1 billion in 1800. As Deirdre McCloskey has noted, if you multiply the gains in consumption to the average human by the gain in life expectancy worldwide by 7 (for 7 billion as compared to 1 billion people), humanity as a whole is better off by a factor of around 120. That’s not 120 percent better off, but 120 times better off since 1800. The competitive market process has also made education, art, and culture available to more and more people. Even the poorest of Americans, not to mention many of the global poor, have access through the Internet and TV to concerts, books, and works of art that were exclusively the province of the wealthy for centuries. And in the wealthiest countries, the dynamics of capitalism have begun to change the very nature of work. Where once humans toiled for 14 hours per day at backbreaking outdoor labor, now an increasing number of us work inside in climate-controlled comfort. Our workday and workweek have shrunk thanks to the much higher value of labor that comes from working with productive capital. We spend a much smaller percentage of our lives working for pay, whether we’re rich or poor. And even with economic change, the incomes of the poor are much less variable, as they are not linked to the unpredictable changes in weather that are part and parcel of a predominantly agricultural economy long since disappeared. Think of it this way: the fabulously wealthy kings of old had servants attending to their every need, but an impacted tooth would likely kill them. The poor in largely capitalist countries have access to a quality of medical care and a variety and quality of food that the ancient kings could only dream of. Consider, too, that the working poor of London 100 years ago were, at best, able to split a pound of meat per week among all of their children, which were greater in number than the two or three of today. In addition, the whole family ate meat once a week on Sunday, the one day the man of the household was home for dinner. That was meat for a week. Compare that to today, when we worry that poor Americans are too easily able to afford a meal with a quarter pound of meat in it every single day for less than an hour’s labor. Even if you think that capitalism has made poor people overweight, that’s a major accomplishment compared to the precapitalist norm of constant malnutrition and the struggle even 100 years ago for the working poor to get enough calories. The reality is that the rich have always lived well historically, as for centuries they could commandeer human labor to attend to their every need. In a precapitalist world, the poor had no hope of upward mobility or of relief from the endless physical drudgery that barely kept them alive. Today, the poor in capitalist countries live like kings, thanks mostly to the freeing of labor and the ability to accumulate capital that makes that labor more productive and enriches even the poorest. The falling cost of what were once luxuries and are now necessities, driven by the competitive market and its profit and loss signals, has brought labor-saving machines to the masses. When profit-seeking and innovation became acceptable behavior for the bourgeoisie, the horn of plenty brought forth its bounty, and even the poorest shared in that wealth. Once people no longer needed permission to innovate, and once the value of new inventions was judged by the improvements they made to the lives of the masses in the form of profit and loss, the poor began to live lives of comfort and dignity.