# ECONOMIC GROWTH CORE

# Economic Growth Bad

## Growth Unsustainable

### Unsustainable

#### Growth is unsustainable and inevitably results in environmental collapse and extinction—catastrophic tipping points are coming soon. Only immediately putting the brakes on economic growth can solve

Smith, UCLA history PhD, 2013 (Richard, “’Sleepwalking to Extinction’: Capitalism and the Destruction of Life and Earth,” Common Dreams, 11/15/13, <http://www.commondreams.org/views/2013/11/15/sleepwalking-extinction-capitalism-and-destruction-life-and-earth>, IC)

For all the climate summits, promises of “voluntary restraint,” carbon trading and carbon taxes, the growth of CO2 emissions and atmospheric concentrations have not just been unceasing, they have been accelerating in what scientists have dubbed the “Keeling Curve.” In the early 1960s, CO2 ppm concentrations in the atmosphere grew by 0.7ppm per year. In recent decades, especially as China has industrialized, the growth rate has tripled to 2.1 ppm per year. In just the first 17 weeks of 2013, CO2 levels jumped by 2.74 ppm compared to last year. Carbon concentrations have not been this high since the Pliocene period, between 3m and 5m years ago, when global average temperatures were 3˚C or 4˚C hotter than today, the Arctic was ice-free, sea levels were about 40m higher and jungles covered northern Canada; Florida, meanwhile, was under water along with other coastal locations we now call New York, London, Shanghai, Hong Kong, Sydney and many others. Crossing this threshold has fuelled fears that we are fast approaching converging “tipping points” — melting of the subarctic tundra or the thawing and releasing of the vast quantities of methane in the Arctic sea bottom — that will accelerate global warming beyond any human capacity to stop it. “I wish it weren’t true, but it looks like the world is going to blow through the 400 ppm level without losing a beat,” said Scripps Institute geochemist Ralph Keeling, son of Charles Keeling. “At this pace, we’ll hit 450 ppm within a few decades.” “It feels like the inevitable march toward disaster,” said Maureen E. Raymo, a scientist at the Lamont-Doherty Earth Observatory, a unit of Columbia University. Why are we marching toward disaster, “sleepwalking to extinction” as the Guardian’s George Monbiot once put it? Why can’t we slam on the brakes before we ride off the cliff to collapse? I’m going to argue here that the problem is rooted in the requirement of capitalist production. Large corporations can’t help themselves; they can’t change or change very much. So long as we live under this corporate capitalist system we have little choice but to go along in this destruction, to keep pouring on the gas instead of slamming on the brakes, and that the only alternative — impossible as this may seem right now — is to overthrow this global economic system and all of the governments of the 1% that prop it up and replace them with a global economic democracy, a radical bottom-up political democracy, an eco-socialist civilization. Although we are fast approaching the precipice of ecological collapse, the means to derail this train wreck are in the making as, around the world we are witnessing a near simultaneous global mass democratic “awakening” — as the Brazilians call it — from Tahir Square to Zucotti Park, from Athens to Istanbul to Beijing and beyond such as the world has never seen. To be sure, like Occupy Wall Street, these movements are still inchoate, are still mainly protesting what’s wrong rather than fighting for an alternative social order. Like Occupy, they have yet to clearly and robustly answer that crucial question: “Don’t like capitalism, what’s your alternative?” Yet they are working on it, and they are for the most part instinctively and radically democratic; in this lies our hope. Capitalism is, overwhelmingly, the main driver of planetary ecological collapse From climate change to natural resource overconsumption to pollution, the engine that has powered three centuries of accelerating economic development, revolutionizing technology, science, culture and human life itself is, today, a roaring out-of-control locomotive mowing down continents of forests, sweeping oceans of life, clawing out mountains of minerals, pumping out lakes of fuels, devouring the planet’s last accessible natural resources to turn them into “product,” while destroying fragile global ecologies built up over eons of time. Between 1950 and 2000 the global human population more than doubled from 2.5 to 6 billion. But in these same decades, consumption of major natural resources soared more than sixfold on average, some much more. Natural gas consumption grew nearly twelvefold, bauxite (aluminum ore) fifteenfold. And so on. At current rates, Harvard biologist E.O. Wilson says that “half the world’s great forests have already been leveled and half the world’s plant and animal species may be gone by the end of this century.” Corporations aren’t necessarily evil, though plenty are diabolically evil, but they can’t help themselves. They’re just doing what they’re supposed to do for the benefit of their shareholders. Shell Oil can’t help but loot Nigeria and the Arctic and cook the climate. That’s what shareholders demand. BHP Billiton, Rio Tinto and other mining giants can’t resist mining Australia’s abundant coal and exporting it to China and India. Mining accounts for 19% of Australia’s GDP and substantial employment even as coal combustion is the single worst driver of global warming. IKEA can’t help but level the forests of Siberia and Malaysia to feed the Chinese mills building their flimsy disposable furniture (IKEA is the third largest consumer of lumber in the world). Apple can’t help it if the cost of extracting the “rare earths” it needs to make millions of new iThings each year is the destruction of the eastern Congo — violence, rape, slavery, forced induction of child soldiers, along with poisoning local waterways. Monsanto and DuPont and Syngenta and Bayer Crop Science have no choice but to wipe out bees, butterflies, birds, small farmers and extinguish crop diversity to secure their grip on the world’s food supply while drenching the planet in their Roundups and Atrazines and neonicotinoids. This is how giant corporations are wiping out life on earth in the course of a routine business day. And the bigger the corporations grow, the worse the problems become. In Adam Smith’s day, when the first factories and mills produced hat pins and iron tools and rolls of cloth by the thousands, capitalist freedom to make whatever they wanted didn’t much matter because they didn’t have much impact on the global environment. But today, when everything is produced in the millions and billions, then trashed today and reproduced all over again tomorrow, when the planet is looted and polluted to support all this frantic and senseless growth, it matters — a lot. The world’s climate scientists tell us we’re facing a planetary emergency. They’ve been telling us since the 1990s that if we don’t cut global fossil fuel greenhouse gas emissions by 80-90% below 1990 levels by 2050 we will cross critical tipping points and global warming will accelerate beyond any human power to contain it. Yet despite all the ringing alarm bells, no corporation and no government can oppose growth and, instead, every capitalist government in the world is putting pedal to the metal to accelerate growth, to drive us full throttle off the cliff to collapse. Marxists have never had a better argument against capitalism than this inescapable and apocalyptic “contradiction.” Solutions to the ecological crisis are blindingly obvious but we can’t take the necessary steps to prevent ecological collapse because, so long as we live under capitalism, economic growth has to take priority over ecological concerns. We all know what we have to do: suppress greenhouse gas emissions. Stop over-consuming natural resources. Stop the senseless pollution of the earth, waters, and atmosphere with toxic chemicals. Stop producing waste that can’t be recycled by nature. Stop the destruction of biological diversity and ensure the rights of other species to flourish. We don’t need any new technological breakthroughs to solve these problems. Mostly, we just stop doing what we’re doing. But we can’t stop because we’re all locked into an economic system in which companies have to grow to compete and reward their shareholders and because we all need the jobs. James Hansen, the world’s preeminent climate scientist, has argued that to save the humans: “Coal emissions must be phased out as rapidly as possible or global climate disasters will be a dead certainty ... Yes, [coal, oil, gas] most of the fossil fuels must be left in the ground. That is the explicit message that the science provides. […] Humanity treads today on a slippery slope. As we continue to pump greenhouse gases in the air, we move onto a steeper, even more slippery incline. We seem oblivious to the danger — unaware of how close we may be to a situation in which a catastrophic slip becomes practically unavoidable, a slip where we suddenly lose all control and are pulled into a torrential stream that hurls us over a precipice to our demise.” But how can we do this under capitalism? After his climate negotiators stonewalled calls for binding limits on CO2 emissions at Copenhagen, Cancun, Cape Town and Doha, President Obama is now trying to salvage his environmental “legacy” by ordering his EPA to impose “tough” new emissions limits on existing power plants, especially coal-fired plants. But this won’t salvage his legacy or, more importantly, his daughters’ futures because how much difference would it make, really, if every coal-fired power plant in the U.S. shut down tomorrow when U.S. coal producers are free to export their coal to China, which they are doing, and when China is building another coal-fired power plan every week? The atmosphere doesn’t care where the coal is burned. It only cares how much is burned. Yet how could Obama tell American mining companies to stop mining coal? This would be tantamount to socialism. But if we do not stop mining and burning coal, capitalist freedom and private property is the least we’ll have to worry about. Same with Obama’s “tough” new fuel economy standards. In August 2012 Obama boasted that his new Corporate Average Fuel Economy (CAFE) standards would “double fuel efficiency” over the next 13 years to 54.5 miles per gallon by 2025, up from 28.6 mpg at present — cutting vehicle CO2 emissions in half, so helping enormously to “save the planet.” But as the Center for Biological Diversity and other critics have noted, Obama was lying, as usual. First, his so-called “tough” new CAFE standards were so full of loopholes, negotiated with Detroit, that they actually encourage more gas-guzzling, not less. That’s because the standards are based on a sliding scale according to “vehicle footprints” — the bigger the car, the less mileage it has to get to meet its “standard.” So in fact Obama’s “tough” standards are (surprise) custom designed to promote what Detroit does best — produce giant Sequoias, mountainous Denalis, Sierras, Yukons, Tundras and Ticonderogas, Ram Chargers and Ford F series luxury trucks, grossly obese Cadillac Escalades, soccer-kid Suburbans, even 8,000 (!) pound Ford Excursions — and let these gross gas hogs meet the “fleet standard.” These cars and “light” trucks are among the biggest selling vehicles in America today (GM’s Sierra is #1) and they get worse gas mileage than American cars and trucks half a century ago. Cadillac’s current Escalade gets worse mileage than its chrome bedecked tail fin-festooned land yachts of the mid-1950s! Little wonder Detroit applauded Obama’s new CAFE standards instead of damning them as usual. Secondly, what would it matter even if Obama’s new CAFE standards actually did double fleet mileage — when American and global vehicle fleets are growing exponentially? In 1950 Americans had one car for every three people. Today we have 1.2 cars for every American. In 1950 when there were about 2.6 billion humans on the planet, there were 53 million cars on the world’s roads — about one for every 50 persons. Today, there are 7 billion people but more than 1 billion cars and industry forecasters expect there will be 2 to 2.5 billion cars on the world’s roads by mid-century. China alone is expected to have a billion. So, at the end of the day, incremental half measures like CAFE standards can’t stop rising GHG missions. Barring some technical miracle, the only way to cut vehicle emissions is to just stop making them — drastically suppress vehicle production, especially of the worst gas hogs. In theory, Obama could simply order GM to stop building its humongous gas guzzlers and switch to producing small economy cars. After all, the federal government owns the company! But of course, how could he do any such thing? Detroit lives by the mantra “big car big profit, small car small profit.” Since Detroit has never been able to compete against the Japanese and Germans in the small car market, which is already glutted and nearly profitless everywhere, such an order would only doom GM to failure, if not bankruptcy (again) and throw masses of workers onto the unemployment lines. So given capitalism, Obama is, in fact, powerless. He’s locked in to promoting the endless growth of vehicle production, even of the worst polluters — and lying about it all to the public to try to patch up his pathetic “legacy.” And yet, if we don’t suppress vehicle production, how can we stop rising CO2 emissions? In the wake of the failure of climate negotiators from Kyoto to Doha to agree on binding limits on GHG emissions, exasperated British climate scientists Kevin Anderson and Alice Bows at the Tyndall Centre, Britain’s leading climate change research center, wrote in September 2012 that we need an entirely new paradigm: Government policies must “radically change” if “dangerous” climate change is to be avoided “We urgently need to acknowledge that the development needs of many countries leave the rich western nations with little choice but to immediately and severely curb their greenhouse gas emissions... [The] misguided belief that commitments to avoid warming of 2˚C can still be realized with incremental adjustments to economic incentives. A carbon tax here, a little emissions trading there and the odd voluntary agreement thrown in for good measure will not be sufficient ... long-term end-point targets (for example, 80% by 2050) have no scientific basis. What governs future global temperatures and other adverse climate impacts are the emissions from yesterday, today and those released in the next few years.” And not just scientists. In its latest world energy forecast released on November 12, 2012, the International Energy Agency (IEA) warns that despite the bonanza of fossil fuels now made possible by fracking, horizontal and deepwater drilling, we can’t consume them if we want to save the humans: “The climate goal of limiting global warming to 2˚C is becoming more difficult and costly with each year that passes... no more than one-third of proven reserves of fossil fuels can be consumed prior to 2050 if the world is to achieve the 2˚C goal...” Of course the science could be wrong about this. But so far climate scientists have consistently underestimated the speed and ferocity of global warming, and even prominent climate change deniers have folded their cards. Still, it’s one thing for James Hansen or Bill McKibben to say we need to “leave the coal in the hole, the oil in the soil, the gas under the grass,” to call for “severe curbs” in GHG emissions — in the abstract. But think about what this means in our capitalist economy. Most of us, even passionate environmental activists, don’t really want to face up to the economic implications of the science we defend. That’s why, if you listen to environmentalists like Bill McKibben for example, you will get the impression that global warming is mainly driven by fossi- fuel-powered electric power plants, so if we just “switch to renewables” this will solve the main problem and we can carry on with life more or less as we do now. Indeed, “green capitalism” enthusiasts like Thomas Friedman and the union-backed “green jobs” lobby look to renewable energy, electric cars and such as “the next great engine of industrial growth” — the perfect win-win solution. This is a not a solution. This is a delusion: greenhouse gasses are produced across the economy not just by power plants. Globally, fossil-fuel-powered electricity generation accounts for 17% of GHG emissions, heating accounts for 5%, miscellaneous “other” fuel combustion 8.6%, industry 14.7%, industrial processes another 4.3%, transportation 14.3%, agriculture 13.6%, land use changes (mainly deforestation) 12.2%. This means, for a start, that even if we immediately replaced every fossil-fuel-powered electric generating plant on the planet with 100% renewable solar, wind and water power, this would only reduce global GHG emissions by around 17%. What this means is that, far from launching a new green-energy-powered “industrial growth” boom, barring some tech-fix miracle, the only way to impose “immediate and severe curbs” on fossil fuel production/consumption would be to impose an EMERGENCY CONTRACTION in the industrialized countries: drastically retrench and in some cases shut down industries, even entire sectors, across the economy and around the planet — not just fossil fuel producers but all the industries that consume them and produce GHG emissions — autos, trucking, aircraft, airlines, shipping and cruise lines, construction, chemicals, plastics, synthetic fabrics, cosmetics, synthetic fiber and fabrics, synthetic fertilizer and agribusiness CAFO operations. Of course, no one wants to hear this because, given capitalism, this would unavoidably mean mass bankruptcies, global economic collapse, depression and mass unemployment around the world. That’s why in April 2013, in laying the political groundwork for his approval of the XL pipeline in some form, President Obama said “the politics of this are tough.” The earth’s temperature probably isn’t the “number one concern” for workers who haven’t seen a raise in a decade; have an underwater mortgage; are spending $40 to fill their gas tank, can’t afford a hybrid car; and face other challenges.” Obama wants to save the planet but given capitalism his “number one concern” has to be growing the economy, growing jobs. Given capitalism — today, tomorrow, next year and every year — economic growth will always be the overriding priority ... till we barrel right off the cliff to collapse.

#### The system is unustainable – nothing short of full economic transition solves

Smith, UCLA history PhD, 2013 (Richard, “’Sleepwalking to Extinction’: Capitalism and the Destruction of Life and Earth,” Common Dreams, 11/15/13, <http://www.commondreams.org/views/2013/11/15/sleepwalking-extinction-capitalism-and-destruction-life-and-earth>, IC)

There’s no technical solution to this problem and no market solution either. In a very few cases — electricity generation is the main one — a broad shift to renewables could indeed sharply reduce fossil fuel emissions in that sector. But if we just use “clean” “green” energy to power more growth, consume ever more natural resources, then we solve nothing and would still be headed to collapse. Producing millions of electric cars instead of millions of gasoline-powered cars, as I explained elsewhere, would be just as ecologically destructive and polluting, if in somewhat different ways, even if they were all run on solar power. Substituting biofuels for fossil fuels in transportation just creates different but no less environmentally-destructive problems: converting farm land to raise biofuel feedstock pits food production against fuels. Converting rainforests, peatlands, savannas or grasslands to produce biofuels releases more CO2 into the atmosphere than the fossil fuels they replace and accelerates species extinction. More industrial farming means more demand for water, synthetic fertilizers and pesticides. And so on. Cap and trade schemes can’t cut fossil fuel emissions because business understands, even if some environmentalists do not, that “dematerialization” is a fantasy, that there’s no win-win tech solution, that capping emissions means cutting growth. Since cutting growth is unacceptable to business, labor and governments, cap and trade has been abandoned everywhere. Carbon taxes can’t stop global warming either because they do not cap emissions. That’s why fossil fuel execs like Rex Tillerson, CEO of ExxonMobil (the largest private oil company in the world) and Paul Anderson, CEO of Duke Energy (the largest electric utility in the U.S.) support carbon taxes. They understand that carbon taxes would add something to the cost of doing business, like other taxes, but they pose no limit, no “cap” on growth. ExxonMobil predicts that, carbon tax or no carbon tax, by 2040 global demand for energy is going to grow by 35%, 65% in the developing world and nearly all of this is going to be supplied by fossil fuels. ExxonMobil is not looking to “leave the oil in the soil” as a favor to Bill McKibben and the humans. ExxonMobil is looking to pump it and burn it all as fast as possible to enrich its shareholders. Hansen, McKibben, Obama — and most of us really — don’t want to face up to the economic implications of the need to put the brakes on growth and fossil fuel-based overconsumption. We all “need” to live in denial, and believe in delusions that carbon taxes or some tech fix will save us because we all know that capitalism has to grow or we’ll all be out of work. And the thought of replacing capitalism seems so impossible, especially given the powers arrayed against change. But what’s the alternative? In the not-so-distant future, this is all going to come to a screeching halt one way or another — either we seize hold of this out-of-control locomotive, or we ride this train right off the cliff to collapse. Emergency Contraction or Global Ecological Collapse? If there’s no market mechanism to stop plundering the planet then, again, what alternative is there but to impose an emergency contraction on resource consumption? This doesn’t mean we would have to de-industrialize and go back to riding horses and living in log cabins. But it does mean that we would have to abandon the “consumer economy” — shut down all kinds of unnecessary, wasteful and polluting industries from junkfood to cruise ships, disposable Pampers to disposable H&M clothes, disposable IKEA furniture, endless new model cars, phones, electronic games, the lot. Plus all the banking, advertising, junk mail, most retail, etc. We would have completely redesign production to replace “fast junk food” with healthy, nutritious, fresh “slow food,” replace “fast fashion” with “slow fashion,” bring back mending, alterations and local tailors and shoe repairmen. We would have to completely redesign production of appliances, electronics, housewares, furniture and so on to be as durable and long-lived as possible. Bring back appliance repairmen and such. We would have to abolish the throwaway disposables industries, the packaging and plastic bag industrial complex, bring back refillable bottles and the like. We would have to design and build housing to last for centuries, to be as energy efficient as possible, to be reconfigurable, and shareable. We would have to vastly expand public transportation to curb vehicle use but also build those we do need to last and be shareable like Zipcar or Paris’ municipally-owned “Autolib” shared electric cars. These are the sorts of things we would have to do if we really want to stop overconsumption and save the world. All these changes are simple, self-evident, no great technical challenge. They just require a completely different kind of economy, an economy geared to producing what we need while conserving resources for future generations of humans and for other species with which we share this planet.

**Every resource is past its peak or will be in the next century, global decline is coming in less than a decade**

**Ahmed 14**

(Dr. Nafeez Mosaddeq, Executive Director of the Institute for Policy Research and Development (IPRD), an independent think tank focused on the study of violent conflict, and taught at the Department of International Relations, University of Sussex, 6/4/2014, The Guardian, “Exhaustion of cheap mineral resources is terraforming Earth – scientific report”, [http://www.theguardian.com/environment/earth-insight/2014/jun/04/mineral-resource-fossil-fuel-depletion-terraform-earth-collapse-civilisation)//WB](http://www.theguardian.com/environment/earth-insight/2014/jun/04/mineral-resource-fossil-fuel-depletion-terraform-earth-collapse-civilisation%29//WB)

**A new landmark scientific report drawing on the work of the world's leading mineral experts forecasts that industrial civilisation's extraction of critical minerals and fossil fuel resources is reaching the limits of economic feasibility, and could lead to a collapse of key infrastructures** unless new ways to manage resources are implemented. **The peer-reviewed study – the 33rd Report to the Club of Rome – is authored by Prof Ugo Bardi of the Department of Earth Sciences at the University of Florence, where he teaches physical chemistr**y. **It includes specialist contributions from fifteen senior scientists and experts across the fields of geology, agriculture, energy, physics, economics, geography, transport, ecology, industrial ecology, and biology, among others.** The Club of Rome is a Swiss-based global think tank founded in 1968 consisting of current and former heads of state, UN bureaucrats, government officials, diplomats, scientists, economists and business leaders. **Its latest report**, to be released on 12th June, **conducts a comprehensive overview of the history and evolution of mining, and argues that the** increasing costs of mineral extraction due to pollution, waste, and depletion of low-cost sources will eventually make the present structure of industrial civilisation unsustainable**.** Much of the report's focus is on the concept of Energy Return on Energy Invested (EROEI), which measures the amount of energy needed to extract resources. While making clear that "we are not running out of any mineral," **the report finds that "extraction is becoming** more and more difficult **as the easy ores are depleted. More energy is needed to maintain past production rates, and even more is needed to increase them**." As a consequence, despite large quantities of remaining mineral reserves: "The production of many mineral commodities appears to be on the verge of decline… we may be going through a century-long cycle that will lead to the disappearance of mining as we know it." **The last decade has seen the world shift to more expensive and difficult to extract fossil fuel resources, in the form of unconventional forms of oil and gas, which have much lower levels of EROEI than conventional oil.** **Even with technological breakthroughs in fracking and associated drilling techniques, this trend is unlikely to reverse significantly**. Advertisement A former senior executive in Australia's oil, gas and coal industry, Ian Dunlop, describes in the report how **fracking can rise production "rapidly to a peak, but it then declines rapidly, too**, often by 80 to 95 percent over the first three years." This means that often "several thousand wells" are needed for a single shale play to provide "a return on investment." The average EROEI to run "industrial society as we know it" is about 8 to 10. Shale oil and gas, tar sands, and coal seam gas are all "at, or below, that level if their full costs are accounted for… Thus **fracking,** in energy terms, **will not provide a source on which to develop sustainable global society."** The Club of Rome report also applies the EROEI analysis to extraction of coal and uranium. **World coal production will peak by 2050 latest**, **and could peak as early as 2020**. US coal production has already peaked, and future production will be determined largely by China. But rising domestic demand from the latter, and from India, could generate higher prices and shortages in the near future: "**Therefore, there is definitely no scope for substituting for oil and gas with coal." As for global uranium supplies**, the report says that current uranium **production from mines is already insufficient to fuel existing nuclear reactors**, a gap being filled by recovery of uranium military stockpiles and old nuclear warheads. While the production gap could be closed at current levels of demand, a worldwide expansion of nuclear power would be unsustainable due to "gigantic investments" needed. Report contributor Michael Dittmar, a nuclear physicist at CERN, the European Organisation for Nuclear Research, argues that **despite large quantities of uranium** in the Earth's crust, **only a "limited numbers of deposits" are "concentrated enough to be profitably mined**." Mining less concentrated deposits would require "far more energy than the mined uranium could ultimately produce." The rising costs of uranium mining, among other costs, has meant that nuclear power investment is tapering off. **Proposals to extract uranium from seawater are** currently **"useless" because "the energy needed to extract and process** uranium from seawater **would be about the same as the energy that could be obtained by the same uranium** using the current nuclear technology." Therefore within this decade, the report forecasts an "unavoidable" production decline from existing uranium mines. US Geological Survey data analysed by the report shows that **chromium, molybdenum, tungsten, nickel, platinum-palladium, copper, zinc, cadmium, titanium, and tin will face peak production followed by declines w**ithin this century. This is because declared reserves are often "more hypothetical than measured", meaning the "assumption of mineral bonanzas… are far removed from reality." In particular, **the report highlights the fate of copper, lithium, nickel and zinc**. **Physicist Prof Rui** **Namorado Rosa** **projects** **an** "**imminent slowdown of copper availability**" in the report. Although production has grown exponentially, the grade of the minerals mined is steadily declining, lifting mining costs. 'Peak copper' is likely to hit by 2040, but could even occur within the next decade. Production of **lithium production**, presently used for batteries electric cars, **would also be strained under a large-scale electrification** of transport infrastructure and vehicles, according to contributor Emilia Suomalainen, an industrial ecologist of the University of Lausanne, Switzerland. Sustainable lithium production requires 80-100% recycling – currently this stands at less than 1%. **Nickel and zinc,** which are used to combat iron and steel corrosion and for electricity storage in batteries, **also could face production peaks in just "a few decades**" – though nickel might be extended some 80 years – according to engineer and metals specialist Philippe Bihoux: "**The easily exploited part of the reserves has been already removed**, and so it will be increasingly difficult and expensive to invest in and exploit nickel and zinc mines." While substitution could help in many cases, it would also be costly and uncertain, requiring considerable investment. Perhaps **the most alarming trend in mineral depletion concerns phosphorous**, **which is critical to fertilise soil and sustain agriculture**. While phosphorous reserves are not running out, physical, energy and economic factors mean **only a small percentage of it can be mined**. Crop yield on 40 percent of the world's arable land is already limited by economical phosphorus availability. In the Club of Rome study, physicist Patrick Dery says that several major regions of **rock phosphate production** – such as the island of Nauru and the US, which is the world's second largest producer – **are post-peak and now declining**, with global phosphorous supplies potentially becoming insufficient to meet agricultural demand within 30-40 years. The problem can potentially be solved as phosphorous can be recycled. A parallel trend documented in the report by Food and Agricultural Organisation (FAO) agronomist Toufic El Asmar is **an accelerating decline in land productivity due to industrial agricultural methods, which are degrading the soil by as much as 50%** in some areas. Prof Rajendra K. Pachauri, chairman of the Intergovernmental Panel on Climate Change (IPCC), said that the report is "an effective piece of work" to assess the planet's mineral wealth "within the framework of sustainability." Its findings offer a "valuable basis for discussions on mineral policy." But the window for meaningful policy action is closing rapidly. "The main alarm bell is the trend in the prices of mineral commodities," Prof Bardi told me. "**Prices have gone up by a factor 3-5 and have remained at these level for the past 5-6 years**. **They are not going to go down again**, because they are caused by irreversible increases in production costs. **These prices are already causing the decline of the less efficient economies** (say, Italy, Greece, Spain, etc.). **We are** not at the inversion point yet, but **close - less than a decade?"**

#### Collapse is coming—best data concludes neg

Turner, University of Melbourne Sustainable Society Institute fellow and PhD, and Alexander, journalist, 2014 (Graham and Cathy, “Limits to Growth was right. New research shows we’re nearing collapse,” The Guardian, 9/1/14, <http://www.theguardian.com/commentisfree/2014/sep/02/limits-to-growth-was-right-new-research-shows-were-nearing-collapse>, IC)

The 1972 book Limits to Growth, which predicted our civilisation would probably collapse some time this century, has been criticised as doomsday fantasy since it was published. Back in 2002, self-styled environmental expert Bjorn Lomborg consigned it to the “[dustbin of history”](http://www.foreignpolicy.com/articles/2002/11/01/the_dustbin_of_history_limits_to_growth). It doesn’t belong there. [Research from the University of Melbourne](http://www.sustainable.unimelb.edu.au/files/mssi/MSSI-ResearchPaper-4_Turner_2014.pdf) has found the book’s forecasts are accurate, 40 years on. If we continue to track in line with the book’s scenario, expect the early stages of global collapse to start appearing soon. Limits to Growth was commissioned by a think tank called the [Club of Rome](http://www.clubofrome.org/). Researchers working out of the Massachusetts Institute of Technology, including husband-and-wife team Donella and Dennis Meadows, built a computer model to track the world’s economy and environment. Called World3, this computer model was cutting edge. The task was very ambitious. The team tracked industrialisation, population, food, use of resources, and pollution. They modelled data up to 1970, then developed a range of scenarios out to 2100, depending on whether humanity took serious action on environmental and resource issues. If that didn’t happen, the model predicted “overshoot and collapse” – in the economy, environment and population – before 2070. This was called the “business-as-usual” scenario. The book’s central point, much criticised since, is that “the earth is finite” and the quest for unlimited growth in population, material goods etc would eventually lead to a crash. So were they right? We decided to check in with those scenarios after 40 years. Dr Graham Turner gathered data from the UN (its department of economic and social affairs, Unesco, the food and agriculture organisation, and the UN statistics yearbook). He also checked in with the US national oceanic and atmospheric administration, the [BP statistical review](http://www.bp.com/en/global/corporate/about-bp/energy-economics/statistical-review-of-world-energy.html), and elsewhere. That data was plotted alongside the Limits to Growth scenarios. The results show that the world is tracking pretty closely to the Limits to Growth “business-as-usual” scenario. The data doesn’t match up with other scenarios. These graphs show real-world data (first from the MIT work, then from our research), plotted in a solid line. The dotted line shows the Limits to Growth “business-as-usual” scenario out to 2100. Up to 2010, the data is strikingly similar to the book’s forecasts. As the MIT researchers explained in 1972, under the scenario, growing population and demands for material wealth would lead to more industrial output and pollution. The graphs show this is indeed happening. Resources are being used up at a rapid rate, pollution is rising, industrial output and food per capita is rising. The population is rising quickly. So far, Limits to Growth checks out with reality. So what happens next? According to the book, to feed the continued growth in industrial output there must be ever-increasing use of resources. But resources become more expensive to obtain as they are used up. As more and more capital goes towards resource extraction, industrial output per capita starts to fall – in the book, from about 2015. As pollution mounts and industrial input into agriculture falls, food production per capita falls. Health and education services are cut back, and that combines to bring about a rise in the death rate from about 2020. Global population begins to fall from about 2030, by about half a billion people per decade. Living conditions fall to levels similar to the early 1900s. It’s essentially resource constraints that bring about global collapse in the book. However, Limits to Growth does factor in the fallout from increasing pollution, including climate change. The book warned carbon dioxide emissions would have a “climatological effect” via “warming the atmosphere”.

## Growth Bad Impacts

### Impact – Biodiversity

**Economic growth is leading us down a path to extinction- trade and other factors are causing biodiversity to die off**

**Gates, Trauger and Czech 14**- Professor of Wildlife Ecology, professor in natural resources management, PHD

(J. Edward, David L., and Brian, Peak Oil, “Envisioning an Alternative Future”, Economic Growth, and Wildlife Conservation, Chapter 15, p.317, 21 Nov 2014 http://link.springer.com/chapter/10.1007/978-1-4939-1954-3\_15)//WB

**There are many anthropogenic causes of the ongoing Sixth Mass Extinction, including human destruction of ecosystems, landscape fragmentation, overexploitation of species and natural resources, spread of invasive species, human population growth, illegal consumption and trade in wildlife products, the further spread of agriculture, and various forms of pollution.** Many of **these threats to biodiversity derive ultimately from economic growth** [11]. Habitat loss and degradation affects 86% of all threatened birds, 86% of the threatened mammals assessed, and 88% of the threatened amphibians (http://www.iucnredlist.org/news/biodiversity-crisis, accessed 21 October 2013). **Losses also stem from introductions of invasive alien species from travel and global trade that establish and spread outside their normal distribution**. Some threatening invasive species include feral domestic cat (Felis silvestris catus) and black rat (Rattus rattus), wild boar (Sus scrofa), green crab (Carcinus maenas), zebra mussel (Dreissena polymorpha), African tulip tree (Spathodea campanulata), Burmese python (Python molurus bivittatus), hemlock woolly adelgid (Adelges tsuga annand), and brown tree snake (Boiga irregularis). Introductions can happen deliberately or unintentionally, for example, by organisms “hitchhiking” in containers, ships, cars, or soil. **Exploitation of natural resources for food, pets, and medicine can result in unconstrained resource extraction, and overhunting and over fishing. Spread of diseases and pollution by humans are other factors;** for example, excessive fertilizer use can lead to high levels of nutrients in soil and waterways, affecting soil organisms and aquatic life. **Burning of fossil fuels by humans is resulting in changes to the global climate; these changes threaten entire ecosystems and their associated species**. By some accounts, “the race to save the composition, structure, and organization of biodiversity as it exists today—is over, and we have lost.” [53]. Our sheer numbers and activities have made us a force of nature that now threatens the functioning of our planet’s life-support system. In recognition of the prominent role played by humans since the beginning of the Industrial Revolution in altering planetary geologic, climatic, and biologic systems, some geologists have labeled this interval the Anthropocene Epoch [61, 72]. In the Anthropocene, **evolution of species by natural selection has been replaced by human selection as the dominant process**. **Baring a mass die-off of humans, there is little that anyone can do now to stop this Sixth Mass Extinction.** As noted by Stephen M. Meyer [53], “In the past century we have accumulated a vast extinction debt that will be paid in the century ahead.” During this time, **Earth could lose upward of 50% of its plant and animal species,** making extinction one of our longest-lasting legacies to future generations**.** Little comfort can be taken in the fact that over tens of millions of years, the biodiversity of our planet may recover from this Sixth Mass Extinction, as it has from past extinction events; but, as happened following the demise of the dinosaurs at the end of the Cretaceous (65 million years ago), **the evolutionary trajectory of life on Earth will have been permanently altered**, resulting in totally different species composition and distribution. The biodiversity of Earth will be as different then as that between today and the Age of Dinosaurs!

**Biodiversity loss causes extinction**

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A substantial majority of scientists agree that the world is currently undergoing the sixth known extinction of species, the most recent being when the dinosaurs were wiped out by a meteor crashing into the earth.' While the previous five extinctions were spurred by volcanic eruptions, meteor impacts, and other exogenous causes, the current one has been brought on by human actions**. Species extinction is another example of ecosystem reaction to overload, and is** potentially **fatal for humankind**, **as we are dependent on other plant and animal species for our own survival**. A number of biologists have predicted that up to one-fifth of all living species could disappear within 30 years, and that if present trends continue, one-half of all species of life on earth will be extinct in less than 100 years, including one-third of the mammal population as a result of habitat destruction, pollution, invasive species, and climate change. Daniel Simberloff.a University of Tennessee ecologist and prominent expert in biological diversity, says, "The speed at which species are being lost is much faster than any we've seen in the past— including those [extinctions) related to meteor collisions." One of the major direct causes is loss of habitat as humans take over more and more of the space previously occupied by other species as population grows. Hunting, logging, overfishing, and pollution have also caused significant losses. Many species of birds, frogs, and other animals sensitive to toxins have fallen to pollution. Other life-forms can be very sensitive to subtle changes caused by increasing CO, levels. For example, coral reefs are dying on account of a complex of factors, including small temperature and acidity changes in the oceans, while the polar bear's time is running out as the arctic ice melts. Many plants and insects are disappearing without us even noticing, as are many microorganisms in soils that are depleted by chemical agriculture. These extinctions are going to have serious consequences for humanity. It is impossible to predict specifically how this ongoing mass-extinction event will affect the human population other than to say that it will be severely negative. The problem is that natural systems are complex, deeply interconnected, and far beyond our capability to understand**. A species that disappears may have unpredictable effects on the whole food chain, all the way up to humans at the top**. **Biodiversity is** not just about pleasant experiences of humankind in nature, but is **about resilience, robustness, and redundancy in the face of change**—it is **nature's immune system**. **When we weaken biodiversity, we increase the likelihood of some aspect of nature going off in an entirely unexpected direction that is potentially fatal for humankind, for example, mutations and cell crossovers leading to new kinds of dangerous bacteria and viruses, or perhaps fatal attacks on crops or domesticated animals that we are dependent upon for food.**

### Impact – Disease

**The current economic system structurally discourages research to solves diseases – focus on profit prevents cures from being distributed**

**Wiist, DHSc, MPH, MS, 6**

(William, “Public Health and the Anticorporate Movement: Rationale and Recommendations”, American Journal of Public Health, Government, Politics, and Law Peer Reviewed, August 2006, http://people.oregonstate.edu/~flayb/MY%20COURSES/H671%20Advanced%20Theories%20of%20Health%20Behavior%20-%20Fall%202012/Readings/Wiist06%20Corporate%20influences,%20PH%20and%20the%20anticporporate%20movement.pdf)//WB

**MANY PUBLIC HEALTH professionals are aware of or have been involved in public health problems and issues related to corporate products, services, or practices.** F**reudenberg1 described a wide variety of products and practices of what he termed disease-promoting corporations.** Included are products such as tobacco, unsafe and polluting motor vehicles, expensive medications, guns, alcohol, and certain foods. Other issues that have generated public health advocacy and research include consumer product safety, hazardous industrial materials, water and air pollution, food supply safety, nutritional content and marketing, and occupational health and safety. **Corporations also influence health services**. For example, **federal funding for some health services such as Medicaid has decreased while the number of people eligible for services has increased2 in part because corporations have increased employee contributions to health insurance premiums or they do not provide health insurance.**3 Regulatory agencies have a limited number of employees to conduct inspections of corporations and enforce health and safety regulations.4 Also, **efforts to prevent or minimize damage from corporate practices or products face opposition from large, well-funded, organized corporate opposition,**1 for example, the tobacco settlement5 and the automobile industry position on safety and fuel efficiency.4 Typically, t**he field of public health has addressed issues such as these as singular issues, as a specific product, or as a single company or a particular type of industry**. **Public health could do more along those lines, but as egregious as the harm from some products, services, and practices may seem, the prevention or amelioration of the harmful effects in and of themselves does not address the fundamental structure and function common to all corporations.** **Rather than expending efforts and resources to confront a particular type of industry or a single health issue, the field of public health might be more effective with a research agenda** and a professional preparation curriculum that focus on the corporation as a societal structural factor in disease. **Such an approach is consistent with the historical and contemporary mission of public health**. Over the past decade t**here has been a movement to return public health to its social justice roots, to a focus on the social determinants of health**.6,7 There has been a call for a third public health revolution that focuses on the distal causative factors of disease.8 P**ublic health ethics, values, and beliefs identify public health’s primary role as that of addressing the fundamental societal structural causes of disease.9 Public health is increasingly focusing on distal structural factors related to inequities in health,10 income inequality, economic growth and instability,11 social relationships,12 the built environment,13 and trade regulations**.14,15 **Public health could benefit** in several ways f**rom a focus on the corporation as a distal, societal structural factor**. Because corporate products, services, and practices provide tangible targets for advocacy and research, **such an approach could be more useful than focusing on** concepts such as f**ree market fundamentalism or extreme capitalism.** Research could examine the influence of the corporate entity on indicators of health status. Academic programs could prepare practitioners to address the corporate role in disease and injury. **Public health advocacy activities related to the corporate products** already noted1 co**uld link to the anticorporate movement**. **Focusing on the corporation as a societal structural factor might also suggest ways to address issues such as race/ethnicity, gender, age, socioeconomic status, and disability that are often manifest in a corporate setti**ng. An anticorporate movement’s perspective of the corporate entity as a societal structural factor is instructive for public health. **Review of that perspective points out the mutual interests in social justice, ethics, and the social determinants of health that public health has with the anticorporate movement**.

**Disease causes extinction—no burnout**

Karl-Heinz **Kerscher 14**, Professor, “Space Education”, Wissenschaftliche Studie, 2014, 92 Seiten

**The death toll for a pandemic is equal to the virulence**, the deadliness of the pathogen or pathogens, **multiplied by the number of people eventually infected. It has been hypothesized that there is an upper limit to the virulence of naturally evolved pathogens**. This is **because a pathogen that quickly kills its hosts might not have enough time to spread to new ones, while one that kills its hosts more slowly** or not at all **will allow carriers more time to spread the infection**, and thus likely out-compete a more lethal species or strain. **This simple model predicts that if virulence and transmission are not linked** in any way, **pathogens will evolve towards low virulence and rapid transmission**. However, **this assumption is not always valid and in more complex models, where the level of virulence and the rate of transmission are related, high levels of virulence can evolve. The level of virulence** that is possible **is instead limited by the existence of complex populations of hosts**, with different susceptibilities to infection, or by some hosts being geographically isolated. The size of the host population and competition between different strains of pathogens can also alter virulence. **There are numerous historical examples of pandemics that have had a devastating effect on a large number of people, which makes the possibility of global pandemic a realistic threat to human civilization**.

### Impact – Poverty

**Economic growth exacerbates poverty**

**Nation Multimedia Group 13**- uses National Statistical Coordination Board data

(“Economic growth masks poverty”, 5/4/13, http://www.nationmultimedia.com/opinion/Economic-growth-masks-poverty-30205224.html)//WB

Three years ago Philippine President Benigno Aquino III ran with the battle cry "Kung walang corrupt, walang mahirap" (If there is no corruption, there will be no poverty). It served as the cornerstone of his "Straight Path" platform. **Halfway into his term**, **the president has achieved much, including the stellar economic growth** that has earned the country an investment-grade credit status from Fitch Ratings. **This is why the disclosure last week by the National Statistical Coordination Board (NSCB) that the incidence of poverty has remained unchanged for the past six years was a big embarrassment to the administration.** Many believe this was the reason Economic Planning Secretary Arsenio Balisacan, who heads the NSCB, was bumped off the official delegation that flew with the president to Brunei last Wednesday for the Asean Summit. **The NSCB report said poverty incidence for the first half of 2012 was 27.9 per cent.** Comparing this with the 2006 and 2009 first-semester figures of 28.8 per cent and 28.6 per cent, respectively, **it said poverty remained unchanged** as the computed differences were not statistically significant. The NSCB noted that in terms of income distribution, 20 per cent of the population (or the poorest segment) accounted for only 6 per cent of the total national income, while the upper 20 per cent accounted for nearly 50 per cent. **All efforts to address poverty will be for naught if the government continues** t**o neglect agriculture.** In a paper written in November 2008, Balisacan presented facts that remain true to this day: **despite the relatively rapid pace of urbanisation** in the past 20 years, **poverty in the Philippines is still largely a rural phenomenon.** Two of every three poor persons are in rural areas and mostly dependent on agricultural employment and incomes. **Poverty incidence in agricultural households is roughly thrice that in the rest of the population**. While agriculture's share in the total labour force has dropped from about half in the late 1980s to only a little more than a third by the mid-2000s, the sector continues to account for about 60 per cent of total poverty. Last week, Balisacan was reported as saying that the visible underemployment in agriculture was a persistent problem that always came up in labour survey results. "This means that agriculture sector workers work less than 40 hours a week, perhaps because there isn't much demand for labour in their areas, and they are looking for additional work, possibly because the wages they receive are not enough to meet their needs. If the problem of visible underemployment in agriculture is addressed, then incomes of farmers would increase, poverty incidence would decrease, and we would not be compromising food security," he said. The government should convince the private sector to invest in agriculture. It can start with the coconut industry, where, according to National Anti-Poverty Commission chief Joel Rocamora, the 70-billion peso (US$1.7 billion) coconut levy fund is available to spur farmers' production. Also, the government can improve the agriculture sector by simply coordinating with Agriculture Secretary Proceso Alcala, who has a number of programmes and projects that need only official support to get implemented. At a recent roundtable with the Inquirer's business section, Alcala cited a quedan system that allows coconut farmers to take part in value-added production from coco sugar to coco biodiesel through cooperative- and joint-venture-type arrangements, and the expansion of the programme under which farmers may borrow funds using an ATM card, to cover the top 20 rice-producing areas nationwide. **In the next three years, the Aquino administration hopes to cut poverty** incidence to 16.6 per cent, or half the 1991 rate of 33.1 per cent. **It had better start aggressively addressing the issues stunting agriculture, otherwise, it will have no option but to again lower the poverty threshold income** (or the minimum amount required to meet basic food and non-food needs) to meet its goal, as it did in 2011 when the threshold was lowered from the previous 52 to 46 pesos for every Filipino per day. **Yes, this can cut the official number of poor people, but this is not what we need. We need the government to implement programmes and policies that will attack the root causes of poverty.**

**Poverty outweighs nuke war**

Abu-Jamal 1998 (Mumia, Peace Activist, “A Quiet and Deadly Violence,” FLASHPOINTS, September 19, 1998, available online at http://www.flashpoints.net/mQuietDeadlyViolence.html, accessed 6/30/07)

This form of violence, not covered by any of the majoritarian, corporate, ruling-class protected media, is invisible to us and because of its invisibility, all the more insidious. How dangerous is it--really? Gilligan notes: [**E]very fifteen years**, on the average, **as many people die because of** relative **poverty as would be killed in a nuclear war** that caused 232 million deaths; and **every single year**, two to **three times** as many **people die from poverty** throughout the world **as were killed by** the **Nazi genocide** of the Jews **over a six-year period. This is**, in effect, the equivalent of **an ongoing,** unending, in fact **accelerating**, thermo**nuclear war,** or genocide **on the** weak and **poor** every year of every decade, throughout the world. [Gilligan, p. 196] Worse still, in a thoroughly capitalist society, much of that violence became internalized, turned back on the Self, because, in a society based on the priority of wealth, those who own nothing are taught to loathe themselves, as if something is inherently wrong with themselves, instead of the social order that promotes this self-loathing.. This vicious, circular, and invisible violence, unacknowledged by the corporate media, uncriticized in substandard educational systems, and un-understood by the very folks who suffer in its grips, feeds on the spectacular and more common forms of violence that the system makes damn sure -that we can recognize and must react to it. This fatal and systematic violence may be called The War on the Poor.

### Impact – Warming

#### Growth causes a laundry list of impacts [climate change, biodiversity loss, soil erosion, disruption of nitrogen and phosphorous cycles] and extinction—reject technological optimism, only cultural shift can solve

Althouse, Masters in economics, 2015 (Jeffrey, with advisors Carloes Young, Universidade Federal do Rio de Janeiro economics associate professor, Dany Lang, University of Paris 13 associate professor, and Eckhard Hein, Berlin School of Economics and Law professor, “Post-Keynesian Ecological Economics: Towards Greener Pastures,” EPOG Master’s Thesis, defended 6/23/15, p. 4-6, IC)

With the publication of the last UN International Panel on Climate Change (IPCC) report, it has become painstakingly clear that human activity has caused an unprecedented amount of change to the Earth’s natural processes, yielding significant impacts on both current and future generations (IPCC 2014). Both the pace of global warming due to greenhouse gas (GHG) emissions and the extent of its effects appear to have been vastly underestimated. Conservative estimates now put likely warming scenarios at between 3.7 and 4.5 °C this century, far beyond the supposedly “manageable” 2 °C warming limit set by international experts. Additional stress augurs poorly for already strained ecological systems, as well as economic growth and social stability. As the IPCC report states, “…climate­-change impacts are projected to slow down economic growth, make poverty reduction more difficult, further erode food security, and prolong existing and create new poverty traps, the latter particularly in urban areas and emerging hotspots of hunger.” (IPCC 2014, p. 20) Climate change, however, is just one of many biophysical limits that are being pushed or surpassed at this time – ranging from biodiversity loss to soil erosion to disruption of nitrogen and phosphorous cycles ­ and the future costs of accruing such ecological debts are likely to rise as global leaders fail to make serious commitments to stay within planetary boundaries (Rockström et al. 2009). As the world’s population continues to grow, along with an ever­-expanding middle class, the availability of both renewable and non­renewable resources are likely to face a number threats that will ripple through the economy. However, despite the overwhelming evidence of natural limits to continued economic growth, economics has been slow to shed old orthodoxies which overlook economic dependence on the natural world. Both the landmark “Limits to Growth” (Meadows et al. 1972) publication by the Club of Rome and further research by Nicholas Georgescu-­Roegen (1970; 1971; 1976) over the limits continued growth, given finite material inputs and increasing energy needs to transform such resources, began a flurry of controversy and responses by the economic mainstream in the early 1970’s. Neoclassically trained economists, believing in perfect rationality, and perfect substitutability of natural inputs “adopted mathematical models of optimising behavior, assuming micro­economic axioms, regarding humans as self­-interested utility maximisers, pricing externalities and conducting trade­offs” (Spash & Ryan 2010, p. 2). Their unflinching optimism in price signals to bring about technological change allow even the most catastrophic environmental disasters to be easily overcome. Even modern ecological economics has largely been complicit in merely appropriating neoclassical and mainstream models of production with moderate alterations to include externalities, bringing about only negligibly different results rather than drastic ideological, behavioral, or political change (Spash 2012, Holt 2005). While they have been slow to pick up the mantle on this subject (Mearman 2009), a growing number of heterodox economists are beginning to set their sights on ecological issues and work across disciplines to bring new perspectives and a more realistic analysis to an old debate that needed reviving (Berg et al. 2015, Foley & Taylor 2014, Victor and Jackson 2014). Post­Keynesians have been especially active in this field, bringing traditionally mico­-based insights from environmental science into a decidedly “macro” framework (Rezai et al. 2012). The foundations of the post­Keynesian paradigm ­ historical time, fundamental uncertainty, and effective demand ­ figure prominently in what is now being called “ecological macroeconomics” This paper provides a brief overview of post­Keynesian ecological economics and the intuitions gleaned from it this far. It is found that while the post­Keynesian lens has proven fruitful to better understand some ecological issues, much more must be done to understand the role that the drivers of growth play in finding a sustainable growth path. Increasing efficiency and productivity growth alone are likely insufficient ­ and in some cases may even be counterproductive­ to achieve the drastic dematerialization of production needed to avoid catastrophic human and environmental damage from climate change. The uncertainty involved in predicting future climate scenarios, and human adaptability to them, should act as a catalyst for more radical solutions, rather than doubling down on technological optimism. A truly sustainable economic path will require a decrease in energy­ and material-­intensive production, as well as a counterbalancing increase in socially beneficial services with low environmental impact. Achieving this in the limited time available will require a significant cultural shift towards sufficiency, rather than efficiency, a more equal distribution of wealth, and government policies that focus less on growth and more on well­being. Going forward, post­Keynesian economists will need to adopt a coherent definition of sustainability founded in the fundamentals of uncertainty, irreversible time and the double-­edged sword of effective demand in a finite world (Berr 2009). While certainly a subject to be debated, such issues beg for a complementary normative theory of social progress to better understand how to ensure inter­ and intra­ generational well­being and advance the shift of values away from growth-­centric dogma. Well­being for current and future generations, without compromising natural processes or access to them, must hold primacy over growth.

**Warming is real, human caused, and causes extinction—acting now is key to avoid catastrophic collapse**

Dr. David **McCoy** et al., MD, Centre for International Health and Development, University College London, “Climate Change and Human Survival,” BRITISH MEDICAL JOURNAL v. 348, 4—2—**14**, doi: <http://dx.doi.org/10.1136/bmj.g2510>, accessed 8-31-14.

The Intergovernmental Panel on Climate Change (IPCC) has just published its report on the impacts of global warming. Building on its recent update of the physical science of global warming [1], **the IPCC’s new report should leave** the world in **no doubt about the scale and immediacy of the threat to human survival,** health, and well-being. The IPCC has already concluded that **it is “virtually certain that human influence has warmed the** global **climate system**” **and** that **it is “extremely likely that more than half of the** observed **increase in** global average surface **temperature** from 1951 to 2010” **is anthropogenic** [1]. **Its** new **report outlines the** future **threats of** further global **warming: increased scarcity of food and** fresh **water; extreme weather** events; **rise in sea level**; **loss of biodiversity**; **areas becoming uninhabitable; and mass** human **migration, conflict and violence.** Leaked drafts talk of hundreds of millions displaced in a little over 80 years. This month, the American Association for the Advancement of Science (AAAS) added its voice: “**the well being of** people of **all nations [is] at risk**.” [2] Such comments reaffirm the conclusions of the Lancet/UCL Commission: that **climate change is “the greatest threat to human health** of the 21st century.” [3] The changes seen so far—massive arctic ice loss and extreme weather events, for example—have resulted from an estimated average temperature rise of 0.89°C since 1901. **Further changes will depend on how much we continue to heat the planet**. The release of just another 275 gigatonnes of carbon dioxide would probably commit us to a temperature rise of at least 2°C—an amount that could be emitted in less than eight years. [4] “**Business as usual” will increase carbon dioxide concentrations** from the current level of 400 parts per million (ppm), which is a 40% increase from 280 ppm 150 years ago, to 936 ppm by 2100, with a 50:50 chance that this will deliver global mean temperature rises of more than 4°C. It is now widely understood that such a rise is “incompatible with an organised global community.” [5]. **The IPCC warns of “tipping points**” in the Earth’s system, **which, if crossed, could lead to a catastrophic collapse of interlinked human and natural systems**. The AAAS concludes that **there is now a “real chance of abrupt, unpredictable and potentially irreversible changes with highly damaging impacts** on people around the globe.” [2] And this week a report from the World Meteorological Office (WMO) confirmed that extreme weather events are accelerating. WMO secretary general Michel Jarraud said, “There is no standstill in global warming . . . The laws of physics are non-negotiable.” [6]

### Impact – War

**Resource scarcity is inevitable and increases the propensity for global war**

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(Rafael and Katherine, “On the effect of natural resources on interstate war”, progress in Physical Geography 2014, Vol. 38(6) 786–806, http://ppg.sagepub.com/content/38/6/786.full.pdf+html)//WB

The effect of resources on interstate war has attracted growing scholarly and governmental attention. The quantitative literature, by contrast, has been slow to develop. T**his paper examines the causal role of a country’s resources on its overall propensity for war in world politics. Our formal model offered competing effects, and so we turned to empirical analysis. Our statistical models included measures of eight types of resources per country and other variables.** The estimation used a large N sample of countries and years. We find that **a country’s resources play statistically significant roles in its overall propensity to engage in war.** Next, we consider implications of these findings for the coming decades, assuming that past trends in our model will continue into the period on which we plan to comment. In so doing, **we return to the NIC (2012) projection of growing international conflict over resources increasing the likelihood of interstate war by 2030.** Regardless of whether this projection will hold true, it is useful to use it as a reference point for our discussion if only because of the stature of the NIC in the USA and the influence it can exert on its government (and possibly others). **Our first stepis to forecast the average levels of the resources included in our models by 2030**. This is a major undertaking, for any numbers pertaining to one resource are linked to the supply and demand patterns of other resources. Such a forecast would need to venture into geology and environmental science (for resource availability), and into economics and sociology (for resource extraction and consumption). **In place of such extensive additional work, we rely on the NIC’s resource change expectations for 2030** and use our model to examine implications for war. To summarize, **we assume: (1)the effects identified by our models will hold to 2030; and (2) the availability of resources will evolve according to the NIC’s projection**. T**he NIC expectation for declining availability of energy, freshwater, and minerals by 2030 implies Fuel, Freshwater, and Minerals will decline. By 2030, the NIC expects rainfall will generally decline due to climate change, indicating less Precipitation. The NIC expectations of rising demand for food and declining food supply imply that Agriculture will rise to meet the demand, but still fall short. The NIC also highlights the precedence for countries’ reliance upon increased deforestation as means to support growing populations, suggesting Timber, Arable Land, and Cropland could increase.** We recognize these are strong assumptions and revisit them shortly. Taking the NIC projections at face value, **our finding that increases in Freshwater, Precipitation, Minerals, and Fuel in a country reduce its overall propensity for interstate war**, **coupled with the NIC projected worsening outlook for these resources, suggests higher chances for interstate war by 2030**. O**ur finding that rises in Arable Land, Timber, and Agriculture raise war propensity, taken alongside the NIC’s projection of increases in these resources, also suggests increased chances of warfare.** We find **these effects grow over time and have the same order of magnitude of those obtained for the non-resource variables**. Summarizing, our finding for **the NIC resource scenario to 2030 supports an expectation of growing chances of interstate war** for the average country. This prospect is worrying, but it assumes, as all regressions do, that the other variables in the model remain constant. This assumption rarely holds, so let us consider next which of our nonresource variables could change by 2030. The NIC, the UN, and many others, expect the populations of the large majority of countries to increase by 2030, though by a declining rate. **Our model suggests a larger Population will increase propensity for war,** but a smaller Population Growth rate will reduce this propensity. By 2030, GDPpc will likely rise for all countries, though we do not know if it will rise Reuveny and Barbieri 801 Downloaded from ppg.sagepub.com at UNIV OF MICHIGAN on July 13, 2015 above the US$14,250 (in current dollars) threshold for the inverted U we see for the one-year lagged results. If it does, further rises in GDPpc would make warfare less likely; otherwise, or if the effect proves to be linear as in Table 4’s distributed lag results, the chances of war will rise. **The NIC assumes climate change will increase the frequency and intensity of weather Disasters. This too would raise the chances of war in the model.** National Capability may climb, reflecting the likely growth of its components. This effect would reduce the chances of war. Considering these modifications, **increased chance for warfare still seems possible**, provided, again, the future trends will resemble their estimated precedents and that resource stocks will follow the NIC’s projected trajectory, neither of which is assured.

**Pursuit of growth creates structural incentives for conflict**

Monteiro and Debs 14

 (Nuno and Alexandre, Department of Political Science at Yale , “An Economic Theory of Hegemonic War”, [http://www.yale.edu/leitner/resources/papers/MonteiroDebs(2014)Feb03Yale.pdf](http://www.yale.edu/leitner/resources/papers/MonteiroDebs%282014%29Feb03Yale.pdf), dml)//WB

This paper introduces a novel framework for understanding **the economic causes of hegemonic wars** that allows us to solve these two puzzles. **Our argument starts from a simple premise: countries differ in their economic power, and a hegemon has a greater influence than other countries in setting the terms of international economic engagement**. Specifically, **the hegemon can affect the division of the surplus generated by its economic interaction with other, weaker states.** **It also has the ability to regulate the cost other states have to pay to access foreign resources they need** in order to grow. Combined, these two mechanisms may prevent weaker states from using their available resources in an optimal way, undermining their economic growth. **For these states, war against the economic hegemon may be a rational option**. **A challenger faced with a constraining structure of the international economy will find war rational** not depending on whether its relative power is rising or declining, but on whether war would bring about a more favorable international economic environment, thereby facilitating faster economic growth. Although war is costly and the challenger’s relative weakness make it less likely to win, victory would allow it to invest its available resources optimally, generating faster economic growth. Therefore, **when the gain in economic efficiency brought by victory in war is sufficiently large to make the challenger’s expected outcome of fighting** (despite its relatively low likelihood of winning) better than the continuation of peace, **war will break out.**

## Transition/Alternatives

### Collapse Causes Transition

#### Collapse is necessary to result in radical transition—tech can’t make the system sustainable because that tech will never be effectively used under capitalism—only crisis can spur democratic impulses to replace the global economic system

Adler, USC professor, 2015 (Paul S., “Book Review Essay: The Environmental Crisis and Its Capitalist Roots: Reading Naomi Klein with Karl Polanyi,” Administrative Science Quarterly, 3/17/2015, <http://asq.sagepub.com/content/early/2015/03/17/0001839215579183.full>, IC)

This diagnosis leads to no easy remedies, clearly. But it does point to two criteria, one negative and the other positive, that might guide our way. Negatively, it is important that we not encourage the illusion that firms will do better competitively if they exercise more environmental stewardship. In reality, sometimes greater stewardship will help the firm’s bottom line, and sometimes it will not, and if we hinge our hopes on market competition driving firms toward such stewardship, we will be inadvertently accelerating, not decelerating, the unfolding crisis. While applauding the goodwill demonstrated by more enlightened corporate leaders, we should be clear that their efforts are not the path to a solution. Similarly, when governments take modest steps to encourage solar or recycling or water conservation, we should be clear that these are woefully inadequate, rather than applauding them as “a good start.” When the patient has cancer and needs major surgery, dieting is nice but not a cure, and it is dangerous to encourage the patient to think otherwise. Negatively too, we should not indulge the facile assumption that technological innovation will allow capitalism to adapt to the looming environmental challenges. Many economists have argued that the market will be able to deal with these challenges because the growing demand for energy-efficient equipment and buildings, for weather-resistant structures, for pest- and drought-resistant seeds, and so forth will incentivize private-sector R&D efforts in those directions. Indeed, I see no reason to believe that technological innovation could not allow a projected 10 billion people or more to live in comfort on this planet. But it defies credibility to imagine that the competitive market process, even aided by government subsidies and regulations, could mobilize the massive, sustained R&D effort that would be required, and could drive the resulting new technologies into widespread use, and could get industry to abandon the huge accumulated capital assets thus rendered obsolete, and could achieve all this in time to avert the collapse of numerous ecological and social systems. Technology can probably save us, but it surely cannot save capitalism. Positively, we need to celebrate instances in which we see the market being effectively reembedded—where investment and production decisions are being driven by social needs rather than private-profit considerations. Where city governments team up with local credit unions, pension funds, and unions to support the emergence of local cooperatives, where these cooperatives join together in planning processes that involve the local community, where these cooperatives’ products respond to real economic, social, and environmental needs as determined by the people involved—here, even if the experiments are local in nature and far from the global scale we so urgently need, people can at least begin to see the contours of the kind of world we need to create. There is an impressive range of such new democratic institutions and institutional ecologies that have been quietly developing just below the surface of public awareness in recent years. They presage various ways of reembedding the economy, not as a return to pre-capitalist modes of embeddedness, but as the creation of a new form of society in which economic decisions are made under norms of democratic dialogue. Such institutions, however, will need to find social movements powerful enough to propel their global diffusion. It is here that our disempowerment is most frustrating. At the moment, and sadly, the best hope for the emergence of such movements lies in the chaos that we are likely to see over the coming few decades as the environmental crises deepen. If current predictions are even approximately accurate, that chaos will involve a combination of widespread economic collapse, massive population transfers, intensifying tensions over fresh water and arable land, and proliferating epidemics. Such chaos may well galvanize mass movements powerful enough to reshape the economy on a national and indeed international scale. The turmoil of the Great Depression in the 1930s provoked the emergence of new mass movements that prompted important changes in the economic system. By comparison, the chaos likely to emerge in the near future will be far more disruptive, and the movements it provokes will therefore probably articulate far more radical goals. Like the Great Depression, however, the looming chaos will represent a very dangerous period, as it will confront us with very stark choices between despotism or autocracy on the one hand—benefitting from a well-oiled arsenal of ideological as well as military weapons—and on the other hand, a highly uncertain path of social experimentation toward a radical deepening and broadening of democracy.

### Decline Solves – Biodiversity

**Economic Decline is the only possible way to solve for this looming biological disaster**

**Gates, Trauger and Czech 14**- Professor of Wildlife Ecology, professor in natural resources management, PHD

(J. Edward, David L., and Brian, Peak Oil, “Envisioning an Alternative Future”, Economic Growth, and Wildlife Conservation, Chapter 15, p.317, 21 Nov 2014 http://link.springer.com/chapter/10.1007/978-1-4939-1954-3\_15)//WB

Our hope is that steps taken now and in the future will help save some biodiversity and provide it a fighting chance for survival. We owe it to future generations to make the attempt [34]. But, **we cannot hope to save much biodiversity if growth is our only economic goal.** Society needs to realize that gro**wth does not equal prosperity** [41]. Besides, e**xponential population growth will not continue through this century, as resources will not be available to support it,** reinforcing the need to move quickly to a SSE. Much can be done now to aid in stabilizing the population, for example, making contraceptives readily availability to men and women, increasing the educational opportunities for women, providing various tax incentives to encourage small families, and many other enticements. Immigration also needs to be addressed by governments; desperate people seeking a better life elsewhere may find that there are few opportunities in future industrialized economies, especially if a SSE is our national goal [11]. **As populations stabilize and then decline in tandem with resource availability, our economy will have to be continually restructured to deal with the fact that growth is no longer desirable or possible.** We need to reassess our long-term vision for human civilization and decide what we must do now to move it toward a more sustainable future for the benefit of the planet and generations yet to come. Once we fully accept how we reached this point in time and understand our situation, we can start envisioning and working toward a future where our civilization is just one of a series of interacting ecosystems that comprise a single huge Earth ecosystem. We envisage a future society distinguished by a stable population and per capita consumption, a more equitable distribution of income and wealth, full recycling of materials, waste streams that the environment can easily absorb or reuse in productive ways, and use of alternative, non-fossil-fuel sources of energy. **Populations will be much smaller and in dynamic balance with available resources. Improvements in infrastructure by governments will be made without consumption of fossil fuels or piling on more debt and interest on debt.** 336 J. E. Gates et al. Whether this outcome is obtainable or not is debatable; nevertheless, we will reach a balance between resource regeneration and resource consumption [7], either by our own choices or by nature’s imposition. **The ways things are now have been created by humans only recently, oftentimes without consideration of the ecological consequences.** **Ways of doing things can be changed or eliminated and replaced with better ways that are beneficial to the long-term health of humanity and the global environment.** We can regain control over our consumptive human systems that foster the pursuit of wealth and status and develop new resilient systems for living sustainably, working toward true happiness and personal growth, in a world enriched by biologically diverse and healthy ecosystems and a stable climate. **Unless we do this collectively as a global society and work toward that vision, we,** in spite of our collective intelligence, **will be confronted with the collapse of our modern, industrialized civilization**; the tragic loss of a large portion of Earth’s biodiversity; and the knowledge that we could have done more to prevent it.

### Decline Solves – Democracy

#### Transition to mass democratic awakening is coming now

Smith, UCLA history PhD, 2013 (Richard, “’Sleepwalking to Extinction’: Capitalism and the Destruction of Life and Earth,” Common Dreams, 11/15/13, <http://www.commondreams.org/views/2013/11/15/sleepwalking-extinction-capitalism-and-destruction-life-and-earth>, IC)

Economic systems come and go. Capitalism has had a 300 year run. The question is: will humanity stand by and let the world be destroyed to save the profit system?

That outcome depends to a great extent on whether we on the left can answer that question “what’s your alternative?” with a compelling and plausible vision of an eco-socialist civilization. We have our work cut out for us. But what gives the growing global eco-socialist movement an edge in this ideological struggle is that capitalism has no solution to the ecological crisis, no way to put the brakes on collapse, because its only answer to every problem is more of the same growth that’s killing us.

“History” was supposed to have “ended” with the fall of communism and the triumph of capitalism two decades ago. Yet today, history is very much alive and it is, ironically, capitalism itself which is being challenged more broadly than ever and found wanting for solutions.

Today, we are very much living in one of those pivotal world-changing moments in history. Indeed, it is no exaggeration to say that this is the most critical moment in human history.

We may be fast approaching the precipice of ecological collapse, but the means to derail this train wreck are in the making as, around the world, struggles against the destruction of nature, against dams, against pollution, against overdevelopment, against the siting of chemical plants and power plants, against predatory resource extraction, against the imposition of GMOs, against privatization of remaining common lands, water and public services, against capitalist unemployment and precarité are growing and building momentum.

Today we are riding a swelling wave of near simultaneous global mass democratic “awakening,” an almost global mass uprising. This global insurrection is still in its infancy, still unsure of its future, but its radical democratic instincts are, I believe, humanity’s last best hope.

### Decline Solves – Laundry List

#### We must de-develop now, growth based politics are impossible to sustain, and they lead to increasing environmental degradation and massive economic inequality

Shrivastava Distinguished Professor and Director of David O'Brien Centre for Sustainable Enterprise at Concordia University, 2015

(Paul, Organizational sustainability under degrowth, pg1, emeraldinsight, http://www.emeraldinsight.com/doi/full/10.1108/MRR-07-2014-0157)

By degrowth, I do not mean what traditional economics calls recession or stagnation. It is not just temporary or even medium-term shrinkage of the conventional economy. The degrowth movement begins with the realization that due to ecological limits and social and intergenerational considerations, conventional economic growth as currently measured will generally slowdown, and economies will have to fit within socially and ecologically acceptable parameters (Brown and Garver, 2009). Degrowth is both an empirical reality and a response to our current economic and ecological crises. Empirical evidence of degrowth is manifested in the slowing growth rates in the post-2008 global financial crisis. US and European economies are struggling to maintain even a 2 per cent to 3 per cent growth. India and China, which grew for a decade at double digits (10 to 14 per cent), have cut their growth estimates to less than half those numbers. Japanese growth has meandered between −2 per cent to +2 per cent for over a decade. Virtually, all national governments around the world, and many state and municipal governments as well, are running deficit budgets at historically high levels. This is not just a temporary recession for a quarter or two, but rather a sustained trend reflecting natural limits to economic growth (Meadows et al., 2004; Stiglitz, 2012). At the Montreal International Conference on Degrowth for the Americas (http://www.montreal.degrowth.org) held in May 2012, we examined degrowth solutions as a response to the global financial economic crisis. These included collaborative consumption, shared economy, hybrid organizations, alternative currencies and population control, among others. Degrowth is a call for a radical break from traditional growth-based models of economy and society. It seeks to move away from the production – consumption-dominated models of the past. It seeks to invent new ways of living together in a true democracy and embodying values of equality and freedom. It is based on sharing and cooperation, and with sufficiently moderate consumption so as to achieve personal and collective fulfillment. Schumacher’s (1973) notion of “small is beautiful” was a precursor of this type of degrowth thinking. Now, the degrowth paradigm has emerged with great vitality in English, German, French and Spanish worlds (Brown and Garver, 2009; Daly, 1996; Georgescu-Roegen, 1971; Jackson, 2011; (Latouche, 2009; Alier, 2009; Victor, 2010). Degrowth paradigm assumes that in a physically limited world, working under the laws of thermodynamics, it is impossible to grow endlessly (Daly, 1996; Georgescu-Roegen, 1971). If we do not plan for it, degrowth will be forced upon us through inflation, increased work, reduced leisure hours and other forms of immiseration of living standards (poorer education, health care, infrastructure, quality of air and water, etc.). It is better to deliberately face degrowth scenarios earlier on and then intentionally choose our paths forward instead of facing dire circumstances where we might be left with little choice. An essential insight of degrowth thinking is that natural capital cannot be entirely substituted with money or artificial capital. We cannot replace potable water, clean air, fertile soil and beautiful landscapes in our current linear economic model of “take, make, dump”. To replenish natural capital stocks, we need to create circular economic loops. It acknowledges the need to limit consumption and pollution to maintain healthy ecosystems for the long-term future. In a growth-based world, market solutions and technological innovations that are ostensibly eco-friendly still contribute to an increase in overall consumption. The efforts at dematerializing consumption remain marginally effective. The relocation of polluting industries away from the Western industrial nations was not accompanied by a reduction of our global ecological footprint – there is no decoupling between our economy and ecological impact (Costanza, 1991). Degrowth is necessary because conventional economic growth (measured in terms of GDP) has not kept its promise to improve our collective well-being (Stiglitz, 2012). GDP growth no longer guarantees us better material living conditions. It is no longer associated with well-paying stable jobs. As GDP increases, we have also seen pollution, obesity, depression, crime and high-risk technologies on the rise. GDP growth also does not guarantee increased economic or social equality. In fact, growth in recent decades has been accompanied by the significant widening of our societal inequalities.

### Yes Mindset Shift

#### Crisis solves for mindset shift—that results in transition

Alexander, PhD and University of Melbourne Lecturer in Environmental Programs, and Rutherford, 2014 (Samuel and Jonathan, “The Deep Green Alternative: Debating Strategies of Transition,” Simplicity Institute, Report 14a, 2014, <http://simplicityinstitute.org/wp-content/uploads/2011/04/The-Deep-Green-Alternative.pdf>, p. 19-20, IC)

Perhaps a more reliable path could be based on the possibility that, rather than imposing an alternative way of life on a society through sudden collapse, a deep crisis could provoke a social or political revolution in consciousness that opens up space for the deep green vision to be embraced and implemented as some form of crisis management strategy. Currently, there is insufficient social or political support for such an alternative, but perhaps a deep crisis will shake the world awake. Indeed, perhaps that is the only way to create the necessary mindset. After all, today we are hardly lacking in evidence on the need for radical change (Turner,'2012), suggesting that shock and response may be the form the transition takes, rather than it being induced through orderly, rational planning, whether from ‘top down’ or ‘from below’. Again, this ‘non-ideal’ pathway to a post-growth or post-industrial society could be built into the other strategies discussed above, adding some realism to strategies that might otherwise appear too utopian. That is to say, it maybe that only deep crisis will create the social support or political will needed for radical reformism, eco-socialism, or eco-anarchism to emerge as social or political movements capable of rapid transformation. Furthermore, it would be wise to keep an open and evolving mind regarding the best strategy to adopt, because the relative effectiveness of various strategies may change over time, depending on how forthcoming crises unfold.

It was Milton Friedman (1982: ix) who once wrote: ‘only a crisis – actual or perceived – produces real change. When that crisis occurs, the actions that are taken depend on the ideas that are lying around.’ What this ‘collapse’ or ‘crisis’ theory of change suggests, as a matter of strategy, is that deep green social and political movements should be doing all they can to mainstream the practices and values of their alternative vision. By doing so they would be aiming to ‘prefigure’ the deep green social, economic, and political structures, so far as that it is possible, in the hope that deep green ideas and systems are alive and available when the crises hit. Although Friedman obviously had a very different notion of what ideas should be ‘lying around’, the relevance of his point to this discussion is that in times of crisis, the politically or socially impossible can become politically or socially inevitable (Friedman, 1982: ix); or, one might say, if not inevitable, then perhaps much more likely.

It is sometimes stated that every crisis is an opportunity – from which the optimist infers that the more crises there are, the more opportunities there are. This may encapsulate one of the most realistic forms of hope we have left.

### Yes Transition

#### Consumerism destroys the environment, and transition is necessary and possible—adaptation to economic decline is key to reframing lifestyles

Brown, Clark University environmental science and policy professor, and Vergragt, Clark University senior research scientist with a PhD in Chemistry from Leiden University, 2015 (Halina Szejnwald and Philip J., “From Consumerism to Wellbeing: Toward a Cultural Transition?” Journal of Cleaner Production, 5/12/2015, http://www.sciencedirect.com/science/article/pii/S0959652615004825, p. 17-18, IC)

Since its rapid evolution after the WWII, consumer society in the US, and the lifestyles it has engendered, has long ceased to deliver on the great promise of wellbeing for all, while exacting a heavy ecological toll. It runs on its own momentum, propelled by cultural meanings and symbols, social practices, institutional inertia, existing infrastructure, and by business and political interests. Since technology alone cannot counteract the ecological cost of unrestrained growth and consumerism, much less address the shrinking gains in wellbeing, a transition beyond this dominant economic model is needed. But it is unrealistic to expect the policy and political leaders to lead that social change. Similarly, there are few signs so far that the established NGOs are about to include consumption and consumerism in their agendas. The change will need to come from the people and, we contend, have at this core an evolution toward a new framing of wellbeing.

While it is generally accepted that cultural change occurs very slowly, under some condition it may actually be very rapid. This was the case with consumer society, which emerged in the US (and other economies) through concerted efforts of government, unions, and the corporate sector when the historical window of opportunity opened up. In the span of a one or two generations the middle class radically changed its “normal” lifestyles, consumption behaviors, and its understanding of what good life consists of. Can such a rapid change take place again, this time following a trajectory beyond consumerism? The difficulty with addressing this question is that the theoretical framework for understanding cultural change of that nature and magnitude is underdeveloped. For one thing, widely accepted theories conceptualize social change as necessarily involving contestation between self-aware incumbents and challengers with specific agendas and alternative collective visions of the future. While that may be the case at in the future, the origins of the change beyond consumerism are very likely to have less conspicuous and less ideological roots. Another difficulty with theorizing about social change toward an alternative to consumer society, based on the history of its emergence, is that the story is commonly told as a historical account, not through a theoretical lens.

In this paper we propose that the cultural change entailing a new framing of wellbeing, if it happens, is unlikely to be driven by moral imperatives or persuasive campaigns, or follow the leadership of organized NGOs. Rather, the fundamental human strife for wellbeing and subjective happiness in everyday life is a more likely driving force. We hypothesize that the shifts in lifestyle choices and adaptations to the current economic realities can produce new social practices, interactions and meanings, which in turn lead to reframing the understanding of wellbeing. Extensive research on what makes people happy and satisfied with their lives suggests that such reframing can readily incorporate a shift away from consumerist lifestyles. In that reframing, materially scaled down life would be richer in other ways: more reciprocal and connected to others, and with a stronger sense of a community. We also hypothesize, drawing on the demographic and economic statistics that technologically connected, educated, confident and open to change millennials might lead the way in the shift toward a less-consumerist society. Their diminishing interest in suburban life in favor of cities, constricted economic opportunities, and the size and interconnectedness all point in that direction.

It is not known at this point whether the various forms of sharing economy, and the growing interest in the precepts of the new economy may contribute to this reframing process. To the extent that some forms (albeit in minority) of sharing economy foster social trust and community building, and that the new economy movement challenges income inequalities and many established institutions, there may be opportunities for mutual reinforcement. In this paper we note these trends and we summarize the small body of relevant empirical research as a way to highlight the opportunities further research on the possible transition beyond consumer society.

**No transition wars – economic collapse results in military budget cuts – but growth increases the propensity for conflict**

**Clary**, 4/21/**15- PHD candidate at MIT**

(Christopher, Economic Stress and International Cooperation: Evidence from International Rivalries”, MIT Political Science Department, p.4, <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2597712)//WB>

Economic Crisis Leads to Austerity **Economic crises generate pressure for austerity.** G**overnment revenues are a function of national economic production, so that when production diminishes through recession, revenues available for expenditure also diminish.** Planning almost invariably assumes growth rather than contraction, so the deviation in available revenues compared to the planned expenditure can be sizable. W**hen growth slowdowns are prolonged, the cumulative departure from planning targets can grow even further, even if no single quarter meets the technical definition of recession**. **Pressures for austerity are felt most acutely in governments that face difficulty borrowing to finance deficit expenditures**. This is especially the case when this borrowing relies on international sources of credit. Even for states that can borrow, however, **intellectual attachment to balanced budgets as a means to restore confidence—a belief in what is sometimes called “expansionary austerity**”—**generates incentives to curtail expenditure.** These incentives to cut occur precisely when populations are experiencing economic hardship, making reductions especially painful that target poverty alleviation, welfare programs, or economic subsidies. As a result, mass and elite constituents strongly resist such cuts. Welfare programs and other forms of public spending may be especially susceptible to a policy “ratchet effect,” where people are very reluctant to forego benefits once they have become accustomed to their availability.6 As Paul Pierson has argued, “**The politics [of welfare state] retrenchment is typically treacherous, because it imposes tangible losses on concentrated groups of voters in return for diffuse and uncertain gains.**”7 Austerity Leads to Cutbacks in Defense Spending **At a minimum, the political costs of pursuing austerity through cutbacks in social and economic expenditures alone make such a path unappealing.** In practice, **this can spur policymakers to curtail national security spending as a way to balance budgets during periods of economic turmoil**. There is often more discretion over defense spending than over other areas in the budget, and it is frequently distantly connected to the welfare of the mass public. Many militaries need foreign arms and foreign ammunition for their militaries, so d**efense expenditures are doubly costly** s**ince they both take up valuable defense budget space while also sending hard currency overseas,** rather than constituencies at home. P**ursuing defense cuts may also conform to the preferences of the financial sector**, which shows a strong aversion to military conflict even if that means policies of appeasement and conciliation.8 **During periods of economic expansion, the opportunity costs associated with defense expenditure**—the requirement for higher taxes or foregone spending in other areas—**are real but acceptable. Economic contraction heightens the opportunity costs by forcing a choice between different types of spending.** There is a constituency for defense spending in the armed services, intelligence agencies, and arms industries, but e**ven in militarized economies this constituency tends to be numerically much smaller than those that favor social and economic expenditures** over military ones. Defense Cutbacks Encourage Rapprochement **An interest in defense cutbacks can lead to conciliatory behavior through two paths. First, the cutbacks themselves serve as a concrete signal to adversaries that the military threat** posed by the economically distressed state **is declining**. **This permits the other state to halt that portion of defense spending dedicated to keeping up**, breaking the back of ongoing arms races through reciprocated, but non-negotiated moves. Unilateral conventional **force reductions were a major element of Gorbachev’s foreign policy in the late 1980s,** alongside negotiated strategic arms control, and diplomatic efforts to achieve political understandings with the United States.9 Gorbachev similarly used force reductions in Afghanistan, Mongolia, and the Soviet Far East to signal to China in 1987 that he was serious about political negotiations.10 Elsewhere, non-negotiated, tit-for-tat military redeployments facilitated Argentina-Brazil rapprochement.11 **Second, leaders may believe cutbacks are necessary, but would be dangerous in the absence of negotiated improvements with traditional foes. Economic downturns can serve as motivation to pursue arms control or political settlement.** During periods of normalcy, such outcomes would be positives, but are viewed as “too hard” by political leaders that move from one urgent problem to the next. **During periods of economic crisis**, however, **arms control or political improvements might allow for much needed cuts in defense spending, and are pursued with greater vigor**. T**he Johnson administration attempted both unilateral and negotiated arms limitations because of budgetary concerns** as President Johnson and Secretary McNamara struggled to pay for the “Great Society” domestic programs and the increasingly costly Vietnam War. They first attempted unilateral “caps” on costly nuclear forces and anti-ballistic missile defenses and when this failed to lead to a reciprocal Soviet response they engaged in formal arms control talks. Détente continued in the Nixon administration, accelerating in 1971 and 1972, simultaneous with rising budget deficits and inflation so serious that Nixon instituted price controls. N**ixon’s decision to sharply limit anti-ballistic missile defenses to enable arms control talks was contrary to his strategic views, but necessitated by a difficult budgetary environment that made paying for more missile defense emplacements unrealistic**.12 As Nixon told his national security advisor Kissinger in an April 1972 discussion of ballistic missile and anti-ballistic missile developments: “You know **we've got a hell of a budget problem. We've got to cut it down, we've got to cut 5 billion dollars off next year's defense budget**. So, I don't want to [inaudible: do it?] unless we've got some settlement with the Russians.”13 In practice, **unilateral defense cuts and force reductions are frequently combined with negotiated political agreements in a sequential, iterative fashion, where a unilateral reduction will signal seriousness that opens the way for political agreement, which in turn permits even deeper reductions.** Defense cuts and force reductions are not only a means to achieve rivalry termination, but also a goal in and of themselves that rivalry termination helps secure. Leaders are seeking resources from defense they can use elsewhere. Thus when Argentine leader Raul Alfonsín campaigned for the need for drastic budgetary austerity, his specific “platform was the reduction of military spending to use it for the other ministries, connected with the concept of eliminating the hypothesis of conflict” with Argentinian rivals, according to Adalberto Rodríguez Giavarini, who served in Alfonsín’s ministry of defense (and later was Argentina’s foreign minister).14 Similarly, **Gorbachev was motivated to reduce arms in the late 1980s because he determined it was necessary to cut Soviet defense spending and defense production**, and repurpose part of the defense industry to make consumer and civilian capital goods, according to contemporary U.S. Central Intelligence Agency classified assessments.15 Thus the “main reason” why strategic arms control breakthroughs occurred from 1986 to 1988 and the Soviet Afghan intervention concluded in 1989 was a realization within the Politburo of “excessively high expenditures on defense,” according to Nikolai Ryzhkov, Gorbachev’s prime minister.16

# Economic Growth Good

## Growth Sustainable

### Sustainable

#### Growth is infinite, every time humanity has come close to running out of something, a more efficient alternative is created

Ridley 14 [April 25, 2014, Matt Ridley, "The World's Resources Aren't Running Out," WSJ, <http://www.wsj.com/news/articles/SB10001424052702304279904579517862612287156>, online, RaMan]

How many times have you heard that we humans are "using up" the world's resources, "running out" of oil, "reaching the limits" of the atmosphere's capacity to cope with pollution or "approaching the carrying capacity" of the land's ability to support a greater population? The assumption behind all such statements is that there is a fixed amount of stuff—metals, oil, clean air, land—and that we risk exhausting it through our consumption. "We are using 50% more resources than the Earth can sustainably produce, and unless we change course, that number will grow fast—by 2030, even two planets will not be enough," says Jim Leape, director general of the World Wide Fund for Nature International (formerly the World Wildlife Fund). But here's a peculiar feature of human history: We burst through such limits again and again. After all, as a Saudi oil minister once said, the Stone Age didn't end for lack of stone. Ecologists call this "niche construction"—that people (and indeed some other animals) can create new opportunities for themselves by making their habitats more productive in some way. Agriculture is the classic example of niche construction: We stopped relying on nature's bounty and substituted an artificial and much larger bounty. Economists call the same phenomenon innovation. What frustrates them about ecologists is the latter's tendency to think in terms of static limits. Ecologists can't seem to see that when whale oil starts to run out, petroleum is discovered, or that when farm yields flatten, fertilizer comes along, or that when glass fiber is invented, demand for copper falls. That frustration is heartily reciprocated. Ecologists think that economists espouse a sort of superstitious magic called "markets" or "prices" to avoid confronting the reality of limits to growth. The easiest way to raise a cheer in a conference of ecologists is to make a rude joke about economists. I have lived among both tribes. I studied various forms of ecology in an academic setting for seven years and then worked at the Economist magazine for eight years. When I was an ecologist (in the academic sense of the word, not the political one, though I also had antinuclear stickers on my car), I very much espoused the carrying-capacity viewpoint—that there were limits to growth. I nowadays lean to the view that there are no limits because we can invent new ways of doing more with less. This disagreement goes to the heart of many current political issues and explains much about why people disagree about environmental policy. In the climate debate, for example, pessimists see a limit to the atmosphere's capacity to cope with extra carbon dioxide without rapid warming. So a continuing increase in emissions if economic growth continues will eventually accelerate warming to dangerous rates. But optimists see economic growth leading to technological change that would result in the use of lower-carbon energy. That would allow warming to level off long before it does much harm. It is striking, for example, that the Intergovernmental Panel on Climate Change's recent forecast that temperatures would rise by 3.7 to 4.8 degrees Celsius compared with preindustrial levels by 2100 was based on several assumptions: little technological change, an end to the 50-year fall in population growth rates, a tripling (only) of per capita income and not much improvement in the energy efficiency of the economy. Basically, that would mean a world much like today's but with lots more people burning lots more coal and oil, leading to an increase in emissions. Most economists expect a five- or tenfold increase in income, huge changes in technology and an end to population growth by 2100: not so many more people needing much less carbon. In 1679, Antonie van Leeuwenhoek, the great Dutch microscopist, estimated that the planet could hold 13.4 billion people, a number that most demographers think we may never reach. Since then, estimates have bounced around between 1 billion and 100 billion, with no sign of converging on an agreed figure. Economists point out that we keep improving the productivity of each acre of land by applying fertilizer, mechanization, pesticides and irrigation. Further innovation is bound to shift the ceiling upward. Jesse Ausubel at Rockefeller University calculates that the amount of land required to grow a given quantity of food has fallen by 65% over the past 50 years, world-wide. Ecologists object that these innovations rely on nonrenewable resources, such as oil and gas, or renewable ones that are being used up faster than they are replenished, such as aquifers. So current yields cannot be maintained, let alone improved. In his recent book "The View from Lazy Point," the ecologist Carl Safina estimates that if everybody had the living standards of Americans, we would need 2.5 Earths because the world's agricultural land just couldn't grow enough food for more than 2.5 billion people at that level of consumption. Harvard emeritus professor E.O. Wilson, one of ecology's patriarchs, reckoned that only if we all turned vegetarian could the world's farms grow enough food to support 10 billion people. Economists respond by saying that since large parts of the world, especially in Africa, have yet to gain access to fertilizer and modern farming techniques, there is no reason to think that the global land requirements for a given amount of food will cease shrinking any time soon. Indeed, Mr. Ausubel, together with his colleagues Iddo Wernick and Paul Waggoner, came to the startling conclusion that, even with generous assumptions about population growth and growing affluence leading to greater demand for meat and other luxuries, and with ungenerous assumptions about future global yield improvements, we will need less farmland in 2050 than we needed in 2000. (So long, that is, as we don't grow more biofuels on land that could be growing food.) But surely intensification of yields depends on inputs that may run out? Take water, a commodity that limits the production of food in many places. Estimates made in the 1960s and 1970s of water demand by the year 2000 proved grossly overestimated: The world used half as much water as experts had projected 30 years before. The reason was greater economy in the use of water by new irrigation techniques. Some countries, such as Israel and Cyprus, have cut water use for irrigation through the use of drip irrigation. Combine these improvements with solar-driven desalination of seawater world-wide, and it is highly unlikely that fresh water will limit human population. The best-selling book "Limits to Growth," published in 1972 by the Club of Rome (an influential global think tank), argued that we would have bumped our heads against all sorts of ceilings by now, running short of various metals, fuels, minerals and space. Why did it not happen? In a word, technology: better mining techniques, more frugal use of materials, and if scarcity causes price increases, substitution by cheaper material. We use 100 times thinner gold plating on computer connectors than we did 40 years ago. The steel content of cars and buildings keeps on falling. Until about 10 years ago, it was reasonable to expect that natural gas might run out in a few short decades and oil soon thereafter. If that were to happen, agricultural yields would plummet, and the world would be faced with a stark dilemma: Plow up all the remaining rain forest to grow food, or starve. But thanks to fracking and the shale revolution, peak oil and gas have been postponed. They will run out one day, but only in the sense that you will run out of Atlantic Ocean one day if you take a rowboat west out of a harbor in Ireland. Just as you are likely to stop rowing long before you bump into Newfoundland, so we may well find cheap substitutes for fossil fuels long before they run out. The economist and metals dealer Tim Worstall gives the example of tellurium, a key ingredient of some kinds of solar panels. Tellurium is one of the rarest elements in the Earth's crust—one atom per billion. Will it soon run out? Mr. Worstall estimates that there are 120 million tons of it, or a million years' supply altogether. It is sufficiently concentrated in the residues from refining copper ores, called copper slimes, to be worth extracting for a very long time to come. One day, it will also be recycled as old solar panels get cannibalized to make new ones. Or take phosphorus, an element vital to agricultural fertility. The richest phosphate mines, such as on the island of Nauru in the South Pacific, are all but exhausted. Does that mean the world is running out? No: There are extensive lower grade deposits, and if we get desperate, all the phosphorus atoms put into the ground over past centuries still exist, especially in the mud of estuaries. It's just a matter of concentrating them again. In 1972, the ecologist Paul Ehrlich of Stanford University came up with a simple formula called IPAT, which stated that the impact of humankind was equal to population multiplied by affluence multiplied again by technology. In other words, the damage done to Earth increases the more people there are, the richer they get and the more technology they have. Many ecologists still subscribe to this doctrine, which has attained the status of holy writ in ecology. But the past 40 years haven't been kind to it. In many respects, greater affluence and new technology have led to less human impact on the planet, not more. Richer people with new technologies tend not to collect firewood and bushmeat from natural forests; instead, they use electricity and farmed chicken—both of which need much less land. In 2006, Mr. Ausubel calculated that no country with a GDP per head greater than $4,600 has a falling stock of forest (in density as well as in acreage). Haiti is 98% deforested and literally brown on satellite images, compared with its green, well-forested neighbor, the Dominican Republic. The difference stems from Haiti's poverty, which causes it to rely on charcoal for domestic and industrial energy, whereas the Dominican Republic is wealthy enough to use fossil fuels, subsidizing propane gas for cooking fuel specifically so that people won't cut down forests. Part of the problem is that the word "consumption" means different things to the two tribes. Ecologists use it to mean "the act of using up a resource"; economists mean "the purchase of goods and services by the public" (both definitions taken from the Oxford dictionary). But in what sense is water, tellurium or phosphorus "used up" when products made with them are bought by the public? They still exist in the objects themselves or in the environment. Water returns to the environment through sewage and can be reused. Phosphorus gets recycled through compost. Tellurium is in solar panels, which can be recycled. As the economist Thomas Sowell wrote in his 1980 book "Knowledge and Decisions," "Although we speak loosely of 'production,' man neither creates nor destroys matter, but only transforms it." Given that innovation—or "niche construction"—causes ever more productivity, how do ecologists justify the claim that we are already overdrawn at the planetary bank and would need at least another planet to sustain the lifestyles of 10 billion people at U.S. standards of living? Examine the calculations done by a group called the Global Footprint Network—a think tank founded by Mathis Wackernagel in Oakland, Calif., and supported by more than 70 international environmental organizations—and it becomes clear. The group assumes that the fossil fuels burned in the pursuit of higher yields must be offset in the future by tree planting on a scale that could soak up the emitted carbon dioxide. A widely used measure of "ecological footprint" simply assumes that 54% of the acreage we need should be devoted to "carbon uptake." But what if tree planting wasn't the only way to soak up carbon dioxide? Or if trees grew faster when irrigated and fertilized so you needed fewer of them? Or if we cut emissions, as the U.S. has recently done by substituting gas for coal in electricity generation? Or if we tolerated some increase in emissions (which are measurably increasing crop yields, by the way)? Any of these factors could wipe out a huge chunk of the deemed ecological overdraft and put us back in planetary credit. Helmut Haberl of Klagenfurt University in Austria is a rare example of an ecologist who takes economics seriously. He points out that his fellow ecologists have been using "human appropriation of net primary production"—that is, the percentage of the world's green vegetation eaten or prevented from growing by us and our domestic animals—as an indicator of ecological limits to growth. Some ecologists had begun to argue that we were using half or more of all the greenery on the planet. This is wrong, says Dr. Haberl, for several reasons. First, the amount appropriated is still fairly low: About 14.2% is eaten by us and our animals, and an additional 9.6% is prevented from growing by goats and buildings, according to his estimates. Second, most economic growth happens without any greater use of biomass. Indeed, human appropriation usually declines as a country industrializes and the harvest grows—as a result of agricultural intensification rather than through plowing more land. Finally, human activities actually increase the productio (sometimes too much, causing algal blooms in water). In places like the Nile delta, wild ecosystems are more productive than they would be without human intervention, despite the fact that much of the land is used for growing human food. If I could have one wish for the Earth's environment, it would be to bring together the two tribes—to convene a grand powwow of ecologists and economists. I would pose them this simple question and not let them leave the room until they had answered it: How can innovation improve the environment?

#### Growth solves all resource shortages and makes itself sustainable – we can grow for thousands of years

Worstall 12(Tim Worstall, Senior Fellow at the Adam Smith institute in London, expert on rare earth elements, "We are nowhere near hitting 'peak oil', because we keep inventing new ways of extracting the stuff", 7/6/12, blogs.telegraph.co.uk/finance/timworstall/100018350/so-thats-the-end-of-peak-oil-then//Aspomer)

Peak oil always was a silly thing to panic over and now we've the UK's very own High Priest of the Church of Gaia telling us so. George Monbiot used his column this week to point out that we're not running out of oil and the wells are not going to run dry anytime soon. Supply is increasing rather nicely. As he says: The constraints on oil supply over the past 10 years appear to have had more to do with money than geology. The low prices before 2003 had discouraged investors from developing difficult fields. The high prices of the past few years have changed that. Any economist could have told him that. Resource constraints are always an economic problem: solved by the price mechanism. It was never true that we would run out of oil – it just gets more expensive. At a higher price, people use less and go and hunt for more. Both have happened: the amount of oil (or energy of any kind) used to produce one dollar of GDP has been falling for decades now. Techniques to extract more have been developed as those prices rise. And I'm afraid that people don't seem to understand the implications of those new techniques. Take the Macondo field drilled by BP. Yes, a disaster in the Gulf: but also the deepest well ever drilled. Having developed the technology to drill so deeply we have not only discovered one new oil field – we've also discovered a whole new Earth that we can explore for oil. That part of the entire globe that between 4,000 and 5,000 feet below the surface. Inventing fracking does not mean just extracting gas from Pennsylvania or oil from the Bakken. It means prospecting the whole planet again for such deposits. New technologies mean we have invented whole new planets to explore for resources. This does not apply only to peak oil or peak gas. There are those out there who worry about peak copper, peak indium and even peak tellurium (an odd one when we use 125 tonnes a year and there's 120 million tonnes in the crust). None of these are geological problems, they are all plain and simple economic ones. This is not to say that the world is free from problems. As Monbiot points out, if you care to worry about such things, having so much more oil might boil us all. But we already know the solution to that, a simple carbon tax. For we are not running out of the things that are subject to the price system. We are finding problems with things like the atmosphere, clean water, fisheries, which are not subject to it. The answer is therefore to introduce the price system to those natural resources so that we don't run out of them.

#### Growth is sustainable, self-correcting and innovative

Seabra, 14-

Leo has a background in Communication and Broadcasting and a broad experience which includes activities in Marketing, Advertising, Sales and Public Relations, writes about technology, digital media, sports, travels, food and sustainability, 2/27, “Capitalism can drive Sustainability and also innovation,” http://seabraaffairs.wordpress.com/2014/02/27/capitalism-can-drive-sustainability-and-also-innovation/

There are those who say that if the world does not change their habits, even the end of economic growth, and assuming alternative ways of living, will be a catastrophe. “Our lifestyles are unsustainable. Our expectations of consumption are predatory.Either we change this, or will be chaos”. Others say that the pursuit of unbridled economic growth and the inclusion of more people in consumption is killing the Earth. We have to create alternative because economic growth is pointing to the global collapse. “What will happen when billions of Chinese decide to adopt the lifestyle of Americans?” I’ll disagree if you don’t mind**…** Theymight be wrong. Completely wrong .. Even very intelligent people wrongly interpret the implications of what they observe when they lose the perspective of time. In the vast scale of time (today, decades, not centuries) it is the opposite of what expected, because they start from a false assumption: the future is the extrapolation of this. But not necessarily be. How do I know? Looking at history. What story? The history of innovation, this thing generates increases in productivity, wealth, quality of life in an unimaginable level. It is innovationthat will defeat pessimism as it always did. It was innovation that made life today is incomparably better than at any other time in human history. And will further improve. Einstein, who was not a stupid person, believed that capitalism would generate crisis, instability, and growing impoverishment. He said: “The economic anarchy of capitalist society as it exists today is, in my opinion, the true source of evil.” The only way to eliminate this evil, he thought, was to establish socialism, with the means of production are owned by the company. A centrally controlled economy would adjust the production of goods and services the needs of people, and would distribute the work that needed to be done among those in a position to do so. This would guarantee a livelihood to every man, women and children. Each according to his possibilities. To each according to their needs. And guess what? What happened was the opposite of what Einstein predicted. Who tried the model he suggested, impoverished, screwed up. Peter Drucker says that almost of all thinking people of the late nineteenth century thought that Marx was right: there would be increased exploitation of workers by employers. They would become poorer, until one day, the thing would explode. Capitalist society was considered inherently unsustainable. It is more or less the same chat today. Bullshit. Capitalism, with all appropriate regulations, self-corrects. It is an adaptive system that learns and changes by design**.** The design is just for the system to learn and change**.** There was the opposite of what Einstein predicted, and held the opposite of what many predict, but the logic that “unlike” only becomes evident over time. It wasn’t obvious that the workers are those whom would profit from the productivity gains that the management science has begun to generate by organizing innovations like the railroad, the telegraph, the telephone .. to increase the scale of production and cheapen things. The living conditions of workers today are infinitely better than they were in 1900. They got richer, not poorer .. You do not need to work harder to produce more (as everyone thought), you can work less and produce more through a mechanism that is only now becoming apparent, and that brilliant people like Caetano Veloso still ignores. The output is pursuing growth through innovation, growth is not giving up. More of the same will become unsustainable to the planet, but most of it is not what will happen, will happen more different, than we do not know what is right. More innovative. Experts, such as Lester Brown, insist on statements like this: if the Chinese also want to have three cars for every four inhabitants, as in the U.S. today, there will be 1.1 billion cars there in 2030, and there is no way to build roads unless ends with the whole area used for agriculture. You will need 98 million barrels of oil per day, but the world only produces about 90 million today, and probably never produce much more. The mistake is to extrapolate today’s solutions for the future. We can continue livinghere for 20 years by exploiting the same resources that we explore today? Of course not. But the other question is: how can we encourage the stream of innovations that will enable the Chinese, Indians, Brazilians, Africans .. to live so as prosperous asAmericans live today? Hey, wake up … what can not stop the engine of innovation is that the free marketengenders. This system is self correcting**,** that is its beauty. We do not need to do nothing but ensure the conditions for it to work without distortion. The rest he does himself. It regulates itself.

## Growth Good Impacts

### Impact – China War

#### U.S growth is empirically successful and deters China Conflict

Galser, 12-

“China is Reacting to Our Weak Economy” Bonnie S. Glaser (senior fellow at the Center for Strategic and International Studies.) 5/2/2012 http://www.nytimes.com/roomfordebate/2012/05/02/are-we-headed-for-a-cold-war-with-china/china-is-reacting-to-our-weak-economy

To maintain peace and stability in the Asia-Pacific region and secure American interests, the United States must sustain its leadership and bolster regional confidence in its staying power. The key to those goals is reinvigorating the U.S. economy. Historically, the Chinese have taken advantage of perceived American weakness and shifts in the global balance of power. In 1974 China seized the Paracel Islands from Saigon just after the United States and the Socialist Republic of Vietnam signed the Paris Peace Treaty, which signaled the U.S. withdrawal from the region. When the Soviet leader Mikhail Gorbachev met one of Deng Xiaoping’s “three obstacles” requirements for better ties and withdrew from Can Ranh Bay, Vietnam, in 1988, China snatched seven of the Spratly Islands from Hanoi. Two decades later, as the United States-Philippines base agreement was terminated, China grabbed Mischief Reef from Manila. Beijing must not be allowed to conclude that an economic downturn means our ability to guarantee regional stability has weakened. The Chinese assertive behaviors against its neighbors in recent years in the East China Sea, the South China Sea and the Yellow Sea were in part a consequence of China’s assessment that the global financial crisis signaled the beginning of U.S. decline and a shift in the balance of power in China’s favor. The Obama administration’s “rebalancing” or “pivot” to Asia will help prevent Chinese miscalculation and increase the confidence of U.S. partners in U.S. reliability as the ballast for peace and stability in the region. But failure to follow through with actions and resources would spark uncertainty and lead smaller countries to accommodate Chinese interests in the region. Most important, the United States must revive its economy. China will inevitably overtake the United States as the largest economy in the world in the coming decade or two. The United States must not let Beijing conclude that a relative decline in U.S. power means a weakened United States unable to guarantee regional peace and stability. The Chinese see the United States as mired in financial disorder, with an alarming budget deficit, high unemployment and slow economic growth — which, they predict, will lead to America's demise as the sole global superpower. To avoid Chinese miscalculation and greater United States-China strategic competition, the United States needs to restore financial solvency and growth through bipartisan action.

**War with China goes nuclear – safeguards won’t prevent escalation**

Wittner 11 – (11/28/11, Lawrence, PhD in history from Columbia University, Emeritus Professor of History at the State University of New York/Albany, “COMMENTARY: Is a Nuclear War with China Possible?” http://www.huntingtonnews.net/14446)

While nuclear weapons exist, there remains a danger that they will be used. After all, for centuries national conflicts have led to wars, with nations employing their deadliest weapons. The current deterioration of U.S. relations with China might end up providing us with yet another example of this phenomenon. The gathering tension between the United States and China is clear enough. Disturbed by China’s growing economic and military strength, the U.S. government recently challenged China’s claims in the South China Sea, increased the U.S. military presence in Australia, and deepened U.S. military ties with other nations in the Pacific region. According to Secretary of State Hillary Clinton, the United States was “asserting our own position as a Pacific power.” But need this lead to nuclear war? Not necessarily. And yet, **there are signs that it could.** After all, both the United States and China possess large numbers of nuclear weapons. The U.S. government threatened to attack China with nuclear weapons during the Korean War and, later, during the conflict over the future of China’s offshore islands, Quemoy and Matsu. In the midst of the latter confrontation, President Dwight Eisenhower declared publicly, and chillingly, that U.S. nuclear weapons would “be used just exactly as you would use a bullet or anything else.” Of course, China didn’t have nuclear weapons then. Now that it does, perhaps the behavior of national leaders will be more temperate. But the loose nuclear threats of U.S. and Soviet government officials during the Cold War, when both nations had vast nuclear arsenals, should convince us that, even as the military ante is raised, nuclear saber-rattling persists. Some pundits argue that nuclear weapons prevent wars between nuclear-armed nations; and, admittedly, there haven’t been very many—at least not yet. But the Kargil War of 1999, between nuclear-armed India and nuclear-armed Pakistan, should convince us that such wars can occur. Indeed, in that case, the conflict almost slipped into a nuclear war. Pakistan’s foreign secretary threatened that, if the war escalated, his country felt free to use “any weapon” in its arsenal. During the conflict, Pakistan did move nuclear weapons toward its border, while India, it is claimed, readied its own nuclear missiles for an attack on Pakistan. At the least, though, don’t nuclear weapons deter a nuclear attack? Do they? Obviously, NATO leaders didn’t feel deterred, for, throughout the Cold War, NATO’s strategy was to respond to a Soviet conventional military attack on Western Europe by launching a Western nuclear attack on the nuclear-armed Soviet Union. Furthermore, if U.S. government officials really believed that nuclear deterrence worked, they would not have resorted to championing “Star Wars” and its modern variant, national missile defense. Why are these vastly expensive—and probably unworkable—military defense systems needed if other nuclear powers are deterred from attacking by U.S. nuclear might? Of course, the bottom line for those Americans convinced that nuclear weapons safeguard them from a Chinese nuclear attack might be that the U.S. nuclear arsenal is far greater than its Chinese counterpart. Today, it is estimated that the U.S. government possesses over five thousand nuclear warheads, while the Chinese government has a total inventory of roughly three hundred. Moreover, only about forty of these Chinese nuclear weapons can reach the United States. Surely the United States would “win” any nuclear war with China. But what would that “victory” entail? A nuclear attack by China would immediately slaughter at least 10 million Americans in a great storm of blast and fire, while leaving many more dying horribly of sickness and radiation poisoning. The Chinese death toll in a nuclear war would be far higher. Both nations would be reduced to smoldering, radioactive wastelands. Also, radioactive debris sent aloft by the nuclear explosions would blot out the sun and bring on a “nuclear winter” around the globe—destroying agriculture, creating worldwide famine, and generating chaos and destruction.

### Impact – Disease

#### Economic growth helps the fight against disease, but decline hinders it

Alexander 9 Brian Alexander, MSNBC.com contributor, 3/10/2009, “Recession may worsen spread of exotic diseases”, http://www.nbcnews.com/id/29599786/#.Vaa-vfkzjX0

Budget cuts over a period of years have left public health at all levels of government underfunded by $20 billion, according to a report published in the U.S. in October by the non-partisan Trust for America’s Health. The recession has only piled on the pain, with states and counties being especially hard hit. For example, Washington's King County was forced to cut roughly $19 million out of public health in its 2009 budget. Funding was surprisingly tiny even before the recession. “When I started at the CDC in the summer of 2001, I was told my branch budget was zero,” said Dr. James Maguire, former chief of the CDC’s parasitic diseases branch and now a Harvard professor. “It was always pretty sparse.” Currently, the budget for the branch is thought to be less than $75,000, not including staff salaries. (The agency was unable to provide a definite amount.) The total for all emerging diseases was $130.3 million for fiscal 2008. By comparison the CDC expects to spend about $103.7 million on anti-tobacco promotions. The 2009 CDC budget for chronic disease prevention, which includes heart disease, diabetes and stroke, is more than $932 million. A significant amount of the CDC funding for emerging diseases goes to salaries and state and local health departments, explained Dr. Ali Kahn, deputy director of the National Center for Zoonotic, Vector-Borne and Enteric Diseases at the CDC, “There is no doubt we could do a lot more in the U.S. and worldwide with additional funds,” said Kahn. The recession has weakened the government's ability to develop better treatments, vaccines or prevent an epidemic, experts said. “States do not have resources to keep people on board and these people are monitoring diseases, the epidemiologists doing shoe leather investigations,” said Jeffrey Levi, executive director of Trust for America’s Health. “You cannot turn them on and off with a switch. If you lose them you’ve lost them forever.”

**Disease causes extinction—no burnout**

Karl-Heinz **Kerscher 14**, Professor, “Space Education”, Wissenschaftliche Studie, 2014, 92 Seiten

**The death toll for a pandemic is equal to the virulence**, the deadliness of the pathogen or pathogens, **multiplied by the number of people eventually infected. It has been hypothesized that there is an upper limit to the virulence of naturally evolved pathogens**. This is **because a pathogen that quickly kills its hosts might not have enough time to spread to new ones, while one that kills its hosts more slowly** or not at all **will allow carriers more time to spread the infection**, and thus likely out-compete a more lethal species or strain. **This simple model predicts that if virulence and transmission are not linked** in any way, **pathogens will evolve towards low virulence and rapid transmission**. However, **this assumption is not always valid and in more complex models, where the level of virulence and the rate of transmission are related, high levels of virulence can evolve. The level of virulence** that is possible **is instead limited by the existence of complex populations of hosts**, with different susceptibilities to infection, or by some hosts being geographically isolated. The size of the host population and competition between different strains of pathogens can also alter virulence. **There are numerous historical examples of pandemics that have had a devastating effect on a large number of people, which makes the possibility of global pandemic a realistic threat to human civilization**.

### Impact – Enviro

#### Increased economic growth leads to environmental protection, empirics prove

Meadows 12 Et. Al. [September/October 2012, Dennis Meadows (American scientist and Emeritus Professor of Systems Management, and former director of the Institute for Policy and Social Science Research at the University of New Hampshire), Obtained from ForeignAffairs, <https://www.foreignaffairs.com/articles/global-commons/2012-09-01/growth-good>,RaMan]

In 1970, U.S. President Richard Nixon signed the Clean Air Act into law, launching one of the most successful public health and environmental programs in history. In the first decade that followed, in Los Angeles, the amount of pollution from ozone -- the main component of smog -- exceeded government health standards on 200 days each year. By 2004, that number had dropped to 28 days. In the 1970s, also as a result of polluted air, nearly 90 percent of American children had lead in their blood at levels higher than what the Centers for Disease Control and Prevention deemed safe, and parents were alarmed by studies showing that lead interfered with cognitive development. Today, only two percent of children have such high levels of lead in their bodies. By controlling hazardous emissions, the Clean Air Act delivered these and many other health benefits. And it did so without curbing economic growth. The United States' GDP has risen by 207 percent since the law was passed over four decades ago. And because the law sparked innovation -- from catalytic converters, which convert toxic exhaust fumes from automobiles into less dangerous substances, to smokestack scrubbers -- pollution reductions have proved relatively inexpensive. According to the U.S. Environmental Protection Agency, for every dollar the United States has spent on cutting pollution through the Clean Air Act, it has gained more than $40 in benefits. Yet in his recent article ("Environmental Alarmism, Then and Now," July/August 2012), Bjørn Lomborg argues that the modern environmental movement has been distracted by unproductive goals and a desire to thwart economic growth. As evidence, he cites The Limits to Growth, a book published in 1972 by a group of scientists associated with the Club of Rome. The book cautioned that exponential increases in population, consumption, and pollution would exhaust the earth's finite natural resources and trigger the collapse of the world system. Lomborg rightly points out that the Club of Rome's worst forecasts never materialized, but he believes the book had a perverse effect on the way people think. "By recommending that the world limit development in order to head off a supposed future collapse," he writes, "The Limits to Growth led people to question the value of pursuing economic growth." Lomborg assumes that those who acknowledge that the planet has finite resources must necessarily oppose economic progress. This framing reveals the limitations of Lomborg's argument. The question the environmental movement asks is not, "How can we arrest growth?" The question is, "What kind of growth do we want?" For decades, heads of state, economists, captains of industry, and environmental leaders have opted for the type of growth that allows economic output to rise, makes the air cleaner, and preserves the planet's resources at the same time. The public call for environmental protection did not begin with the publication of a slender volume from the Club of Rome. It emerged from what people saw with their own eyes: raw sewage in the Great Lakes, smog so thick that it obscured the George Washington Bridge, oil despoiling Santa Barbara's pristine beaches, old-growth forests stripped bare in Oregon. It was Americans' desire to protect their families and their resources that ignited the modern environmental movement and inspired the passage of the Clean Air Act, the Clean Water Act, the Safe Drinking Water Act, and other landmark legislation. Lomborg, however, claims that the Club of Rome's dire warnings distracted people from making real progress. "Spurred by analyses such as that presented in The Limits to Growth, much time and effort over the years has been diverted from useful activities to dubious or even pernicious ones." As an example, he says that instead of banning DDT, a known carcinogen, the United States should have focused on air pollution. He claims that because air pollution does not enjoy "celebrity backers," it has been "ignored." The lives saved by the Clean Air Act prove him wrong. For 40 years, the environmental movement has sought to make the air safer to breathe, the water cleaner to drink, and the wilderness better protected. Only those who forget the sight of yellow-brown haze or burning rivers would call this a distraction. GETTING IT RIGHT Today, a new set of images reveals the hazards not of economic growth per se but of the unsustainable exploitation of natural resources. These are not predictions from a 40-year-old report but measurements of real developments. Right now, 90 percent of the world's large fish, such as tuna, swordfish, and marlin, have disappeared thanks to overfishing. This is alarming not just for the sake of the species themselves but also for industry and food supplies: the National Ocean Economics Program reports that between 1997 and 2007, California's commercial fishing revenues dropped by 43 percent because fish stocks were plummeting. Meanwhile, 90 percent of West Africa's rain forests have been destroyed, and between 2000 and 2005 alone, the world lost rain-forest acreage equal to the size of Germany. The amount of carbon dioxide in the air has increased by 23 percent over the last 50 years, driving climate change and intensifying such extreme weather events as the 2010 floods in Pakistan, which affected 20 million people, and the 2011 floods in Thailand, which caused more than $45 billion in damage. Accounting for the world's natural capital is not alarmist; it is wise. Clean air, a stable climate, plentiful fish, lush forests, fresh water, and energy resources are the building blocks of prosperity. Identifying how to tap them without exhausting them will open the door to economic growth. Consider, for instance, the automobile industry. The United States can continue to waste oil, a limited and expensive resource, by burning it in inefficient engines that use outdated technologies. Or it can build cars that travel farther on less gasoline. The Obama administration has opted to encourage the latter by raising the fuel-efficiency standard to 54.6 miles per gallon by 2025. Within 20 years, better-performing cars will reduce U.S. oil use by more than the amount that the country imported from Iraq and Saudi Arabia in 2010. They will also save drivers more than $80 billion a year at the pump and, by 2025, halve the amount of carbon pollution emitted by vehicles in the United States. Even if the United States finally starts to clean up its automobile fleet, demand for cars is rising around the globe. Right now, there are about 800 million vehicles in use; by 2050, that number will rise to 2.5 billion. If the world is to meet this demand without sending oil prices through the roof, endangering public health with dirty tailpipes, and intensifying climate change, then it must start finding ways to make this growth greener. The same holds for rising energy needs. Two-thirds of the buildings that are projected to exist in India in 2030, for instance, have not yet been built. David Goldstein, a scientist at the Natural Resources Defense Council, has argued that if India incorporates energy-saving features from the beginning of construction, it can reduce energy use by 50 percent at no additional cost. In other words, it makes more economic sense to start with efficient buildings than to retrofit them later. The production of efficient buildings and cleaner cars will generate billions of dollars for manufacturers and employ millions of people. That constitutes growth, but because it will use less energy and generate less pollution, it will be more sustainable growth. Lomborg fails to account for these gains because he persists in thinking that environmental leaders oppose economic growth. He is mistaken. At the recent Earth Summit in Rio de Janeiro, nobody called for an end to growth. Instead, the 50,000 heads of state, mayors, business executives, and citizens who gathered there affirmed that, despite Lomborg's claims to the contrary, infinite growth in the consumption of finite resources is simply not possible. Those of us who are concerned for the environment want economic growth. After all, prosperity often leads to greater environmental protection. We just want to do it right. FRANCES BEINECKE is President of the Natural Resources Defense Council. PATTERNS, NOT PREDICTIONS Dennis Meadows According to Bjørn Lomborg, The Limits to Growth, a short book written 40 years ago (and of which I am a co-author), is "mostly forgotten." Nevertheless, he believes that the book "helped set the terms of debate on crucial issues . . . with malign effects that remain embedded in public consciousness four decades later." Among those "malign effects" is the growing recognition that current economic policies can produce problems greater than their benefits. Lomborg rejects that perception, concluding, "It is past time to acknowledge that economic growth, for lack of a better word, is good, and that what the world needs is more of it, not less." The expansion of economic output over the past 250 years has produced enormous gains in human welfare. But conditions have changed. Humanity must now become more nuanced in its policies. We noted this in The Limits to Growth, writing, "Any human activity that does not require a large flow of irreplaceable resources or produce severe environmental degradation might continue to grow indefinitely." Lomborg quotes only the first edition of our book, long out of print. Thus, readers cannot easily form their own conclusions. In Limits to Growth: The 30-Year Update, we used more recent data but still reached the original conclusions. Lomborg's critique of our report boils down to the assertion that we predicted the exhaustion of resources before the year 2000. But we said repeatedly in The Limits to Growth that it is impossible to predict the future of social systems precisely. Instead, our goal was to understand long-term patterns of development for world population, capital, and other physical variables. We showed 12 different scenarios of the future, seven portraying collapse and five showing possibilities for a sustainable future. We declared unambiguously that the scenarios were "not exact predictions of the values of the variables at any particular year in the future. They are indications of the system's behavioral tendencies only." We were interested in patterns, not predictions. Unlike Lomborg, most readers noted this point. As the physicist Graham Turner wrote in a 2008 paper for Australia's Commonwealth Scientific and Industrial Research Organization (CSIRO) comparing The Limits to Growth's predictions with "thirty years of reality," the book "was not intended to be predictive or for making detailed forecasts, but to provide a means for better understanding the behaviour of the world economic system." Lomborg claims that The Limits to Growth "worried about running out of oil (in 1990) and natural gas (in 1992)." But as Matthew Simmons, who was an energy adviser to U.S. President George W. Bush and a member of the National Petroleum Council, wrote in a 2000 white paper on energy, "Nowhere in the book was there any mention about running out of anything by 2000. Instead, the book's concern was entirely focused on what the world might look like 100 years later. There was not one sentence or even a single word written about an oil shortage, or limit to any specific resource, by the year 2000." Lomborg errs because his critique overwhelmingly draws on numbers he took from one data table in the first edition of The Limits to Growth. He presents those numbers as predictions generated by our computer model, even though our citations indicated that this table presented 1970 data compiled by the U.S. Bureau of Mines and other sources. We used the numbers solely to illustrate important differences between linear and exponential growth; they had no connection to our scenarios. What is more, Lomborg ignores the fact that we eliminated this table completely from the second and third editions of our book with no effect whatsoever on our results. Lomborg makes many other important mistakes. His discussion of his Figure 2, on commodity prices, ignores the rise in the commodity price index since the year 2000, which may herald a permanent shift in the trend. His Figure 3, on natural resource levels, confuses resource reserves with their crustal abundance. The first can be increased by raising prices; the second cannot. His Figure 4 compares the effects of short-lived air pollution with our scenario values for long-lived toxics, a category from which we explicitly excluded air pollution. Ignoring climate change, Lomborg suggests that conventional policies can solve society's problems. Many scientific studies contradict that view, most recently a report from IAP, a global network of 105 scientific academies. In June, IAP published a joint statement acknowledging that the global system is "on track to alternative futures with severe and potentially catastrophic implications for human well-being." The Limits to Growth said this in 1972, and Turner's CSIRO report has reconfirmed our concern. After analyzing empirical information on the development of global society, Turner concluded, "The analysis shows that 30 years of historical data compares favorably with key features of [The Limits to Growth's] business-as-usual scenario called the 'standard run' scenario, which results in collapse of the global system midway through the 21st Century." To avert that result, we proposed deliberate measures for slowing physical expansion. Lomborg, by contrast, argues that human ingenuity alone will allow the world to overcome its environmental challenges. The problem is that he ignores the role ingenuity often plays in blocking constructive change.

#### Growth is key to green tech

Ben-Ami, 11 (Daniel Ben-Ami, journalist and author, regular contributor to *spiked*, has been published in the *American*, the *Australian*, Economist.com, *Financial Times*, the *Guardian*, the *Independent*, *Novo* (Germany), *Ode* (American and Dutch editions), *Prospect*, *Shanghai Daily*, the *Sunday Telegraph*, the *Sunday Times*, and *Voltaire* (Sweden), 2011 (“Do not knock prosperity that makes the good life possible,” Published Online for *Shanghai Daily* on June 15, 2011, Available Online at http://bit.ly/P9JUus)

Finally, there is the argument about the environment itself. The most popular variant of the idea of a natural limit nowadays is that growth inevitably means runaway climate change. However, there is plenty of evidence to the contrary. There are many forms of energy, including nuclear, that do not emit greenhouse gases. There are also ways to adapt to global warming such as building higher sea walls. Since such measures are expensive it will take more resources to pay for them; which means more economic growth rather than less. If anything the green drive to curb prosperity is likely to undermine our capacity to tackle climate change. Schumacher’s fundamentally conservative argument chimes well with those who want to reconcile us to austerity. It suits those in power for the mass of the population to accept the need to make do with less. Under such circumstances it is no surprise that David Cameron, like his international peers, is keen for us to focus on individual contentment rather than material prosperity. It is hard to imagine a more anti-human outlook than one advocating a sharp fall in living standards for the bulk of the world’s population.

### Impact – Poverty

#### Economic growth is not only sustainable for the economy but also drastically helps the poor.

Ridley 14 [April 25, 2014, Matt Ridley, "The World's Resources Aren't Running Out," WSJ, <http://www.wsj.com/news/articles/SB10001424052702304279904579517862612287156>, online, RaMan]

But apart from improvements in longevity, happiness, health, education, safety and environmental quality, what has economic growth done for the poor? Chapter Two showed that absolute poverty is declining around the world. The fraction of the world’s population living on less than $1 or $2 per day dropped rapidly over the twentieth century. The benefits of growth in New Zealand also have been widely shared. Figure 5, below, charts average income per adult in New Zealand as well as average incomes excluding the top 10% of earners. Average real incomes rose from about $23,000 in 1953 to over $41,000 in 2011. Average earnings for the bottom 90% rose from $16,500 to $31,800, almost doubling, in real terms, from 1953 to 2011. Economic growth from 1953 to 2011 reduced inequality between the bottom 90% and the top 10%. Growth in incomes has been strongest, relatively speaking, for those outside of the top 10%. Figure 5 shows income growth relative to a 1953 baseline. The data series starts in 1953 because, before that, a different measure of household earnings was used making the earlier data not comparable to the later figures. The table sets 1953’s income equal to 100 for all three groups, then traces the growth since then. While the earnings of the top 1% grew rapidly from 1988 to 1999, over the longer period, the top 1% have not fared nearly as well. Incomes for the bottom 90% almost doubled from 1988 to 1999. The top 1% and 10% are up by half as much: incomes of both groups are 50% higher than in 1953. Unfortunately, the World Top Incomes Database used in the charts above does not provide more details about income growth for those outside the top 10%. For that, we need to turn to the Ministry of Social Development’s recent report on trends in inequality and hardship from 1982 to 2013.59 THE CASE FOR ECONOMIC GROWTH 33 Figure 6 plots income growth since 1982 for households in the second, fourth, sixth and eighth deciles. Twenty percent of households earn as much or less than the figure reported for the second decile; 40% earn as much as or less than the fourth decile, and so on. Figure 6: Household Income Growth Since 1982 Income 1 40 130 1 20 1 10 1 00 90 80 70 60 1982 1984 1986 1988 1990 1992 1994 1996 1998 2001 2004 2007 2009 2010 2011 2012 2013 DECILE 2 DECILE 4 DECILE 6 DECILE 8 Y EARS Source: Author’s calculations from appendices to Perry, 2014.60 In all cases, incomes declined in real terms from 1982 to 1994, followed by strong growth. Households in the eighth-decile earned 30% more in 2013 than eighth-decile households in 1982. Households in the second decile earned 20% more in 2013 than second-decile households in 1982. And the figures above show that earners in the bottom 90% experienced strong income growth from 1953 to 1971, with stagnation from the early 1970s until the late 1980s or early 1990s, depending on the income group. An alternative approach is to compare earnings for the bottom and top 40% of households. Figure 7 compares income growth at the midpoint of the second and third deciles – a measure of the median earnings of the bottom 40% – with income growth at the midpoint of the seventh and eighth deciles – a measure of the median earnings of the top 40%.While incomes grew more strongly for those in the top 40% than for those in the bottom 40% since the early 1980s, both groups have shared in the strong growth since 1994. Bryan Perry’s report for the Ministry of Social Development concludes: There is no evidence of any sustained rise or fall in inequality in the last two decades. The level of household disposable income inequality in New Zealand is a little above the OECD median. The share of total income received by the top 1% of individuals is at the low end of the OECD rankings.62 Bad economic policy in the 1970s, combined with worsening trade conditions, made the 1970s a lost decade; recovering from the Muldoon era took the bulk of the 1980s. The economic reforms of the 1980s were necessary, but they were hard – especially for poorer groups. Businesses had to learn how to operate in a new open and competitive environment; too many lower skilled workers had too few options when production lines rationalised. The period from 1982 to the early 1990s was terrible for workers in the bottom 40%. But by 2009, rapid income growth in the bottom 40% made up much of the difference. It is then not surprising that child poverty rates, as measured as the proportion of children in low-income households, measured after THE CASE FOR ECONOMIC GROWTH 35 housing costs, rose from about 15% in the 1980s to peak near 35% in the mid- 1990s, before dropping to just over 20% by 2013.63 As poverty rates in this kind of measure are based on a household’s income relative to the median, gains in median income will increase measured child poverty unless there is a parallel increase in household incomes for poorer households. The rise in housing costs over the 1990s and 2000s, largely due to tighter council restrictions on the supply of new housing, has also hurt poorer families. Households on less than half the median income have a much harder time making ends meet, after housing costs, than when councils encouraged more building. The Ministry of Social Development report cited above notes that after-housing-cost incomes for low-income households are no better than they were in the 1980s. The benefits of economic growth ring a bit hollow when all income gains are eaten up in higher rents. Addressing restrictive land use policies that prevent both building up and building out will consequently be an important part of improving real after-housing-cost incomes for those at the bottom.64

**Poverty outweighs nuke war**

Abu-Jamal 1998 (Mumia, Peace Activist, “A Quiet and Deadly Violence,” FLASHPOINTS, September 19, 1998, available online at http://www.flashpoints.net/mQuietDeadlyViolence.html, accessed 6/30/07)

This form of violence, not covered by any of the majoritarian, corporate, ruling-class protected media, is invisible to us and because of its invisibility, all the more insidious. How dangerous is it--really? Gilligan notes: [**E]very fifteen years**, on the average, **as many people die because of** relative **poverty as would be killed in a nuclear war** that caused 232 million deaths; and **every single year**, two to **three times** as many **people die from poverty** throughout the world **as were killed by** the **Nazi genocide** of the Jews **over a six-year period. This is**, in effect, the equivalent of **an ongoing,** unending, in fact **accelerating**, thermo**nuclear war,** or genocide **on the** weak and **poor** every year of every decade, throughout the world. [Gilligan, p. 196] Worse still, in a thoroughly capitalist society, much of that violence became internalized, turned back on the Self, because, in a society based on the priority of wealth, those who own nothing are taught to loathe themselves, as if something is inherently wrong with themselves, instead of the social order that promotes this self-loathing.. This vicious, circular, and invisible violence, unacknowledged by the corporate media, uncriticized in substandard educational systems, and un-understood by the very folks who suffer in its grips, feeds on the spectacular and more common forms of violence that the system makes damn sure -that we can recognize and must react to it. This fatal and systematic violence may be called The War on the Poor.

### Impact – War

#### An unstable economy causes war—empirics prove

Mead 09 [February 4, 2009, Walter Russell Mead (James Clarke Chace Professor of Foreign Affairs and Humanities at Bard College and Professor of American foreign policy at Yale University), “Only Makes You Stronger: Why the Recession Bolstered America”, online, <http://www.freerepublic.com/focus/news/2169866/posts>, February 4, RaMan]

But, in many other countries where capitalism rubs people the wrong way, this is not the case. On either side of the Atlantic, for example, the Latin world is often drawn to anti-capitalist movements and rulers on both the right and the left. Russia, too, has never really taken to capitalism and liberal society--whether during the time of the czars, the commissars, or the post-cold war leaders who so signally failed to build a stable, open system of liberal democratic capitalism even as many former Warsaw Pact nations were making rapid transitions. Partly as a result of these internal cultural pressures, and partly because, in much of the world, capitalism has appeared as an unwelcome interloper, imposed by foreign forces and shaped to fit foreign rather than domestic interests and preferences, many countries are only half-heartedly capitalist. When crisis strikes, they are quick to decide that capitalism is a failure and look for alternatives. So far, such half-hearted experiments not only have failed to work; they have left the societies that have tried them in a progressively worse position, farther behind the front-runners as time goes by. Argentina has lost ground to Chile; Russian development has fallen farther behind that of the Baltic states and Central Europe. Frequently, the crisis has weakened the power of the merchants, industrialists, financiers, and professionals who want to develop a liberal capitalist society integrated into the world. Crisis can also strengthen the hand of religious extremists, populist radicals, or authoritarian traditionalists who are determined to resist liberal capitalist society for a variety of reasons. Meanwhile, the companies and banks based in these societies are often less established and more vulnerable to the consequences of a financial crisis than more established firms in wealthier societies. As a result, developing countries and countries where capitalism has relatively recent and shallow roots tend to suffer greater economic and political damage when crisis strikes--as, inevitably, it does. And, consequently, financial crises often reinforce rather than challenge the global distribution of power and wealth. This may be happening yet again. None of which means that we can just sit back and enjoy the recession. History may suggest that financial crises actually help capitalist great powers maintain their leads--but it has other, less reassuring messages as well. If financial crises have been a normal part of life during the 300-year rise of the liberal capitalist system under the Anglophone powers, so has war. The wars of the League of Augsburg and the Spanish Succession; the Seven Years War; the American Revolution; the Napoleonic Wars; the two World Wars; the cold war: The list of wars is almost as long as the list of financial crises. Bad economic times can breed wars. Europe was a pretty peaceful place in 1928, but the Depression poisoned German public opinion and helped bring Adolf Hitler to power. If the current crisis turns into a depression, what rough beasts might start slouching toward Moscow, Karachi, Beijing, or New Delhi to be born? The United States may not, yet, decline, but, if we can't get the world economy back on track, we may still have to fight.

#### Growth promotes peace

Qian 14 Joseph Cheng Qian, Master of Arts in Global Security Studies, John Hopkins University, “THE EFFECT OF TRADE, RESOURCES, AND MIGRATION ON CONFLICT”, https://jscholarship.library.jhu.edu/bitstream/handle/1774.2/37270/QIAN-THESIS-2014.pdf?sequence=1

Through economic interdependence, countries have drastically increased opportunities for interactions among societies that are often correlated with peaceful coexistence. Keohane and Nye observe that improvements in relations increase the cost of using military force, "there is no guarantee that military means will be more effective than economic ones to achieve a given purpose.”13 These ideas stretch back to the early 20th century with scholars such as Norman Angell declaring that economic interdependence rendered wars irrational and looked forward to the day when they would become obsolete. 14 Trade and Conflict Trade has always been referred to as the interdependent nature of open markets and the idea of comparative advantage. Trade is positively correlated with economic gains as actors often find that interdependence fosters economic cooperation through migration, tourism, and the promotion of exchanges creating a mutually beneficial economic relationship.15 Scholars who have identified a strong correlation between trade and conflict such as Edward Mansfield note that the majority of existing literature emphasizes that trade, especially in the form of agreements enhances market access for goods, services, and investments. In addition to liberalizing and increasing the flow of overseas commerce, these institutions are designed to stabilize and reduce volatility in policy and flow of goods and services by constraining states from introducing new trade barriers and fostering policy transparency and convergence in expectations, standards, and stability.16 Mansfield continues to argue that trade institutions reduce the variability of trade flows in three complementary ways. First, institutions help enforce existing market access commitments and deter the erection of new protectionist barriers that could otherwise precipitate fluctuations in trade. Second, trade institutions foster transparency and policy convergence among member-states. Third, such institutions change certain characteristics of markets, precipitating responses by private traders that reduce the volatility of crossborder transactions.17 J.D. Morrow brings up the conflict dimension by highlighting that trade flows could reduce the risk of escalation by increasing the range of costly signals of resolve in a crisis.18 Hegre et al. bring in themes of governance and fear of consequences in their study. They find that commerce promotes peace because violence has substantial costs. Economically important trade reduces conflict because interstate violence adversely affects commerce. If conflict did not impede trade, economic agents would be indifferent to risk and the maximization of profit. Because conflict is costly, trade should reduce interstate violence. Otherwise, national leaders would be insensitive to economic loss and the preferences of powerful domestic actors. The economic cost of conflict should reduce the likelihood of military conflict, ceteris paribus, if national leaders are rational.19

#### Economic decline inevitably leads to war

Roberts 15 [May 7, 2015, Paul Craig Roberts (American economist previously worked in the Reagan Administration), “War Threat Rises As Economy Declines”, <http://www.paulcraigroberts.org/2015/05/11/war-threat-rises-economy-declines-paul-craig-roberts/>, RaMan]

The defining events of our time are the collapse of the Soviet Union, 9/11, jobs offshoring, and financial deregulation. In these events we find the basis of our foreign policy problems and our economic problems. The United States has always had a good opinion of itself, but with the Soviet collapse self-satisfaction reached new heights. We became the exceptional people, the indispensable people, the country chosen by history to exercise hegemony over the world. This neoconservative doctrine releases the US government from constraints of international law and allows Washington to use coercion against sovereign states in order to remake the world in its own image. To protect Washington’s unique Uni-power status that resulted from the Soviet collapse, Paul Wolfowitz in 1992 penned what is known as the Wolfowitz Doctrine. This doctrine is the basis for Washington’s foreign policy. The doctrine states: “Our first objective is to prevent the re-emergence of a new rival, either on the territory of the former Soviet Union or elsewhere, that poses a threat on the order of that posed formerly by the Soviet Union. This is a dominant consideration underlying the new regional defense strategy and requires that we endeavor to prevent any hostile power from dominating a region whose resources would, under consolidated control, be sufficient to generate global power.” In March of this year the Council on Foreign Relations extended this doctrine to China. Washington is now committed to blocking the rise of two large nuclear-armed countries. This commitment is the reason for the crisis that Washington has created in Ukraine and for its use as anti-Russian propaganda. China is now confronted with the Pivot to Asia and the construction of new US naval and air bases to ensure Washington’s control of the South China Sea, now defined as an area of American National Interests. 9/11 served to launch the neoconservatives’ war for hegemony in the Middle East. 9/11 also served to launch the domestic police state. While civil liberties have shriveled at home, the US has been at war for almost the entirety of the 21st century, wars that have cost us, according to Joseph Stiglitz and Linda Bilmes, at least $6 trillion dollars. These wars have gone very badly. They have destabilized governments in an important energy producing area. And the wars have vastly multiplied the “terrorists,” the quelling of which was the official reason for the wars. Just as the Soviet collapse unleashed US hegemony, it gave rise to jobs offshoring. The Soviet collapse convinced China and India to open their massive underutilized labor markets to US capital. US corporations, with any reluctant ones pushed by large retailers and Wall Street’s threat of financing takeovers, moved manufacturing, industrial, and tradable professional service jobs, such as software engineering, abroad. This decimated the American middle class and removed ladders of upward mobility. US GDP and tax base moved with the jobs to China and India. US real median family incomes ceased to grow and declined. Without income growth to drive the economy, Alan Greenspan resorted to an expansion of consumer debt, which has run its course. Currently there is nothing to drive the economy. When the goods and services produced by offshored jobs are brought to the US to be sold, they enter as imports, thus worsening the trade balance. Foreigners use their trade surpluses to acquire US bonds, equities, companies, and real estate. Consequently, interests, dividends, capital gains, and rents are redirected from Americans to foreigners. This worsens the current account deficit. In order to protect the dollar’s exchange value in the face of large current account deficits and money creation in support of the balance sheets of “banks too big to fail,” Washington has the Japanese and European central banks printing money hand over fist. The printing of yen and euros offsets the printing of dollars and thus protects the dollar’s exchange value. The Glass-Steagall Act that separated commercial and investment banking had been somewhat eroded prior to the total repeal during the second term of the Clinton regime. This repeal, together with the failure to regulate over the counter derivatives, the removal of position limits on speculators, and the enormous financial concentration that resulted from the dead letter status of anti-trust laws, produced not free market utopia but a serious and ongoing financial crisis. The liquidity issued in behalf of this crisis has resulted in stock and bond market bubbles. Implications, consequences, solutions: When Russia blocked the Obama regime’s planned invasion of Syria and intended bombing of Iran, the neoconservatives realized that while they had been preoccupied with their wars in the Middle East and Africa for a decade, Putin had restored the Russian economy and military. The first objective of the Wolfowitz doctrine–to prevent the re-emergence of a new rival–had been breached. Here was Russia telling the US “No.” The British Parliament joined in by vetoing UK participation in a US invasion of Syria. The Uni-Power status was shaken. This redirected the attention of the neoconservatives from the Middle East to Russia. Over the previous decade Washington had invested $5 billion in financing up-and-coming politicians in Ukraine and non-governmental organizations that could be sent into the streets in protests. When the president of Ukraine did a cost-benefit analysis of the proposed association of Ukraine with the EU, he saw that it didn’t pay and rejected it. At that point Washington called the NGOs into the streets. The neo-nazis added the violence and the government unprepared for violence collapsed. Victoria Nuland and Geoffrey Pyatt chose the new Ukrainian government and established a vassal regime in Ukraine. Washington hoped to use the coup to evict Russia from its Black Sea naval base, Russia’s only warm water port. However, Crimea, for centuries a part of Russia, elected to return to Russia. Washington was frustrated, but recovered from disappointment and described Crimean self-determination as Russian invasion and annexation. Washington used this propaganda to break up Europe’s economic and political relationships with Russia by pressuring Europe into sanctions against Russia. The sanctions have had adverse impacts on Europe. Additionally, Europeans are concerned with Washington’s growing belligerence. Europe has nothing to gain from conflict with Russia and fears being pushed into war. There are indications that some European governments are considering a foreign policy independent of Washington’s. The virulent anti-Russian propaganda and demonization of Putin has destroyed Russian confidence in the West. With the NATO commander Breedlove demanding more money, more troops, more bases on Russia’s borders, the situation is dangerous. In a direct military challenge to Moscow, Washington is seeking to incorporate both Ukraine and Georgia, two former Russian provinces, into NATO. On the economic scene the dollar as reserve currency is a problem for the entire world. Sanctions and other forms of American financial imperialism are causing countries, including very large ones, to leave the dollar payments system. As foreign trade is increasingly conducted without recourse to the US dollar, the demand for dollars drops, but the supply has been greatly expanded as a result of Quantitative Easing. Because of offshored production and US dependence on imports, a drop in the dollar’s exchange value would result in domestic inflation, further lowering US living standards and threatening the rigged, stock, bond, and precious metal markets. The real reason for Quantitative Easing is to support the banks’ balance sheets. However, the official reason is to stimulate the economy and sustain economic recovery. The only sign of recovery is real GDP which shows up as positive only because the deflator is understated. The evidence is clear that there has been no economic recovery. With the first quarter GDP negative and the second quarter likely to be negative as well, the second-leg of the long downturn could begin this summer. Moreover, the current high unemployment (23 percent) is different from previous unemployment. In the postwar 20th century, the Federal Reserve dealt with inflation by cooling down the economy. Sales would decline, inventories would build up, and layoffs would occur. As unemployment rose, the Fed would reverse course and workers would be called back to their jobs. Today the jobs are no longer there. They have been moved offshore. The factories are gone. There are no jobs to which to call workers back. To restore the economy requires that offshoring be reversed and the jobs brought back to the US. This could be done by changing the way corporations are taxed. The tax rate on corporate profit could be determined by the geographic location at which corporations add value to the products that they market in the US. If the goods and services are produced offshore, the tax rate would be high. If the goods and services are produced domestically, the tax rate could be low. The tax rates could be set to offset the lower costs of producing abroad. Considering the lobbying power of transnational corporations and Wall Street, this is an unlikely reform. My conclusion is that the US economy will continue its decline. On the foreign policy front, the hubris and arrogance of America’s self-image as the “exceptional, indispensable” country with hegemonic rights over other countries means that the world is primed for war. Neither Russia nor China will accept the vassalage status accepted by the UK, Germany, France and the rest of Europe, Canada, Japan and Australia. The Wolfowitz Doctrine makes it clear that the price of world peace is the world’s acceptance of Washington’s hegemony. Therefore, unless the dollar and with it US power collapses or Europe finds the courage to break with Washington and to pursue an independent foreign policy, saying good-bye to NATO, nuclear war is our likely future. Washington’s aggression and blatant propaganda have convinced Russia and China that Washington intends war, and this realization has drawn the two countries into a strategic alliance. Russia’s May 9 Victory Day celebration of the defeat of Hitler is a historical turning point. Western governments boycotted the celebration, and the Chinese were there in their place. For the first time Chinese soldiers marched in the parade with Russian soldiers, and the president of China sat next to the president of Russia. The Saker’s report on the Moscow celebration is interesting. http://thesaker.is/todays-victory-day-celebrations-in-moscow-mark-a-turning-point-in-russian-history/ Especially note the chart of World War II casualties. Russian casualties compared to the combined casualties of the US, UK, and France make it completely clear that it was Russia that defeated Hitler. In the Orwellian West, the latest rewriting of history leaves out of the story the Red Army’s destruction of the Wehrmacht. In line with the rewritten history, Obama’s remarks on the 70th anniversary of Germany’s surrender mentioned only US forces. In contrast Putin expressed gratitude to “the peoples of Great Britain, France and the United States of America for their contribution to the victory.” http://thesaker.is/15865/ For many years now the President of Russia has made the point publicly that the West does not listen to Russia. Washington and its vassal states in Europe, Canada, Australia, and Japan do not hear when Russia says “don’t push us this hard, we are not your enemy. We want to be your partners.” As the years have passed without Washington hearing, Russia and China have finally realized that their choice is vassalage or war. Had there been any intelligent, qualified people in the National Security Council, the State Department, or the Pentagon, Washington would have been warned away from the neocon policy of sowing distrust. But with only neocon hubris present in the government, Washington made the mistake that could be fateful for humanity.

## Transition Fails

### Transition Bad

#### Economic decline destroys the environment and condemns billions – only growth can lead us towards a better world

Mead 12 [February 4, 2009, Walter Russell Mead (James Clarke Chace Professor of Foreign Affairs and Humanities at Bard College and Professor of American foreign policy at Yale University), “The Energy Revolution 4: Hot Planet?”, online, http://www.the-american-interest.com/2012/07/28/the-energy-revolution-4-hot-planet/, RaMan]

Over a series of recent posts, I’ve been looking at the energy revolution that is changing the look of the 21st centuries. Some countries [are losers](http://blogs.the-american-interest.com/wrm/2012/07/08/the-energy-revolution-part-one-the-biggest-losers/), but the [US in particular](http://blogs.the-american-interest.com/wrm/2012/07/15/energy-revolution-2-a-post-post-american-post/) stands to make big gains at home and [in its foreign policy](http://blogs.the-american-interest.com/wrm/2012/07/18/energy-revolution-3-the-new-american-century/). On the whole, this news is about as good as it gets: trillions of dollars of valuable resources are now available to power the US economy, cut our trade deficit and reduce our vulnerability to Middle East instability. Hundreds of thousands of well paid blue collar jobs are going to reduce income inequality and help rebuild a stable middle class. Many of the resources are exactly where we would want them: in hard hit Rust Belt states. World peace is also looking more possible: the great powers aren’t going to be elbowing each other as they fight to control the last few dribs and drabs of oil. Nasty dictatorships and backward-facing petro-states aren’t going to be able blackmail the world as easily. But there is one group (other than the Russians and the Gulf Arabs and the Iranians) that isn’t sharing in the general joy: the greens. For them, the spectacle of a looming world energy crisis was good news. It justified huge subsidies for solar and wind power (and thereby guaranteed huge fortunes for clever green-oriented investors). Greens outdid themselves year after year with gloom and doom forecasts about the coming oil crunch. They hoped that public dislike of the Middle East and the costs of our involvement there could be converted into public support for expensive green energy policies here at home: “energy independence” was one of the few arguments they had that resonated widely among average voters. Back in those salad days of green arrogance, there was plenty of scoffing at the ‘peak oil deniers’ and shortage skeptics who disagreed with what greens told us all was settled, Malthusian science. “Reality based” green thinkers sighed and rolled their eyes at the illusions of those benighted techno-enthusiasts who said that unconventional sources like shale oil and gas and the oil sands of Canada would one day become available. Environmentalists, you see, are science based, unlike those clueless, Gaia-defying technophiles with their infantile faith in the power of human creativity. Greens, with their awesome powers of Gaia-assisted intuition, know what the future holds. But those glory days are over now, and the smarter environmentalists are bowing to the inevitable. George Monbiot, whose cries of woe and pain in the Guardiannewspaper have served as the Greek chorus at each stage of the precipitous decline of the global green movement, gave voice to green grief at the prospect of a wealthy and prosperous century to come: “[We were wrong](http://www.guardian.co.uk/commentisfree/2012/jul/02/peak-oil-we-we-wrong),” he wrote on July 2,”about peak oil. There’s enough to fry us all.” Monbiot now gets the politics as well: There is enough oil in the ground to deep-fry the lot of us, and no obvious means to prevail upon governments and industry to leave it in the ground. Twenty years of efforts to prevent climate breakdown through moral persuasion have failed, with the collapse of the multilateral process at Rio de Janeiro last month. The world’s most powerful nation is again becoming an oil state, and if the political transformation of its northern neighbour [a reference to Canada] is anything to go by, the results will not be pretty. In other words, a newly oil rich United States is going to fight even harder against global green carbon policies, and the new discoveries will tilt the American political system even farther in the direction of capitalist oil companies. Capitalism is not, Monbiot is forced to admit, a fragile system that will easily be replaced. Bolstered by huge supplies of oil, it is here to stay. Industrial civilization is, as far as he can now see, unstoppable. Gaia, that treacherous slut, has made so much oil and gas that her faithful acolytes today cannot protect her from the consequences of her own folly. Welcome to the New Green Doom: an overabundance of oil and gas is going to release so much greenhouse gas that the world is going to fry. The exploitation of the oil sands in Alberta, warn leading environmentalists, is a tipping point. William McKibben put it this way [in an interview](http://www.wired.com/wiredscience/2011/09/bill-mckibben-tar-sands-qa/) with Wired magazine in the fall of 2011: I think if we go whole-hog in the tar sands, we’re out of luck. Especially since that would doubtless mean we’re going whole-hog at all the other unconventional energy sources we can think of: Deepwater drilling, fracking every rock on the face of the Earth, and so forth. Here’s why the tar sands are important: It’s a decision point about whether, now that we’re running out of the easy stuff, we’re going to go after the hard stuff. The Saudi Arabian liquor store is running out of bottles. Do we sober up, or do we find another liquor store, full of really crappy booze, to break into? A year later, despite the success of environmentalists like McKibben at persuading the Obama administration to block a pipeline intended to ship this oil to refineries in the US, it’s clear (as it was crystal clear all along to anyone with eyes to see) that the world has every intention of making use of the “crappy liquor.” Again, for people who base their claim to world leadership on their superior understanding of the dynamics of complex systems, greens prove over and over again that they are surprisingly naive and crude in their ability to model and to shape the behavior of the political and economic systems they seek to control. If their understanding of the future of the earth’s climate is anything like as wish-driven, fact-averse and intellectually crude as their approach to international affairs, democratic politics and the energy market, the greens are in trouble indeed. And as I’ve written in the past, the contrast between green claims to understand climate and to be able to manage the largest and most complex set of policy changes ever undertaken, and the evident incompetence of greens at managing small (Solyndra) and large (Kyoto, EU cap and trade, global climate treaty) political projects today has more to do with climate skepticism than greens have yet understood. Many people aren’t rejecting science; they are rejecting green claims of policy competence. In doing so, they are entirely justified by the record. Nevertheless, the future of the environment is not nearly as dim as greens think. Despairing environmentalists like McKibben and Monbiot are as wrong about what the new era of abundance means as green energy analysts were about how much oil the planet had. The problem is the original sin of much environmental thought: Malthusianism. If greens weren’t so addicted to Malthusian horror narratives they would be able to see that the new era of abundance is going to make this a cleaner planet faster than if the new gas and oil had never been found. Let’s be honest. It has long been clear to students of history, and has more recently begun to dawn on many environmentalists, that all that happy-clappy carbon treaty stuff was a pipe dream and that nothing like that is going to happen. A humanity that hasn’t been able to ban the bomb despite the clear and present dangers that nuclear weapons pose isn’t going to ban or even seriously restrict the internal combustion engine and the generator. The political efforts of the green movement to limit greenhouse gasses have had very little effect so far, and it is highly unlikely that they will have more success in the future. The green movement has been more of a group hug than a curve bending exercise, and that is unlikely to change. If the climate curve bends, it will bend the way the population curve did: as the result of lots of small human decisions driven by short term interest calculations rather than as the result of a grand global plan. The shale boom hasn’t turned green success into green failure. It’s prevented green failure from turning into something much worse. Monbiot understands this better than McKibben; there was never any real doubt that we’d keep going to the liquor store. If we hadn’t found ways to use all this oil and gas, we wouldn’t have embraced the economics of less. True, as oil and gas prices rose, there would be more room for wind and solar power, but the real winner of an oil and gas shortage is… coal. To use McKibben’s metaphor, there is a much dirtier liquor store just down the road from the shale emporium, and it’s one we’ve been patronizing for centuries. The US and China have oodles of coal, and rather than walk to work from our cold and dark houses all winter, we’d use it. Furthermore, when and if the oil runs out, the technology exists to get liquid fuel out of coal. It isn’t cheap and it isn’t clean, but it works. The newly bright oil and gas future means that we aren’t entering a new Age of Coal. For this, every green on the planet should give thanks. The second reason why greens should give thanks for shale is that environmentalism is a luxury good. People must survive and they will survive by any means necessary. But they would much rather thrive than merely survive, and if they can arrange matters better, they will. A poor society near the edge of survival will dump the industrial waste in the river without a second thought. It will burn coal and choke in the resulting smog if it has nothing else to burn. Politics in an age of survival is ugly and practical. It has to be. The best leader is the one who can cut out all the fluff and the folderol and keep you alive through the winter. During the Battle of Leningrad, people burned priceless antiques to stay alive for just one more night. An age of energy shortages and high prices translates into an age of radical food and economic insecurity for billions of people. Those billions of hungry, frightened, angry people won’t fold their hands and meditate on the ineffable wonders of Gaia and her mystic web of life as they pass peacefully away. Nor will they vote George Monbiot and Bill McKibben into power. They will butcher every panda in the zoo before they see their children starve, they will torch every forest on earth before they freeze to death, and the cheaper and the meaner their lives are, the less energy or thought they will spare to the perishing world around them. But, thanks to shale and other unconventional energy sources, that isn’t where we are headed. We are heading into a world in which energy is abundant and horizons are open even as humanity’s grasp of science and technology grows more secure. A world where more and more basic human needs are met is a world that has time to think about other goals and the money to spend on them. As China gets richer, the Chinese want cleaner air, cleaner water, purer food — and they are ready and able to pay for them. A Brazil whose economic future is secure can afford to treasure and conserve its rain forests. A Central America where the people are doing all right is more willing and able to preserve its biodiversity. And a world in which people know where their next meal is coming from is a world that can and will take thought for things like the sustainability of the fisheries and the protection of the coral reefs. A world that is more relaxed about the security of its energy sources is going to be able to do more about improving the quality of those sources and about managing the impact of its energy consumption on the global commons. A rich, energy secure world is going to spend more money developing solar power and wind power and other sustainable sources than a poor, hardscrabble one. When human beings think their basic problems are solved, they start looking for more elegant solutions. Once Americans had an industrial and modern economy, we started wanting to clean up the rivers and the air. Once people aren’t worried about getting enough calories every day to survive, they start wanting healthier food more elegantly prepared. A world of abundant shale oil and gas is a world that will start imposing more environmental regulations on shale and gas producers. A prosperous world will set money aside for research and development for new technologies that conserve energy or find it in cleaner surroundings. A prosperous world facing climate change will be able to ameliorate the consequences and take thought for the future in ways that a world overwhelmed by energy insecurity and gripped in a permanent economic crisis of scarcity simply can’t and won’t do. Greens should also be glad that the new energy is where it is.

#### Dedevelopment is nonsensical, starts an immediate collapse of the modern society

Monbiot 09 [George Monbiot, 8-1-2009, "Is there any point in fighting to stave off industrial apocalypse?," Guardian, online, <http://www.theguardian.com/commentisfree/cif-green/2009/aug/17/environment-climate-change>, RaMan]

Like you I have become ever gloomier about our chances of avoiding the crash you predict. For the past few years I have been almost professionally optimistic, exhorting people to keep fighting, knowing that to say there is no hope is to make it so. I still have some faith in our ability to make rational decisions based on evidence. But it is waning. If it has taken governments this long even to start discussing reform of the common fisheries policy – if they refuse even to make contingency plans for peak oil – what hope is there of working towards a steady-state economy, let alone the voluntary economic contraction ultimately required to avoid either the climate crash or the depletion of crucial resources? The interesting question, and the one that probably divides us, is this: to what extent should we welcome the likely collapse of industrial civilisation? Or more precisely: to what extent do we believe that some good may come of it? I detect in your writings, and in the conversations we have had, an attraction towards – almost a yearning for – this apocalypse, a sense that you see it as a cleansing fire that will rid the world of a diseased society. If this is your view, I do not share it. I'm sure we can agree that the immediate consequences of collapse would be hideous: the breakdown of the systems that keep most of us alive; mass starvation; war. These alone surely give us sufficient reason to fight on, however faint our chances appear. But even if we were somehow able to put this out of our minds, I believe that what is likely to come out on the other side will be worse than our current settlement. Here are three observations: 1 Our species (unlike most of its members) is tough and resilient; 2 When civilisations collapse, psychopaths take over; 3 We seldom learn from others' mistakes. From the first observation, this follows: even if you are hardened to the fate of humans, you can surely see that our species will not become extinct without causing the extinction of almost all others. However hard we fall, we will recover sufficiently to land another hammer blow on the biosphere. We will continue to do so until there is so little left that even Homo sapiens can no longer survive. This is the ecological destiny of a species possessed of outstanding intelligence, opposable thumbs and an ability to interpret and exploit almost every possible resource – in the absence of political restraint. From the second and third observations, this follows: instead of gathering as free collectives of happy householders, survivors of this collapse will be subject to the will of people seeking to monopolise remaining resources. This will is likely to be imposed through violence. Political accountability will be a distant memory. The chances of conserving any resource in these circumstances are approximately zero. The human and ecological consequences of the first global collapse are likely to persist for many generations, perhaps for our species' remaining time on earth. To imagine that good could come of the involuntary failure of industrial civilisation is also to succumb to denial. The answer to your question – what will we learn from this collapse? – is nothing. This is why, despite everything, I fight on. I am not fighting to sustain economic growth. I am fighting to prevent both initial collapse and the repeated catastrophe that follows. However faint the hopes of engineering a soft landing – an ordered and structured downsizing of the global economy – might be, we must keep this possibility alive. Perhaps we are both in denial: I, because I think the fight is still worth having; you, because you think it isn't

### Transition Fails

#### The thesis of degrowth a.k.a “dedevelopment” is politically impossible, a transition would be deleterious.

Jewel 14 [Fall, 2014, Lucille A. Jewell (Associate Professor of Law at the University of Tennessee College of Law), “The Indie Lawyer of the Future: How New Technology, Cultural Trends, and Market Forces Can Transform the Solo Practice of Law”, Obtained from LexisNexis, <http://www.lexisnexis.com.proxy.lib.umich.edu/hottopics/lnacademic/>, RaMan]

2. Herman Daly: Ecological Economics Herman Daly teaches economics at the University of Maryland and formerly served as senior economist in the World Bank's environmental department. n68 In the 1970s, Daly revitalized John Stuart Mill's concept of the stationary economic state, and pioneered the term "sustainability" in policy analysis. n69 Daly argued that continuous economic growth was not a workable goal for the economy or the planet. n70 Daly situated the economy within the earth's ecosystem, and referred to the general laws of thermodynamics to illustrate the unsustainability of unlimited economic growth. n71 When humans and their material things become so large that natural resource inputs and waste outputs move beyond nature's ability to replenish its resources and absorb the waste, the throughput flow, and thus the human population, becomes unsustainable. n72 For the past fifty years, growth has been the sine qua non of economic thinking. n73 While continuous growth is a physical impossibility, Daly recognized that limiting growth, in many instances is a political impossibility. n74 Nonetheless, Daly warned that the consequences of inaction would be deleterious. n75 Humankind must take the transition to a sustainable economy - one that takes heed of the inherent biophysical limits of the global ecosystem so that it can continue to operate long into the future. If we do not make that transition, we maybe cursed not just with uneconomic growth but with an ecological catastrophe that would sharply lower living standards. n76 [\*336] Although continuous growth in the economy is not viable, there can be continuous development. n77 Development, as opposed to growth, means that production rates should match depreciation rates. n78 In terms of production, development requires more durable and long-lasting products. n79 Maintenance and repair become more important when development is emphasized, and these tasks may produce more jobs because they are not easily outsourced. n80 Daly argued that economies can no longer resort to the traditional solution for fighting poverty and joblessness; society cannot continue to ameliorate poverty and joblessness by stimulating more economic growth. n81 Rather, Daly suggests that people might have to share. n82 Daly has influenced contemporary quests for sustainability, qualitative development, and eco-conscious approaches to sharing resources. His concepts of sustainability and a steady state clearly apply to the legal profession and legal education. This is beyond the scope of this article, but Daly would likely argue that the legal community has relied too heavily on a growth model for legal education and needs to pull back the reins and align law school seats with available jobs for lawyers. As Daly notes, limits on this type of growth require an interventionist approach to trade regulation. n83 The relevance of Daly to this article, explored more fully below, is what role lawyers can play when individuals, communities, and governments seek to make the transition from growth to development.

### Too Late

#### Current society is too embedded in our lives, it’s too late for a transition

Gopel 14[April 28, 2014, Maja Gopel (Head of the Berlin Office of the Wuppertal Institute for climate, Environment and Energy ), “Getting to Postgrowth: The Transformative Power of Mind- and Paradigm Shifts”, online, <http://www.growthintransition.eu/getting-to-postgrowth-the-transformative-power-of-mind-and-paradigm-shifts/>, RaMan]

The socio-economic concept of path dependencies sheds some light on the underlying reasons: if the status quo is challenged, it translates into a deviation from the “normal” way of doing things which creates higher transaction costs, (presumably) higher risks and a fear of losing roles, identities and privileges. On top of this, standardized procedures, legal institutionalization and the creation of material-economic infrastructures leads to further lock-ins that take a lot of political will to change. This plethora of self-stabilizing path dependencies in our minds and institutions is what Antonio Gramsci captured in his concept of hegemony. Next to the more visible exertion of power in form of money, jurisdiction or other types of coercion, it is the widely established convictions and canonized knowledge, cultural narratives, belief-systems and the “derived needs” in a given society that play out in favor of those benefiting from the status quo.[1] These allow for “leadership with least resistance”, if supported by a programmatic “social myth” which provides the imagination and justifications as to why this particular set of values, norms, practices, institutions and regulations is of general interest. The idea of endless economic growth benefiting all may have been the most powerful example for such a social myth. Its perseverance has been the biggest roadblock for getting the sustainable development agenda on track. The Rio Declaration of the United Nations made sustainable development the overarching policy principle of international cooperation. According to its official definition it means development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” while giving priority to the needs of the poor and acknowledging the limitations that social and technological activities impose on nature’s ability to replenish means. [2] Economic, social and environmental concerns were to be integrated. What happened instead was that environmental and social aspects were fitted into the economic growth story and its underlying paradigm- which tells us nothing meaningful about human needs and keeps us blind to natural reproduction cycles. Needs are reduced to the general concept of “utility maximization” and, based on the ontological assumption that humans are selfish, insatiable and rational, it is concluded that this goal is best serviced by ever increasing consumption. Equipped with so-defined “representative actors”, markets in which everything of value will find a price and is subject to supply and demand, are considered the most efficient and just institutions for progress. Consequently, it is assumed that wealth accumulation on the top will trickle down to the poor as long as they offer anything valuable. According to this rationale of universal monetarization, the need to assess nature’s ability to replenish resources became unnecessary. The concept of “capital substitutability” crept into our development story which means that loss of nature can be compensated by other capital or input factors created by humans. As a consequence, the myth of economic growth became shielded against the attack of “limits to growth” reports and co-opted into the hegemonic regime, as Antonio Gramsci would say.