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#### Business practices are ongoing conduct defined by the behaviors of many market participants

Kerry Lynn Macintosh 97, Associate Professor of Law, Santa Clara University School of Law. B.A. 1978, Pomona College; J.D. 1982, Stanford University, “Liberty, Trade, and the Uniform Commercial Code: When Should Default Rules Be Based On Business Practices?,” 38 Wm. & Mary L. Rev. 1465, Lexis

These new and revised articles reflect a strong trend toward choosing default rules 4 that codify existing business practices. 5 [FOOTNOTE 5 BEGINS] In this Article, the term "business practices" is used to refer to practices that emerge over time as countless market participants exercise their freedom to engage in profitable transactions. For an account of the evolution of business practices, see infra Part II. As used here, "business practices" is broader and less technical than "trade usage," which the Code narrowly defines as "any practice or method of dealing having such regularity of observance in a place, vocation, or trade as to justify an expectation that it will be observed with respect to the transaction in question." U.C.C. 1-205(2). [FOOTNOTE 5 ENDS] This is particularly true of the recent revisions to Articles 3 (Negotiable Instruments), 4 (Bank Deposits and Collections) and 5 (Letters of Credit).

#### Only per se illegality prohibits a practice---rules of reason prohibit anticompetitive effects for individual acts, or instances of ‘practice.’

John Paul Stevens 90, Justice, Supreme Court of the United States, “FTC v. Superior Court Trial Lawyers Ass'n,” 493 U.S. 411, Lexis

LEdHN[3C] [3C]LEdHN[14] [14]Equally important is the second error implicit in respondents' claim to immunity from the per se rules. In its opinion, the Court of Appeals assumed that the antitrust laws permit, but do not require, the condemnation of price fixing and boycotts without proof of market power. 15 The opinion further assumed that the per se rule prohibiting such activity "is only a rule of 'administrative convenience and efficiency,' not a statutory command." 272 U.S. App. D. C., at 295, 856 F. 2d, at 249.This statement contains two errors. HN10 [\*\*\*\*42] The per se [\*433] rules are, of course, the product of judicial interpretations of the Sherman Act, but the rules nevertheless have the same force and effect as any other statutory commands. Moreover, while the per se rule against price fixing and boycotts is indeed justified in part by "administrative convenience," the Court of Appeals erred in describing the prohibition as justified only by such concerns. The per se rules also reflect a long-standing judgment that the prohibited practices by their nature have "a substantial potential for impact on competition." Jefferson Parish Hospital District No. 2 v. Hyde, 466 U.S. 2, 16 (1984).

[\*\*\*\*43] LEdHN[15] [15]As we explained in Professional Engineers, HN11 the rule of reason in antitrust law generates

"two complementary categories of antitrust analysis. In the first category are agreements whose nature and necessary effect are so plainly anticompetitive that no elaborate study of the industry is needed to establish their illegality -- they are 'illegal per se.' In the second category are agreements whose competitive effect can only be evaluated by analyzing the facts peculiar to the business, the history of the restraint, and the reasons why it was imposed." 435 U.S., at 692.

[\*\*\*873] "Once experience with a particular kind of restraint enables the Court to predict with confidence that the rule of reason will condemn it, it has applied a conclusive presumption that the restraint is unreasonable." Arizona v. Maricopa County Medical Society, 457 U.S. 332, 344 (1982).

[\*\*781] LEdHN[16] [16] [\*\*\*\*44] The per se rules in antitrust law serve purposes analogous to per se restrictions upon, for example, stunt flying in congested areas or speeding. Laws prohibiting stunt flying or setting speed limits are justified by the State's interest in protecting human life and property. Perhaps most violations of such rules actually cause no harm. No doubt many experienced drivers and pilots can operate much more safely, even at prohibited speeds, than the average citizen.

[\*434] If the especially skilled drivers and pilots were to paint messages on their cars, or attach streamers to their planes, their conduct would have an expressive component. High speeds and unusual maneuvers would help to draw attention to their messages. Yet the laws may nonetheless be enforced against these skilled persons without proof that their conduct was actually harmful or dangerous.

In part, the justification for these per se rules is rooted in administrative convenience. They are also supported, however, by the observation that every speeder and every stunt pilot poses some threat to the community. An unpredictable event may overwhelm the skills of the best driver or pilot, even if the [\*\*\*\*45] proposed course of action was entirely prudent when initiated. A bad driver going slowly may be more dangerous that a good driver going quickly, but a good driver who obeys the law is safer still.

#### Voting issue---key to link uniqueness and preventing bidirectionality on an otherwise virtually unlimited topic

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#### ‘Antitrust law’ must be economy-wide---that excludes subsets

Gerber ’20 [David; October; Distinguished Professor of Law at Chicago-Kent College of Law, Illinois Institute of Technology; Oxford Scholarship Online, Competition Law and Antitrust, “What is It? Competition Law’s Veiled Identity,” Ch. 1, p. 14-15]

C. A Core Definition

The Guide uses the terms “competition law” and “antitrust law” to refer to a general domain of law whose object is to deter private restraints on competitive conduct. We look more closely at the terms:

1. “General”—The laws included are those that are applicable throughout an economy and thereby provide a framework for all market operations (there are always some exempted sectors). Laws dealing only with specific markets (e.g., telecommunication) do not play that role.

2. “Domain of Law” here refers to a politically authorized set of norms and the institutional arrangements used to enforce them.

Is it law—or is it policy? The relationship between “competition law” and “competition policy” is not always clear. Often the terms are used interchangeably, but there can be important differences between them. Both can refer to norms used to combat restraints on competition, but they represent two different ways of looking at the relevant laws, and the differences can influence how norms are interpreted and applied. “Law” implies that established methods of interpretation are used to interpret and apply the norms and that established procedures are the sole or primary means of enforcing and changing the norms. In this view, the norms are a relatively stable component of a legal system. Thinking of those same norms as “policy,” on the other hand, implies that they are a tool of whatever government is in power and that it can use and modify them as it wishes.

3. “Restraint” refers to any limitation imposed by one or more private actors that reduces the intensity of competition in a market.

4. “Competition” refers to a process by which firms in a market seek to maximize their profits by exploiting market opportunities more effectively than other firms in the market.

#### Violation---the aff only applies under limited circumstances

#### Voting Issue---explodes the topic to infinite sectoral and case-specific affs the neg can never meaningfully prepare for

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#### Disorder is inevitable, the drive to secure culminates in endless violence.

**Der Derian 98** – Prof Political Science at University of Mass. [James, Political Science Professor, University of Massachusetts, 1998. On Security, ed: Lipschitz, The Value of Security: Hobbes, Marx, Nietzsche, and Baudrillard, Decentering Security.]

The will to power, then, should not be confused with a Hobbesian perpetual desire for power. It can, in its negative form, produce[s] a reactive and resentful longing for only power, leading, in Nietzsche's view, to a triumph of nihilism. But Nietzsche refers to a positive will to power, an active and affective force of becoming, from which values and meanings are produced which affirm life. Conventions of security act to suppress rather than confront the fears endemic to life, for "... life itself is essentially appropriation, injury, overpowering of what is alien and weaker; suppression, hardness, imposition of one's own forms, incorporation and at least, at its mildest, exploitation--but why should one always use those words in which slanderous intent has been imprinted for ages." [35](http://www.ciaonet.org/book/lipschutz/lipschutz12.html#note35#note35) Elsewhere Nietzsche establishes the pervasiveness of agonism in life: "life is a consequence of war, society itself a means to war." [36](http://www.ciaonet.org/book/lipschutz/lipschutz12.html#note36#note36) But the denial of this permanent condition, the effort to disguise it with a consensual rationality or to hide from it with a fictional sovereignty, are all effects of this suppression of fear. The desire for security is manifested as a collective resentment of difference--that which is not us, not certain, not predictable. Complicit with a negative will to power is the fear-driven desire for protection from the unknown. Unlike the positive will to power, which produces an aesthetic affirmation of difference, the search for truth produces a truncated life which conforms to the rationally knowable, to the causally sustainable. In The Gay Science, Nietzsche asks of the reader: "Look, isn't our need for knowledge precisely this need for the familiar, the will to uncover everything strange, unusual, and questionable, something that no longer disturbs us? Is it not the instinct of fear that bids us to know? And is the jubilation of those who obtain knowledge not the jubilation over the restoration of a sense of security?" [37](http://www.ciaonet.org/book/lipschutz/lipschutz12.html#note37#note37) The fear of the unknown and the desire for certainty combine to produce a domesticated life, in which causality and rationality become the highest sign of a sovereign self, the surest protection against contingent forces. The fear of fate assures a belief that everything reasonable is true, and everything true, reasonable. In short, the security imperative produces, and is sustained by, the strategies of knowledge which seek to explain it. Nietzsche elucidates the nature of this generative relationship in The Twilight of the Idols : The causal instinct is thus conditional upon, and excited by, the feeling of fear. The "why?" shall, if at all possible, not give the cause for its own sake so much as for a particular kind of cause --a cause that is comforting, liberating and relieving. . . . That which is new and strange and has not been experienced before, is excluded as a cause. Thus one not only searches for some kind of explanation, to serve as a cause, but for a particularly selected and preferred kind of explanation--that which most quickly and frequently abolished the feeling of the strange, new and hitherto unexperienced: the most habitual explanations. [38](http://www.ciaonet.org/book/lipschutz/lipschutz12.html#note38#note38) A safe life requires safe truths. The strange and the alien remain unexamined, the unknown becomes identified as evil, and evil provokes hostility--recycling the desire for security. The "influence of timidity," as Nietzsche puts it, creates a people who are willing to subordinate affirmative values to the "necessities" of security: "they fear change, transitoriness: this expresses a straitened soul, full of mistrust and evil experiences." [39](http://www.ciaonet.org/book/lipschutz/lipschutz12.html#note39#note39) The unknowable which cannot be contained by force or explained by reason is relegated to the off-world. "Trust," the "good," and other common values come to rely upon an "artificial strength": "the feeling of security such as the Christian possesses; he feels strong in being able to trust, to be patient and composed: he owes this artificial strength to the illusion of being protected by a god."

#### We should not impose order on chaos – suffering is inevitable; the only option is to affirm the value in that suffering and give it meaning

**Kain, 7** (Philip J., “Nietzsche, Eternal Recurrence, and the Horror of Existence”, Journal of Nietzsche Studies, issue 33, Penn state University, Muse)//RSW

Nietzsche simply dismisses the designed cosmos, which few believe in anymore anyway (WP 12a). On the other hand, Nietzsche takes the perfectible cosmos very seriously. He resists it with every fiber of his being.5 For Nietzsche, we must stop wasting time and energy hoping to change things, improve them, make progress (see, e.g., WP 40, 90, 684)—the outlook of liberals, socialists, and even Christians, all of whom Nietzsche tends to lump together and excoriate. For [End Page 50] Nietzsche, we cannot reduce suffering, and to keep hoping that we can will simply weaken us. Instead, we must conceal an alien and terrifying cosmos if we hope to live in it. And we must develop the strength to do so. We must toughen ourselves. We need more suffering, not less. It has "created all enhancements of man so far . . ." (BGE 225, 44; WP 957; GM II:7). If we look deeply into the essence of things, into the horror of existence, Nietzsche thinks we will be overwhelmed—paralyzed. Like Hamlet we will not be able to act, because we will see that action cannot change the eternal nature of things (BT 7). We must see, Nietzsche says, that "a profound illusion . . . first saw the light of the world in the person of Socrates: the unshakeable faith that thought . . . can penetrate the deepest abysses of being, and that thought is capable not only of knowing being but even of correcting it. This sublime metaphysical illusion accompanies science as an instinct . . ." (BT 15). In Nietzsche's view, we cannot change things. Instead, with Hamlet we should "feel it to be ridiculous or humiliating that [we] should be asked to set right a world that is out of joint" (BT 7; cf. TI "Anti-Nature," 6). Knowledge of the horror of existence kills action—which requires distance and illusion. The horror and meaninglessness of existence must be veiled if we are to live and act. What we must do, Nietzsche thinks, is construct a meaning for suffering. Suffering we can handle. Meaningless suffering, suffering for no reason at all, we cannot handle. So we give suffering a meaning. We invent a meaning. We create an illusion. The Greeks constructed gods for whom wars and other forms of suffering were festival plays and thus an occasion to be celebrated by the poets. Christians imagine a God for whom suffering is punishment for sin (GM II:7; cf. D 78). One might find all this unacceptable. After all, isn't it just obvious that we can change things, reduce suffering, improve existence, and make progress? Isn't it just obvious that modern science and technology have done so? Isn't it just absurd for Nietzsche to reject the possibility of significant change? Hasn't such change already occurred? Well, perhaps not. Even modern environmentalists might resist all this obviousness. They might respond in a rather Nietzschean vein that technology may have caused as many problems as it has solved. The advocate of the perfectible cosmos, on the other hand, would no doubt counter such Nietzschean pessimism by arguing that even if technology does cause some problems, the solution to those problems can only come from better technology. Honesty requires us to admit, however, that this is merely a hope, not something for which we already have evidence, not something that it is absurd to doubt—not at all something obvious. Further technology may or may not improve things. The widespread use of antibiotics seems to have done a miraculous job of improving our health and reducing suffering, but we are also discovering that such antibiotics give rise to even more powerful bacteria that are immune to those [End Page 51] antibiotics. We have largely eliminated diseases like cholera, smallpox, malaria, and tuberculosis, but we have produced cancer and heart disease. We can cure syphilis and gonorrhea, but we now have AIDS. Even if we could show that it will be possible to continuously reduce suffering, it is very unlikely that we will ever eliminate it. If that is so, then it remains a real question whether it is not better to face suffering, use it as a discipline, perhaps even increase it, so as to toughen ourselves, rather than let it weaken us, allow it to dominate us, by continually hoping to overcome it. But whatever we think about the possibility of reducing suffering, the question may well become moot. Nietzsche tells a story: "Once upon a time, in some out of the way corner of that universe which is dispersed into numberless twinkling solar systems, there was a star upon which clever beasts invented knowing. That was the most arrogant and mendacious minute of 'world history,' but nevertheless, it was only a minute. After nature had drawn a few breaths, the star cooled and congealed, and the clever beasts had to die" (TL 1, 79). Whatever progress we might think we are making in reducing suffering, whatever change we think we are bringing about, it may all amount to nothing more than a brief and accidental moment in biological time, whose imminent disappearance will finally confirm the horror and meaninglessness of existence. The disagreement here is not so much about the quantity of suffering that we can expect to find in the world but, rather, its nature. For proponents of the designed cosmos, suffering is basically accidental. It is not fundamental or central to life. It is not a necessary part of the nature of things. It does not make up the essence of existence. We must develop virtue, and then we can basically expect to fit and be at home in the cosmos. For the proponents of a perfectible cosmos, suffering is neither essential nor unessential. The cosmos is neutral. We must work on it to reduce suffering. We must bring about our own fit. For Nietzsche, even if we can change this or that, even if we can reduce suffering here and there, what cannot be changed for human beings is that suffering is fundamental and central to life. The very nature of things, the very essence of existence, means suffering. Moreover, it means meaningless suffering—suffering for no reason at all. That cannot be changed—it can only be concealed.

#### The alternative is a Dionysian relationship with existence---only accepting the “imperfections” of the status quo as products of chaos that are beautiful can create an ethical relationship towards suffering

**Nietzsche, ‘78** The anti-christ Human, All too Human. Aphorism #284 1878

*The means to real peace*.— No government admits any more that it keeps an army to satisfy occasionally the desire for conquest. Rather the army is supposed to serve for defense, and one invokes the morality that approves of self-defense. But this implies one's own morality and the neighbor's immorality; for the neighbor must be thought of as eager to attack and conquer if our state must think of means of self-defense. Moreover, the reasons we give for requiring an army imply that our neighbor, who denies the desire for conquest just as much as does our own state, and who, for his part, also keeps an army only for reasons of self-defense, is a hypocrite and a cunning criminal who would like nothing better than to overpower a harmless and awkward victim without any fight. Thus all states are now ranged against each other: they presuppose their neighbor's bad disposition and their own good disposition. This presupposition, however, is inhumane, as bad as war and worse. At bottom, indeed, it is itself the challenge and the cause of wars, because, as I have said, it attributes immorality to the neighbor and thus provokes a hostile disposition and act. We must abjure the doctrine of the army as a means of self-defense just as completely as the desire for conquests. And perhaps the great day will come when people, distinguished by wars and victories and by the highest development of a military order and intelligence, and accustomed to make the heaviest sacrifices for these things, will exclaim of its own free will, "We break the sword," and will smash its entire military establishment down to its lowest foundations. Rendering oneself unarmed when one had been the best-armed, out of a height of feeling—that is the means to real peace, which must always rest on a peace of mind; whereas the so-called armed peace, as it now exists in all countries, is the absence of peace of mind. One trusts neither oneself nor one's neighbor and, half from hatred, half from fear, does not lay down arms. Rather perish than hate and fear, and twice rather perish than make oneself hated and feared—this must someday become the highest maxim for every single commonwealth. Our liberal representatives, as is well known, lack the time for reflecting on the nature of man: else they would know that they work in vain when they work for a "gradual decrease of the military burden." Rather, only when this kind of need has become greatest will the kind of god be nearest who alone can help here. The tree of war-glory can only be destroyed all at once, by a stroke of lightning: but lightning, as indeed you know, comes from a cloud—and from up high.

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#### The Executive and Judical Branch of the United States should

#### interpret antitrust law to cover bargaining power of workers in labor markets;

#### waive any legal defenses of the interpretation other than Chevron deference;

#### announce this interpretation is an administration priority and enforce it; and

#### grant cert to any challenges to business practices that reduce bargaining power of workers in labor markets.

#### The United States Congress should sue the executive for its interpretation of bargaining power of workers in labor markets.

#### The CP competes and solves the aff

Gavil 17 [Andrew I, Jonathan B Baker, William Kovacic, and Joshua D Wright; Professor at the Howard University School of Law and Senior of Counsel at Crowell & Moring LLP; Professor at the George Mason University School of Law, a commissioner of the U.S. Federal Trade Commission from 2006 to 2011; Research Professor of Law at American University, former Director of the Bureau of Economics at the Federal Trade Commission; the Executive Director of the Global Antitrust Institute, professor of law at George Mason University, commissioner of the U.S. Federal Trade Commission from 2013 to 2015; third edition published 2017; Antitrust Law in Perspective: Cases, Concepts, and Problems in Competition Policy, “Defining Competition Policy for a Global Economy,” Ch. 1, p. 60]

One method for designing antitrust standards of conduct is to create general rules and rely chiefly on enforcement officials and courts to articulate the law's specific content. As we have already noted, the Sherman Act assigns a pivotal role to the courts in adapting to changing views of what constitutes sound policy:

\* \* \* "Stare decisis is not an inexorable command." In the area of antitrust law, there is a competing interest, well-represented in this Court's decisions, in recognizing and adapting to changed circumstances and the lessons of accumulated experience. Thus, the general presumption that legislative changes should be left to Congress has less force with respect to the Sherman Act in light of the accepted view that Congress "expected the courts to give shape to the statute's broad mandate by drawing on common-law tradition." As we have explained, the term "restraint of trade," as used in § 1, also "invokes the common law itself, and not merely the static content that the common law assigned to the term in 1890." Accordingly, this Court has reconsidered its decisions construing the Sherman Act when the theoretical underpinnings of those decisions are called into serious question.

State Oil Co. v. Khan, 522 U.S. 3, 20-21 (1997). As Justice Sandra Day O'Connor suggested, drafting antitrust rules in general terms gives courts and enforcement agencies much discretion to shape policy and makes the law flexible and adaptable. Some legislatures might regard this degree of flexibility suspiciously if they think prosecutors will misuse their discretion or that courts will ignore the legislature's intent in interpreting the law.

#### Chevron will die now---the CP’s durable fiat resurrects the doctrine

Berman 20 [Amanda; 2018; a counsel in the Environment & Natural Resources and Litigation groups; Crowell, “Administrative Law – The Supreme Court and the President Rein in the ‘Administrative State,” [https://www.crowell.com/NewsEvents/Publications/Articles/Administrative-Law-The-Supreme-Court-and-the-President-Rein-in-the-Administrative-State](https://takecareblog.com/blog/the-imminent-demise-of-chevron-deference)]

A conservative Supreme Court and administration have both been working to roll back the administrative state, shifting its center of power to the courts. The shift has been incremental, as demonstrated by two recent Supreme Court rulings and executive orders. Yet the impacts on virtually every agency—and therefore every business subject to regulation—are already substantial. And the pace of change could rapidly increase in 2020 and beyond.

“These trends will make it easier for industry to challenge agency actions they don’t like,” says Amanda Shafer Berman, counsel in the Environment & Natural Resources and Litigation groups at Crowell & Moring and a former senior attorney in the Department of Justice’s Environmental Defense Section. “But it might make it harder for them to get what they want.” In other words, even as challenging agencies becomes easier, agencies could become slower and more cautious in ways that regulated businesses may find frustrating. Furthermore, the rollback in administrative power could ultimately result in greater regulatory uncertainty.

#### Extinction---adaptable regulations filter global catastrophic risks

Bazelon and Posner 17 [Emily and Eric; 2017; Staff writer and Law Professor at the University of Chicago; New York Tunes, “The Government Gorsuch Wants to Undo,” https://www.nytimes.com/2017/04/01/sunday-review/the-government-gorsuch-wants-to-undo.html]

The 80 years of law that are at stake began with the New Deal. President Franklin D. Roosevelt believed that the Great Depression was caused in part by ruinous competition among companies. In 1933, Congress passed the National Industrial Recovery Act, which allowed the president to approve “fair competition” standards for different trades and industries. The next year, Roosevelt approved a code for the poultry industry, which, among other things, set a minimum wage and maximum hours for workers, and hygiene requirements for slaughterhouses. Such basic workplace protections and constraints on the free market are now taken for granted.

But in 1935, after a New York City slaughterhouse operator was convicted of violating the poultry code, the Supreme Court called into question the whole approach of the New Deal, by holding that the N.I.R.A. was an “unconstitutional delegation by Congress of a legislative power.” Only Congress can create rules like the poultry code, the justices said. Because Congress did not define “fair competition,” leaving the rule-making to the president, the N.I.R.A. violated the Constitution’s separation of powers.

The court’s ruling in Schechter Poultry Corp. v. the United States, along with another case decided the same year, are the only instances in which the Supreme Court has ever struck down a federal statute based on this rationale, known as the “nondelegation doctrine.” Schechter Poultry’s stand against executive-branch rule-making proved to be a legal dead end, and for good reason. As the court has recognized over and over, before and since 1935, Congress is a cumbersome body that moves slowly in the best of times, while the economy is an incredibly dynamic system. For the sake of business as well as labor, the updating of regulations can’t wait for Congress to give highly specific and detailed directions.

The New Deal filled the gap by giving policy-making authority to agencies, including the Securities and Exchange Commission, which protects investors, and the National Labor Relations Board, which oversees collective bargaining between unions and employers. Later came other agencies, including the Environmental Protection Agency, the Occupational Safety and Health Administration (which regulates workplace safety) and the Department of Homeland Security. Still other agencies regulate the broadcast spectrum, keep the national parks open, help farmers and assist Americans who are overseas. Administrative agencies coordinated the response to Sept. 11, kept the Ebola outbreak in check and were instrumental to ending the last financial crisis. They regulate the safety of food, drugs, airplanes and nuclear power plants. The administrative state isn’t optional in our complex society. It’s indispensable.

But if the regulatory power of this arm of government is necessary, it also poses a risk that federal agencies, with their large bureaucracies and potential ties to lobbyists, could abuse their power. Congress sought to address that concern in 1946, by passing the Administrative Procedure Act, which ensured a role for the judiciary in overseeing rule-making by agencies.

The system worked well enough for decades, but questions arose when Ronald Reagan came to power promising to deregulate. His E.P.A. sought to weaken a rule, issued by the Carter administration, which called for regulating “stationary sources” of air pollution — a broad wording that is open to interpretation. When President Reagan’s E.P.A. narrowed the definition of what counted as a “stationary source” to allow plants to emit more pollutants, an environmental group challenged the agency. The Supreme Court held in 1984 in Chevron v. Natural Resources Defense Council that the E.P.A. (and any agency) could determine the meaning of an ambiguous term in the law. The rule came to be known as Chevron deference: When Congress uses ambiguous language in a statute, courts must defer to an agency’s reasonable interpretation of what the words mean.

Chevron was not viewed as a left-leaning decision. The Supreme Court decided in favor of the Reagan administration, after all, voting 6 to 0 (three justices did not take part), and spanning the ideological spectrum. After the conservative icon Justice Antonin Scalia reached the Supreme Court, he declared himself a Chevron fan. “In the long run Chevron will endure,” Justice Scalia wrote in a 1989 article, “because it more accurately reflects the reality of government, and thus more adequately serves its needs.”

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#### The United States federal government should remove its prohibitions and eliminate the scope of its laws, transferring its resources and authority to a new futarchich government.

#### The United States futarchic government substantially increase prohibitions on anticompetitive private sector business practices that decrease bargaining power of workers in labor markets.

#### Solves the aff better and extinction

Tabarrok 14 Alex Tabarrok, 5-13-2014, "Should the Future Get a Vote?," Marginal REVOLUTION, https://marginalrevolution.com/marginalrevolution/2014/05/should-the-future-get-a-vote.html

Philosopher Thomas Wells argues that [future citizens need the vote today](http://aeon.co/magazine/living-together/a-mechanism-to-give-future-citizens-the-vote/): …future generations must accept whatever we choose to bequeath them, and they have no way of informing us of their values. In this, they are even more helpless than foreigners, on whom our political decisions about pollution, trade, war and so on are similarly imposed without consent. Disenfranchised as they are, such foreigners can at least petition their own governments to tell ours off, or engage with us directly by writing articles in our newspapers about the justice of their cause. The citizens of the future lack even this recourse. The asymmetry between past and future is more than unfair. Our ancestors are beyond harm; they cannot know if we disappoint them. Yet the political decisions we make today will do more than just determine the burdens of citizenship for our grandchildren. They also concern existential dangers such as the likelihood of pandemics and environmental collapse. Without a presence in our political system, the plight of future citizens who might suffer or gain from our present political decisions cannot be properly weighed. We need to give them a voice. But how can we solve this problem? Wells has some very good insights: If current citizens can’t help but be short-sighted, perhaps we should consider introducing agents who can vote in a far-seeing and impartial way. They would need to be credibly motivated to defend the basic interests of future generations as a whole, rather than certain favoured subsets, and they would require the expertise to calculate the long-term actuarial implications of government policies. But then his solution turns laughable: Such voters would have to be more than human. I am thinking of civic organisations, such as charitable foundations, environmentalist advocacy groups or non-partisan think tanks. Well’s solution (give these groups votes) is so tied to his conception of what the “enlightened” future will bring that it clearly fails the far-seeing, impartiality, credibly motivated and expertise requirements that he outlines as desirable. We need not conclude, however, that Well’s plea is disingenuous or impossible but we do need a better implementation. Robin Hanson’s government of prediction markets (“[futarchy](http://hanson.gmu.edu/futarchy.html)“) is a better approach. It is know well understood that relative to other institutions prediction markets draw on expertise to produce predictions that are [far seeing](https://www.sciencedirect.com/science/article/pii/S0169207008000320) and [impartial](http://hanson.gmu.edu/biashelp.pdf). What is less well understood is that through a suitable choice of what is to be traded, prediction markets can be designed to be credibly motivated by a variety of goals including the interests of future generations. To understand futarchy note that a prediction market in future GDP would be a good predictor of future GDP. Thus, if all we cared about was future GDP, a good rule would be to pass a policy if prediction markets estimate that future GDP will be higher with the policy than without the policy. Of course, we care about more than future GDP; perhaps we also care about environmental quality, risk, inequality, liberty and so forth. What Hanson’s futarchy proposes is to incorporate all these ideas into a weighted measure of welfare. Prediction markets would then be used to predict and make policy choices based on future welfare. Incorporated within the measure of welfare could be factors like environmental quality many years into the future. Note, however, that even this assumes that we know what people in the future will care about. Here then is the final [meta-twist](http://inception.davepedu.com/). We can also incorporate into our measure of welfare predictions of how future generations will define welfare. We could, for example, choose a rule such that we will pass policies that increase future environmental quality unless a prediction market in future definitions of welfare suggests that future generations will change their welfare standards. It sounds complicated but then so is the problem. In short, more than any other form of government, futarchy is based on far seeing, impartial, expertise driven and credibly motivated predictions of future welfare and it is flexible enough to allow for a wide definition of welfare including taking into account the interests of future generations.

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#### The fifty states and relevant subnational entities should substantially increase prohibitions on anticompetitive private sector business practices that reduce bargaining power of workers in labor markets.

#### States solve

Arteaga 21 [Juan and Jordan Ludwig; January 28; former Deputy Assistant Attorney General for the U.S. Department of Justice’s Antitrust Division, J.D. from Columbia Law School; partner in the Antitrust and Competition Group at Crowell and Moring firm, J.D. from Loyola Law School; Global Competition Review, “The Role of US State Antitrust Enforcement,” <https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement>]

In the United States, competition laws have been implemented and enforced through a dual system where the state and federal governments play distinct, yet complementary, roles in regulating the competitive process. While the Department of Justice (DOJ) Antitrust Division and Federal Trade Commission (FTC) are widely viewed as the stewards of US antitrust laws, state attorneys general have long played an important, albeit varying, role within the United States’ antitrust enforcement regime. This has been especially true during the past 30 years because state attorneys general have become much more effective at coordinating their antitrust enforcement efforts to ensure that they have a meaningful seat at the table in any actions brought jointly with their federal counterparts or are able to bring their own actions when the DOJ and FTC decide not to do so.

Prior to the enactment of the first federal antitrust law – the Sherman Act – in 1890, state antitrust enforcement was quite robust in the United States because at least 26 states had already enacted some form of antitrust prohibition.[[2]](https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement#footnote-126) In addition, state enforcers had often used general corporation law and common law restraint of trade principles to regulate anticompetitive business practices and transactions.[[3]](https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement#footnote-125) This well-established state antitrust enforcement infrastructure – coupled with the fact that the Antitrust Division and FTC had only recently been created – permitted state attorneys general to continue playing a leading enforcement role for the first 30 years after the Sherman Act’s passage.[[4]](https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement#footnote-124) Indeed, state attorneys general successfully prosecuted a number of the most consequential antitrust enforcement actions during this period.[[5]](https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement#footnote-123)

In the early 1920s, however, state antitrust enforcers began playing a less prominent role because ‘the national dimension of the most important trusts, . . . as well as their ability to restructure in order to evade problematic state laws’, made clear that the federal government needed to step forward in order to adequately protect consumers and the competitive process.[[6]](https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement#footnote-122) As a result, the DOJ and FTC – whose national jurisdiction and greater resources enabled them to tackle the most pressing competition issues of the time – displaced state attorneys general as the primary source of government antitrust enforcement within the United States.[[7]](https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement#footnote-121) This largely remained true until the mid-1970s when Congress, in response to the DOJ and FTC’s perceived inactivity, passed two laws that expanded the authority of state attorneys general to enforce the federal antitrust laws and provided them with financial resources to do so.[[8]](https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement#footnote-120)

In 1976, Congress passed the Hart-Scott-Rodino Antitrust Improvement Act, which, among other things, authorised state attorneys general to bring parens patriae suits (i.e., legal actions brought on behalf of natural persons residing within their states) seeking monetary (treble damages) and injunctive relief for Sherman Act violations.[[9]](https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement#footnote-119) Congress also passed the Crime Control Act of 1976, which, among other things, provided state attorneys general with tens of millions in federal grants as ‘seed money’ for the creation of antitrust bureaus within their offices.[[10]](https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement#footnote-118) These laws had their intended effect of reinvigorating state antitrust enforcement.

During the 1980s, for example, state attorneys general once again emerged as vigorous antitrust enforcers, especially with respect to the prosecution of resale price maintenance practices and other vertical restraints.[[11]](https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement#footnote-117) The rise in the level and prominence of state antitrust enforcement during this period was largely due to a perceived enforcement void at the federal level, where the DOJ and FTC had mostly limited their focus to ‘prohibiting cartels and large horizontal mergers’.[[12]](https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement#footnote-116) No longer content with ceding antitrust enforcement to federal enforcers, state attorneys general expanded their antitrust dockets from prosecuting purely ‘local matters, such as bid-rigging on state contracts’, to actively investigating and litigating matters with multistate and national implications.[[13]](https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement#footnote-115) To help ensure that they had a larger seat at the antitrust enforcement table, state attorneys general also increased the coordination of their enforcement efforts and competition advocacy through organisations such as the National Association of Attorneys General (NAAG), which created a Multistate Antitrust Task Force and issued state Vertical Restraints and Horizontal Merger Guidelines during this period.[[14]](https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement#footnote-114)

### 1NC---OFF

#### Biden’s PC passes B3 now

Easley ’11-6 [Jason; 2021; managing editor, White House Press Pool and a Congressional correspondent; PoliticusUSA, “Biden Shows America What a Real President Who Gets Things Done Looks Like,” https://www.politicususa.com/2021/11/06/biden-shows-america-what-a-real-president-who-gets-things-done-looks-like.html]

In a display of total confidence, President Biden was asked what gives him the confidence Congress will pass Build Back Better. He said, “me.”

Video:

Tweet omitted.

The President was asked, “Mr. President, have you gotten assurances from moderate Democrats in the House and Senate that they are going to vote for your Build Back Better plan now that what they really wanted, the infrastructure bill, has passed.

President Biden answered, “You know I’m not going to answer that question for you because I’m not going to get into who or what made what commitments to me. I don’t negotiate in public, but I feel confident that we will have enough votes to pass the Build Back Better plan.

When he was asked, “What gives you that confidence? “

Biden responded, “Me.”

This is what a confident president who gets things done sounds like. Donald Trump turned infrastructure week into a national joke by being unable to deliver for the American people, as he continued to promise and promise, but nothing ever happened.

Biden is reminding America of what a real president can do when they know how to use their power and platform.

Trump talked the talk, but President Biden and the Democrats delivered action and results.

#### Antitrust sinks it

Carstensen ’21 [Peter; February 2021; Fred W. & Vi Miller Chair in Law Emeritus at the University of Wisconsin Law School; Concurrences, “The ‘Ought’ and ‘Is Likely’ of Biden Antitrust,” <https://www.concurrences.com/en/review/issues/no-1-2021/on-topic/the-new-us-antitrust-administration-en#carstensen>]

14. Similarly, despite bipartisan murmurs about competitive issues, the potential in a closely divided Congress that any major initiatives will survive is limited at best. In part the challenge here is how the Biden administration will rank its commitments. If it were to make reform of competition law a major and primary commitment, it would have to trade off other goals, which might include health care reform or increases in the minimum wage. It is likely in this circumstance the new administration, like the Obama administration’s abandonment of the pro-competitive rules proposed under the PSA, would elect to give up stricter competition rules in order to achieve other legislative priorities.

15. Another key to a robust commitment to workable competition is the choice of cabinet and other key administrative positions. Here as well, the early signs are not entirely encouraging. In selecting Tom Vilsack to return as secretary of agriculture, the president has embraced a friend of the large corporate interests dominating agriculture who has spent the last four years in a highly lucrative position advancing their interests. Given the desperate need for pro-competitive rules to implement the PSA and control exploitation of dairy farmers through milk-market orders, the return of Vilsack is not good news. Who will head the FTC and who will be the attorney general and assistant attorney general for antitrust is still unknown, but if those picks are also centrists with strong links to corporate America the hope for robust enforcement of competition law will further attenuate!

16. In sum, this is a pessimistic prognostication for the likely Biden antitrust enforcement agenda. There is much that ought to be done. But this requires a willingness to take major enforcement risks, to invest significant political capital in the legislative process, and to select leaders who are committed to advancing the public interest in fair, efficient and dynamically competitive markets. The early signs are that the new administration will be no more committed to robust competition policy than the Obama administration. Events may force a more vigorous policy—I will cling to that hope as the Biden administration takes shape.

#### Prevents existential climate disaster

Moncrief ’11-11 [Aliki; 2021; executive director of Florida Conservation Voters; Orlando Sentinel, “Build Back Better Act would help in climate crisis,” https://www.orlandosentinel.com/opinion/guest-commentary/os-op-climate-change-congress-act-now-20211111-44u6bgyn5fdvnp3eqievkebqpe-story.html]

Last week, Congress passed the Infrastructure Investment and Jobs Act. This bipartisan bill will address upgrades to things like our transportation system, rural broadband, public transit, and clean-water infrastructure. These are badly needed, overdue investments that will make our communities more resilient to the climate impacts we are already seeing. But we know much more is needed.

It’s not enough to just respond to extreme weather — we need to cut the pollution driving it in the first place. That’s why Congress must also pass the Build Back Better Act, the most transformational climate and jobs legislation in our nation’s history. By investing in clean energy and things like electric vehicles and more energy-efficient homes and businesses, we can stop making the problem worse and avoid a growing disaster. We don’t have time for half measures, and Floridians know it — more than 75% of registered voters in the state support bold congressional action on climate change.

The Build Back Better Act takes bold steps to dramatically reduce climate pollution for everyone. But it also centers those who have been disproportionately impacted by this crisis by taking steps to address the decades of unchecked environmental injustice, ensuring at least 40% of the benefits of this bill go to those communities hardest hit by pollution and climate change.

Building a clean energy economy is an investment that will pay dividends for families today and for generations to come. Preventing the most catastrophic hurricanes, floods and heat waves will help ensure that we still bring people from all over the world to our beaches, the Everglades, and every amazing destination across our state that supports our multi-billion dollar tourism industry.

And the robust clean-energy investments in the Build Back Better Act will create millions of good-paying jobs for Floridians in every corner of our state. Florida already ranks fourth in the nation for clean-energy employment, and this legislation would help this industry grow exponentially by tapping into the Sunshine State’s solar power potential.

Orlando has some great members of Congress who understand that climate change is an existential threat to our state and they ran on being a part of the solution to this crisis. Now, we are counting on them to take bold action and pass the Build Back Better Act. This is a win-win-win that creates jobs, lowers energy bills for Floridians, and begins to address the climate crisis at the same time.

### 1NC---OFF

#### Affs should be required to explicitly advocate for veganism in the 1AC---increases support for the animal rights movement

Joy 13 By Melanie Joy: Social Psychologist & Author , "Speaking Truth to Power: Understanding the Dominant, Animal-Eating Narrative for Vegan Empowerment and Social Transformation," 8 years ago One Green Planet, https://www.onegreenplanet.org/animalsandnature/speaking-truth-to-power-understanding-the-dominant-animal-eating-narrative-for-vegan-empowerment-and-social-transformation/

As vegans, our goal is not simply to get people to stop eating animals; we aim to bring about a revolutionary shift in social consciousness to transform a culture of violence and oppression to one of nonviolence and liberation. Our goal is to catalyze a revolution to change the course of history. History is shaped not by weapons, or tyrants, or rebellions. History is shaped by *stories*. Beneath every oppression and every revolution are narratives that guide them: we cannot invade and take up arms against another without first believing the story that the other is our enemy who must be conquered, just as we cannot stand together in protest of violent invasions without believing the story that the war is unjust. *Dominant narratives* are the stories told by the dominant culture; they define our reality and guide our lives like an invisible hand. And when the dominant culture is oppressive, so, too, are its narratives. Such narratives are *fictions*, constructed to delude people into supporting the dominant way of life even though that way of life runs counter to what they would otherwise support, and to silence the voices of people who seek to tell the truth. Thus, social change is made possible by those who challenge the dominant narratives, replacing fictions with facts by bearing witness to and speaking out against oppression. Revolutions that change the course of history are made possible by those who speak truth to power. **Learning from History: A Case Study of Feminism** Only by examining history can we hope to change its course, and there is much to learn from the revolutionaries who came before us. The twentieth-century feminist movement offers a particularly useful example. Throughout much of the twentieth century, women were considered inferior to men and thus destined for a life of domestic servitude. Many women suffered lives of tedium and isolation, cut off from the vibrant social world around them, yet they obligingly submitted to their fate. Then, in the 1960s, something happened. Women began talking with each other about their experiences, and over time, these conversations led to the establishment of formal discussion groups. And as more and more women shared their stories, they discovered that many of them were experiencing the same problems, such as being verbally and physically abused by their husbands. The women thus realized that they were not *inferior*; they were *oppressed*. Sharing their stories empowered women to speak out against their oppression – to speak truth to power – and helped launch the modern women’s liberation movement, a global movement that changed the course of history. There are important lessons in this story for those of us who seek social transformation: *Stories shape our lives, and our world, for better or worse.* When women believed the stories told by the dominant, sexist culture – when they looked at the world through the eyes of (sexist) males – they believed that their own personal deficiencies, rather than external power structures, were to blame for their lower social status. *Stories can be fiction or fact.* The dominant story of sexist culture – that women were inferior because they were overly emotional, weak, and irrational – was based on gross distortions of the truth about women’s true nature and experience. It was a fiction. True stories, on the other hand, reflect the authentic truth of our experience. *Widespread stories reflect (and reinforce) a widespread belief system, or ideology.* The story that women were inferior to men did not come out of nowhere; it reflected the widespread ideology of sexism. And the more men and women alike bought into this fiction, the more they reinforced the sexist system, playing out and thus confirming the stereotypes of dominant males and submissive females. *When we change our stories, we change our lives, and our world.* As vegans, we are largely aware of the fictions spun by the dominant, animal-eating culture; our advocacy is organized around providing alternative, truthful stories. But there are some dominant stories that many vegans remain unaware of, and these stories can cause us to feel disempowered and despairing and they can seriously undermine our advocacy. When we become aware of these stories, though, we can rewrite them, and transform our despair into inspiration and empower ourselves and our movement. **Carnism and the Dominant, Animal-Eating Narrative** To understand the dominant, animal-eating narrative, we need to understand the ideology that breeds its various stories. Most people, vegans and non-vegans alike, still believe that there is no ideology of the dominant, animal-eating culture. We tend to assume that only vegans (and vegetarians) bring their beliefs to the dinner table. But when **eating animals is** not a necessity for survival, it is a choice – and choices always stem from beliefs. Carnism is the invisible ideology that conditions people to eat animals. Carnism has been written about extensively [elsewhere](http://www.carnism.com/); here I will simply summarize its key features as they relate to its narratives. Carnism is a *dominant* ideology; it is invisible and is woven through the very structure of society, constructing norms, laws, beliefs, behaviors, etc. and becoming internalized, shaping the very way we think and feel about eating animals. In other words, we look at the world through the lens of carnism, as a society and as individuals. Carnism is also an *oppressive* ideology; eating animals is organized around a powerful, socially privileged group (humans) using another group (farmed animals) for their own ends. In short, carnism is a *system of oppression*. However, most people who participate in carnism – who eat animals – care about animals and don’t want them to suffer. So carnism, like other oppressive ideologies, must use a set of social and psychological defense mechanisms to enable humane people to participate in inhumane practices without fully realizing what they are doing. In short, carnism teaches us how not to think and feel when it comes to eating animals. These *carnistic defenses* create and maintain the stories that support the ideology in a feedback loop: ideology → defenses (tell stories) → distort perceptions → block feelings → enable behaviors → reinforce ideology For example: carnism → objectification (“animals are things”) → perceive a turkey as somet*hing*, rather than some*one →* numb emotions → eat turkeys → reinforce carnism Of course, there is a much simpler way to describe the fictions promulgated by the dominant culture: propaganda. **Carnistic Defenses: Primary and Secondary** There are two kinds of carnistic defenses: *primary* and *secondary*. All defenses exist to distort reality, to promote fiction as fact. In general, primary defenses are “pro-carnism;” they exist to *validate carnism*. The stories they tell are that “eating animals is the right thing to do” – that, for example, “milk does a body good.” Secondary defenses, on the other hand, are “anti-vegan;” they exist to *invalidate veganism*. The stories they tell are that “not eating animals is the wrong thing to do” – that, for instance, plant protein is inferior to animal protein. Primary defenses distort the truth about farmed animals (“pigs are stupid, lazy, dirty”) and proponents of carnism (“people need to eat animals”), and secondary defenses distort the truth about vegans and veganism (“vegans are unhealthy”). **Primary Defenses and Narratives: Pro-Carnism Fictions** Denial is the main defense of carnism; if we deny there is a problem in the first place, then we don’t have to do anything about it. Denial is expressed largely through *invisibility*, and the main way carnism remains invisible is by remaining unnamed: if we don’t name it, we can’t even think about it or question it, so eating animals appears to be a given rather than a choice. And of course the victims of the system are kept out of sight and therefore conveniently out of public consciousness. The stories that primary denial tells are “there is no belief system” and “there is no problem.” **Another carnistic defense is *justification***. Justification tells many stories, many myths, all of which fall under the Three Ns of Justification: “**eating animals is *normal*, *natural*, and *necessary***.” Not surprisingly, these same myths have been used to justify oppressive practices throughout human history, from slavery to heterosexual supremacy. And finally, carnism uses a set of defenses that distort our perceptions of farmed animals and their flesh and excretions. We thus view farmed animals as *objects* (“chickens are commodities”) and *abstractions* (“a pig is a pig and all pigs are the same”), and we place animals in rigid *categories* in our minds so we can harbor very different feelings and carry out very different behaviors toward different species (“dogs are friends and family; cows are food”). Many vegans have an intuitive understanding of primary carnistic defenses. We recognize that others are looking at the world through the lens of carnism, so that much of our activism focuses on challenging carnistic fictions, telling the truth. For instance, consider [FARM’s 10 Billion Lives Tour](http://10billiontour.org/) (making the invisible visible), the efforts of medical practitioners to demonstrate that eating animals is neither natural nor necessary for health (debunking two of the Ns of Justification), [Mercy for Animals’ campaign](http://www.mercyforanimals.org/WhyLoveBrochure.pdf) asking why we love some animals but eat others (challenging categories), and [Farm Sanctuary’s *Someone, not Something* project](http://www.farmsanctuary.org/learn/someone-not-something/about-the-someone-not-something-project/) (validating the individuality of farmed animals). **Secondary Defenses and Narratives: Backlash and the Vegan Casualties of Carnism** Though vegans often have a sense of how primary defenses influence non-vegans, many vegans do not realize that we, too, are looking at the world through the lens of carnism – from within the sphere of secondary defenses. To understand this point, try to envision carnistic defenses in concentric circles, with primary defenses in the center, surrounded by a circle of secondary defenses. So even though vegans have largely stepped out of the sphere of primary defenses, we remain within the system. In other words, we often believe in some or all of the stories told by secondary defenses. Secondary carnistic defenses exist to invalidate the stories that challenge carnism. They accomplish this end by invalidating: vegans, vegan ideology and practice, and the vegan movement. And secondary defenses are a part of a *backlash* against veganism; a backlash is a reaction of the dominant culture when its power is threatened. (For example, when the women’s liberation movement began to achieve widespread support, the term “feminist,” once proudly embraced by many women and men alike, was turned into a slur by the dominant sexist culture.) Thus, secondary defenses evolve and intensify as a movement evolves and intensifies, and they are a sign of the movement’s success, not its failure. **Projection: Shooting the Messenger** ***Projection* exists to invalidate vegans, and thus our message**. Projection tells the story that “vegans are wrong.” If we shoot the messenger, we don’t have to take seriously the implications of her or his message. One kind of projection has to do with the qualities of carnistic culture. **Vegans may be portrayed as *possessing the undesirable qualities* of the culture so, for instance, we’re seen as “biased” and “extremist”** when we challenge the biases and extreme practices of the dominant culture and we are accused of “propagandizing” when we challenge carnistic propaganda. Or we may be portrayed as *lacking the desirable qualities* of the culture so, for instance, we’re seen as “overly emotional” and “sensationalist” when we challenge the apathy and numbing of the dominant culture. When we don’t recognize these projections for what they are, we may believe the negative messages we hear about ourselves and question the truth of our own stories. For instance, we may believe the myth that our emotions are excessive, instead of recognizing that our emotional reaction – our sadness, grief, anger, etc. – to the atrocity that is animal agriculture is in fact healthful, appropriate, and legitimate. When it comes to eating animals, the world needs *more* emotion, not less. Another consequence of not recognizing these carnistic projections is that we can end up projecting right back onto non-vegans and become enmeshed in a battle of projections rather than engaged in a productive dialogue about the real issue. Another kind of projection is that which reduces vegans to shallow *stereotypes*. For instance, if we express our anger at the social injustice that is carnism, we are militant human haters; if we advocate peace and compassion we are tofu-loving, tree-hugging hippies. (Of course, there is nothing wrong with being a hippie. But there *is* a problem with being reduced to a one-dimensional stereotype.) When we don’t recognize these projections, we can end up acting them out in a self-fulfilling prophecy, confirming the distorted stories of carnistic culture. Carnistic culture also often projects onto vegans an i*mage of omnipotence*, suggesting that we only have a right to our ideology if we can live up to an impossible ideal. So, for instance, we are expected to be *paragons of health*: I cannot count the number of vegans who have told me that they never let non-vegans know when they’re sick out of fear that their illness will be used to discredit their veganism. Or, we are expected to be *paragons of virtue*, with the moral consistency of the Buddha: we’re hypocrites if we wear a used wool sweater….but we’re extremists if we don’t. We are also expected to be *experts on everything*: agricultural economics; organic, veganic, hydroponic mushroom farming; quantum physics. It’s as if we don’t have a right to advocate veganism if we don’t have all the solutions to the problem of carnism. And when we of course don’t live up to these projections, it becomes an excuse to invalidate everything we stand for. What pressure on us! We end up *tokenized*, treated as the token vegan, the ambassador for the entire movement. If we buy into the fictitious story that we can and should be perfect and that we are solely responsible for the success or failure of the movement, then when we don’t turn everyone around us vegan we can feel like we have failed the animals, that we are responsible for animal suffering; in our vegan minds we become animal murderers. Talk about role reversal! This is how secondary defenses work: they turn the problem of carnism around and pin it on vegans. Sometimes, though, vegans react to this projection of omnipotence by believing that they are indeed all-powerful, or that their particular brand of veganism is the perfect ideal. And they project onto other vegans that the other vegans are imperfect and “wrong.” Such righteousness often leads to fundamentalism and ideological rigidity, a problem that plagues activists in many social movements. A final carnistic projection is that of the *pathological* (unhealthy) vegan. Fortunately, the image of the scrawny, sickly vegan is in rapid decline. However, it is still not uncommon for a psychologist to, for instance, assume that a young woman’s veganism is reflective of an eating disorder. Pathologizing those who challenge the status quo has been a common method of maintaining oppressive systems throughout history; for instance, before the abolition of human slavery in the U.S., slaves who attempted escape were diagnosed with the mental illness drapetomania. **Secondary Justification: Neocarnism** While primary justification tells the stories that eating animals is normal, natural, and necessary, *secondary justification* tells the stories that *not* eating animals is *ab*normal, *un*natural, and *un*necessary. Secondary justification is a carnistic defense that ironically puts *vegans* on the defensive, as it places the burden of truth on us. Vegans often find themselves in the position of justifying why they do *not* eat animals, rather than non-vegans explaining why they do. Interestingly, each of the secondary justifications has morphed into an entirely new ideology, which I refer to as [neocarnism](http://www.onegreenplanet.org/lifestyle/understanding-neocarnism/). I believe that, thanks to the tireless work of vegan advocates and the advent of the Internet, denial (the main defense of carnism) has been sufficiently destabilized. Many people today are no longer able to deny at least the most egregious practices of animal agriculture. So justification has taken on a more important role in maintaining the system. The emergence of neocarnism (e.g., “happy meat,” “local/sustainable meat”), which I have written about [elsewhere](http://livepage.apple.com/), frustrates vegans but is in fact a sign of progress. **Secondary Denial: Carnistic Injustice and Vegan Oppression** And finally, we come full circle to denial. Primary denial, as mentioned, tells the story that “there is no belief system.” *Secondary denial*, however, takes this one step further. Because if we believe that people who eat animals are operating outside of a belief system – and a dominant belief system in particular – then we believe that there is no dominant (“majority”) group and, therefore, there is no subordinate (“minority”) group.[[i]](https://www.onegreenplanet.org/animalsandnature/speaking-truth-to-power-understanding-the-dominant-animal-eating-narrative-for-vegan-empowerment-and-social-transformation/#_edn1) So, one story that secondary denial tells is that “vegans are not an ideological minority group.”[[ii]](https://www.onegreenplanet.org/animalsandnature/speaking-truth-to-power-understanding-the-dominant-animal-eating-narrative-for-vegan-empowerment-and-social-transformation/#_edn2) When vegans do not recognize that we are ideological minorities we can end up accepting and even internalizing carnistic prejudice. For instance, thousands of vegans with whom I have spoken have told me how they are mocked (or otherwise treated in a hostile manner) for no reason other than the fact that they are vegan – that they belong to a social minority group – which, by definition, is *harassment*. And these vegans feel unable to defend themselves. They either stand up for themselves and their beliefs and risk, for instance, being accused of lacking a sense of humor, or they force themselves to laugh along with the “joke,” thus participating in their own degradation. Denying that vegans are ideological minorities is a powerful way of silencing those of us who challenge carnistic stories. So when we recognize secondary denial for what it is we are better able to stand up for ourselves, and to educate non-vegans, many of whom are no doubt completely unaware of their carnistic prejudice. As ideological minorities, vegans are also de-individualized by the dominant culture, a phenomenon experienced by members of all non-dominant groups. In other words, vegans are seen as a homogeneous group (“all vegans are the same”) rather than as distinct individuals. We become reduced to nothing other than our ideology. And if we buy into this story that we are and should be homogeneous, then we see our differences as weaknesses rather than as the strengths that they are. The truth is that vegans are no less diverse than non-vegans, nor should we be. Another story that secondary denial tells is that “there is no oppression.” If we believe that there is no belief system and there is no oppression, then we also believe that “there is no system of oppression,” that eating animals is simply a matter of personal ethics – a personal choice – rather than the inevitable end result of a deeply entrenched *ism*. (Imagine believing that owning African slaves had nothing to do with racism!) Thus, any attempt to reduce or eliminate oppression is seen as infringing on one’s “freedom of choice.” And these stories lead us to believe another story, that “eating animals is not a social justice issue” and, therefore, that “the vegan movement is not a bona fide social justice movement.” When vegans and non-vegans alike believe such fictions, we can fail to see that the vegan movement is part of a long tradition of social movements that have changed the world. And the vegan movement remains disconnected from the other social movements that it is naturally aligned with and must unite with if we hope to bring about the kind of widespread, revolutionary transformation toward which we are all working. When we believe that there is no system of oppression – no systematic, widespread violence – then we also believe the myth that “animal agriculture is not an atrocity,” a *mass trauma*. And we therefore fail to see the roles we all play in the traumatization; we don’t recognize, for instance, animals as *victims*, animal agribusinesses as *perpetrators*, and vegans as *witnesses*. Much could be written about the impact of [“carnism-induced trauma”](http://www.carnism.com/index.php/2012-05-08-16-39-52/carnism-induced-trauma) but one point is particularly important for vegans to be aware of: as witnesses we are also victims. Secondary Traumatic Stress Disorder (STSD) is virtually identical to Post-Traumatic Stress Disorder (PTSD) except that it is caused by witnessing – rather than being a direct victim of – trauma. There are scores of vegans who, as a result of witnessing the violence of carnism, suffer from depression, anxiety, intrusive thoughts, irritability, nightmares, a loss of faith in themselves and others, survivor guilt (guilt for not doing “enough” to help animals), burnout, etc. – all potential symptoms of STSD. Yet the vast majority of vegans – and psychologists they may seek out – do not recognize these symptoms as inevitable, legitimate reactions to trauma, and they are therefore not in a position to appropriately [treat or prevent them](http://www.amazon.com/Trauma-Stewardship-Everyday-Caring-Others/dp/157675944X/ref=sr_1_1?s=books&ie=UTF8&qid=1344743512&sr=1-1&keywords=trauma+stewardship+by+laura+van+dernoot+lipsky). Sometimes secondary denial tells the story that “there is no vegan movement.” Or, it obscures the true power and scope of the movement, telling the story that “the vegan movement is weak and ineffective,” thus diminishing individual vegans’ perception of their power to make a difference. (In this way, secondary denial is like primary denial in that it makes invisible the facts that would weaken the system.) Vegans can end up feeling that the problem is so huge, and their impact so trivial, that they become demoralized by what seems an impossible challenge. The stories of secondary carnistic defenses can cause vegans to feel disconnected from each other and the movement. They can make us feel isolated, silenced, confused, frustrated, and disempowered. They destroy solidarity and erode hope and as such are powerful tools to help maintain carnism. And as long as we remain unaware of the myths of secondary carnistic defenses, we will likely perpetuate, rather than debunk, them; we practice *reactive*, rather than *proactive*, veganism. **Reactive Veganism: The Dynamics of Internalized Oppression and Privilege** When we are *reactive*, we are looking at the world through the lens of carnistic defenses and reacting to its stories. When members of minority groups believe the stories told about them by the dominant culture, they have *internalized the oppression* of that culture. And the stories of the dominant culture are invariably that the needs and experiences of the minority group are less valid and important than those of the majority group. For instance, if a vegan at a family dinner requests that the cheese be kept off the salad or the butter be kept out of the mashed potatoes, this need – which is simple to accommodate and would make a significant difference for the vegan – is often seen as far less important than the “need” to have a traditional meal. When members of majority groups believe the messages of the dominant culture – that their needs and experiences are more valid and important than those of the minority group – they have internalized the privilege afforded them by the culture. This mentality is often reflected in a sense of entitlement, and a righteous anger may be triggered when one’s needs aren’t given priority over others’. For example, many non-vegans can feel “controlled” when asked to dine at a restaurant that doesn’t serve animals, claiming that there is “nothing” for them to eat on the menu. And yet these same individuals may without compunction make arrangements for a vegan to dine with them at a steakhouse without consulting the vegan or considering the inconvenience and offense such a situation may provoke. Of course, most non-vegans have no awareness of their carnistic privilege; they have simply absorbed, and are replaying, the fictitious stories of carnistic culture. And similarly, most vegans are unaware of their internalized oppression. However, many vegans do sense, on some level, a contradiction between what we know to be true (that we have a right to be seen and treated as equals) and what we have learned to believe is true (that others’ needs supersede ours). So we can, for instance, find ourselves apologizing for “inconveniencing” others while at the same time resenting the fact that we are making such apologies. **Shame and Grandiosity** Internalized oppression leads to shame, the feeling of being “less-than.” We feel shame when we look at ourselves through others’ eyes and believe their version of reality over our own (“Your needs/beliefs/values, etc. are less valid than mine/ours.”). Our shame may prevent us from standing up for ourselves when, for example, we are called “hypersensitive,” or it may lead us to apologize for things we shouldn’t be sorry for. Sometimes we may react to our shame by flipping into its opposite state, *grandiosity*, which is the feeling of being “better-than.” We thus refuse to look at ourselves through the eyes of others at all or to take in any information that challenges our existing ideas. When we are in a state of grandiosity, we can end up shaming others, acting as a mirror of carnistic culture. For instance, we may project stereotypes onto non-vegans (seeing them as “apathetic, selfish animal eaters”) or otherwise invalidate their experience (*Non-vegan*: “I love animals.” *Vegan*: “No you don’t; you eat them.”). **Beyond Carnistic Fictions: Practicing Proactive Veganism** The good news is that, when we recognize carnistic stories, we can change our relationship to them. We can practice *proactive*, rather than reactive, veganism. When we practice proactive veganism, we resist the carnistic fictions and *we hold onto the truth of our experience without invalidating others*. Practicing proactive veganism means that we seek, speak, and live our truth with integrity toward ourselves and others. We thus practice the “Cs” of a balanced mind and heart: We approach situations with *curiosity* – an open mind – and *compassion* – an open heart. We seek *clarity*, looking deeply within ourselves and connecting with those whose integrity we trust, to hold onto our authentic truth, our own story. And we cultivate the *courage* to bring the other Cs into our lives and our world. Proactive veganism is embodied veganism. It is our philosophy lived out in our bodies, in our minute-to-minute lives. It is the practice of the Cs toward ourselves, others, and our world and it enables us to forgive ourselves, and others, when we inevitably end up engaging in the dynamics of a universal system in which we are all enmeshed. Practicing proactive veganism also helps diminish the anger which plagues so many vegans, as it requires us to be empathic – and empathy is the antidote to anger. (For practical tips on practicing the Cs, I highly recommend learning the principles of nonviolent communication). When we recognize carnistic stories, we can transform our shame to *pride*, a prerequisite for activists in all social movements: consider, for example, Black Pride, Gay Pride, and, now, Veggie Pride. True pride is the opposite of shame/grandiosity; it is not feeling less-than, or better-than; it is the recognition that all individuals – vegans, non-vegans, animals – possess equal inherent worth. And as vegans, we have much to be proud of. We stand firmly against the overwhelming pressures to conform to the dominant culture, we refuse to accept the fictions of ubiquitous carnistic propaganda, and we withstand the incessant seductions to fall back asleep and follow the path of least resistance. Ultimately, when we recognize carnistic fictions, we neither underestimate nor overestimate their power. As a powerful man – Hitler – once said, “Make the lie big, make it simple, keep saying it, and eventually they will believe it.” And as an even more powerful man – Gandhi – once said, “All through history the way of truth [has] always won. There have been tyrants and murderers…but in the end, they always fall. Think of it – always.” And Gandhi was right. Indeed, perhaps the greatest carnistic lie of all is the story that people don’t care – that people eat animals not because their hearts and minds have been manipulated by a culture that is antithetical to their core values and has coerced them into acting against their own interests and the interests of others, but because they don’t care. I have had the privilege of speaking to thousands of non-vegans around the world, giving my carnism presentation to packed halls and to standing ovations, and the stories I hear from attendees are radically different from those of the dominant culture. Here are just a few of the countless quotes from evaluation forms I collect after a presentation: “My life changed tonight. I cracked open. My heart cracked open. I’ll never have a bite of animal flesh again, ever.” ~Bellevue, WA “I wasn’t vegan before, now I really should be…You were successful! Thank you!” ~Zagreb, Croatia “I can’t make excuses anymore. Thank you for making the invisible visible.” ~Albuquerque, NM “My values and sense of myself are different than following a system [that teaches us to] eat animals…Definitely I have to make some changes. Definitely.” ~Maribor, Slovenia “Although the film of slaughtered animals almost made me vomit…the overall message got through to me, about how we are all really just under a sort of ‘group pressure.’ Now I have real doubts about ever eating meat again.” ~Stockholm, Sweden “I came to this presentation very skeptical and thinking I may leave unchanged. But I feel…I feel extremely aware and changed.” ~San Francisco, CA So, despite what the carnistic narratives would have us believe, there is reason to be extremely hopeful. The truth is that people care about animals, and they care about the truth. The truth is that the vegan movement is growing exponentially, in myriad countries around the world: As vegans, we are a part of something much greater than our individual selves; we are a part of a social movement that I believe will one day be looked back upon as one of the most transformational movements in human history. The truth is that each and every one of us is making a difference; what we stand for as vegans is the greatest threat to the carnistic powers that be. The truth is that, by speaking truth to power, we are changing the course of history.

#### Convincing people to spare $1 for animal advocacy is sufficient to save an animal from a lifetime of torture

Cooney 15 , 6-23-2015, "What Does it Cost to Save an Animal's Life? Would You Believe...$1?," Flaming Vegan, https://www.theflamingvegan.com/view-post/What-does-it-cost-to-save-an-animals-life-Would-you-believe-one-dollar Nick Cooney is the Founder and Managing Partner at [Lever VC](https://www.levervc.com/), a venture capital fund investing in early-stage companies in the alternative protein segment. This segment includes plant-based and cultivated dairy, egg, and meat companies. Lever VC functions internationally, with offices in the U.S. and Hong Kong and staff in Hong Kong, the U.S., Israel, and Europe. Nick has been working in the alternative protein segment for more than fifteen years. Lever VC was established by [Nick Cooney and his partners in 2019](https://www.bloomberg.com/press-releases/2019-09-05/nick-cooney-launches-the-lever-vc-fund).  
Lastly, I looked at farm animal advocacy organizations. By that, I mean groups who spend all or most of their bugets on promoting vegan eating, and/or on trying to reduce the suffering of animals on factory farms. Based on data compiled by the charity advisory organization [Animal Charity Evaluators](http://www.animalcharityevaluators.org/), as well as several program impact studies with which I've been involved, it appears that some of the top farm animal advocacy groups are spending $1 or less for every animal they spare from a lifetime of misery. At first glance, that seems hard to imagine. Can the crumpled dollar bill in your pocket - which can't even get you a small cup of coffee at Starbucks - really spare an animal from months or years of misery inside a factory farm? Yes, it can. As odd as it sounds, the data makes clear that it's true. The average American eats about 31 farmed animals a year. So if a farm animal advocacy group can inspire someone to cut out meat for $30 or less in program expenses (expenses like running advertising, printng booklets, producing videos, or so forth), then they spent less than a dollar for every animal they spared from a life of suffering. Also, some corporate policy changes and new laws can reduce the suffering of hundreds of thousands or millions of animals in one fell swoop. That too is why some of the top farm animal advocacy groups can turn that dollar bill in your pocket into one animal protected from extreme cruelty. As I discuss in [**How To Be Great At Doing Good,**](http://www.nickcooney.com/) this raises some extremely important questions for those of us who donate to animal protection causes. If I have $1,000 to donate, I could help give one more pig a happy year at a santuary (on top of the thousands of other animals that are already being protected at sanctuaries). Or with that $1,000, I could spare two cats or dogs or rabbits from being euthanized due to lack of a good home. Or I could spare over one thousand pigs, chickens, and cows from enduring a lifetime of misery crammed inside filthy factory farms. **This is how much is at stake when we decide which organiztions to donate money toward.** Psychologically it certainly doesn't feel that way. It doesn't feel like writing the name of one well-respected animal protection group on a check would spare one or two animals, and writing the name of another well-respected animal protection group on a check would spare a thousand animals. To us, writing either name feels pretty much the same. But as I discuss in [**my new book**](http://www.nickcooney.com/), there is so much on the line when we decide where to donate and how to volunteer. Which is why, if we truly care about animals, it's so critical that we make the most thoughful, calculated decisions we can.

#### Factory farming is a moral abomination

Geer 14 Abigail geer 2014, "10 Alarming Facts About the Lives of Factory Farmed Animals," One Green Planet, https://www.onegreenplanet.org/animalsandnature/facts-about-the-lives-of-factory-farmed-animals/

Here are 10 alarming facts about the lives of factory-farmed animals:

1. More than 80 percent of pigs have pneumonia upon slaughter

The cramped dirty conditions that pigs are forced to live in on factory farms cause numerous serious health problems which are never treated. Dangerous gases from manure, including high levels of ammonia, cause [pneumonia in over 80 percent of the factory-farmed pigs](http://www.organicconsumers.org/Toxic/factoryfarm.cfm) entering U.S. slaughterhouses.

2. A battery chicken lives on space smaller than your iPad

Each chicken in a battery farm has to spend its entire life in a [cage that has a floor space smaller than an iPad](http://www.huffingtonpost.co.uk/philip-lymbery/free-range-animals_b_4315066.html), no room to turn around, and certainly not enough space to stretch its wings. They also have to spend their entire lives standing on metal mesh flooring, which causes pain, discomfort, and injury to the feet and legs.

3. Animals are forced to grow up to three times faster than nature intended

Due to selective breeding and the use of weight gaining drugs in feed, [animals are forced to grow at an alarming rate](http://www.upc-online.org/broiler/102903bigger.htm). Chickens reach the weight desired for slaughter after just 35 days on a factory farm today, when this should normally take 90 days. They are also reaching that weight on less food, as in the 1950s it took three pounds of feed to produce a pound of meat, now it’s just 1.7 pounds of feed. The same is true in the pork industry, as pigs are usually killed at just six months of age.

4. Dairy cows are killed after just three lactation cycles

The natural lifespan of a cow is between 20 to 25 years. However, in factory farms, dairy cows are often considered to be “spent” by the time they have gone through [just three lactation cycles](http://www.farmsanctuary.org/learn/factory-farming/dairy/). They are aggressively bred, fed, and drugged to produce as much milk as possible in the shortest amount of time, and this has a detrimental effect on their overall health and long-term milk production. In the modern farming world, it’s more cost-effective to send them to the slaughter at this early stage of life and have them replaced before their milk production decreases.

5. Forced molting processes kill 5 to 10 percent of hens

In many egg production farms, the practice of [forced molting](http://www.upc-online.org/molting/) is used to trick the hens into higher levels of egg production. When their natural laying cycle ends, they are forced into another cycle by being placed into darkness for up to eight days and denied water and food. A huge number of hens die in the process, but is still considered to be “good practice” as it increases overall egg production on the farms.

6. Newborn animals are routinely mutilated

Piglets are [mutilated](http://www.viva.org.uk/pig-hell/mutilations) within the first two weeks of life by having their teeth clipped, tails cut off, and testicles removed. This is done without anesthetic and is incredibly painful for the animals. It is done to prevent the pigs from damaging themselves and each other when they become agitated and distressed due to their cramped living conditions. Chickens have their beaks clipped for the same reason.

7. Genetic manipulation has left 90 percent of broiler chickens unable to walk properly

The obsession with creating as much meat as possible in the shortest space of time, with the least outlay on food costs, means that as many as [90 percent of broiler chickens are unable to walk properly](http://www.organicconsumers.org/Toxic/factoryfarm.cfm) at all. The bones and muscles in their legs are unable to cope with the sheer weight of their bodies.

8. Mothers are separated from their babies at birth

In the dairy industry, calves are taken away from their mothers at birth and are sent off to veal farms where they will spend the rest of their short lives. The calves are not allowed to stay with their mothers as they would drink their mother’s milk, which is desired by the industry for human consumption instead. In the pork industry, piglets are [weaned from their mothers after just two weeks](http://www.aspca.org/fight-cruelty/farm-animal-cruelty/pigs-factory-farms) so that the sow can be made pregnant again, as this increases the amount of litters she can produce each year.

9. Veterinary care is almost never administered to sick and injured animals

[Factory farming is all about economics](http://beyondfactoryfarming.org/get-informed/economics). The life, feelings, and desires of the individual animals bred into these awful places are never considered to be important. It is commonplace for very sick and injured animals to be left untreated in the hope that they will survive until they reach the slaughterhouse. Illness due to environmental conditions in the farms are so common that farmers simply feed antibiotics to all animals as a form of damage limitation, but veterinary fees to treat sick and injured individuals is not economically viable.

10. Ninety-nine percent of U.S. farm animals never get to express natural behaviors

In the U.S., an incredible 99 percent of farmed animals are now bred in factory farms. This means that due to current accepted regulations on animal welfare in these farms, [99 percent of farmed animals in the U.S](http://www.aspca.org/fight-cruelty/farm-animal-cruelty/what-factory-farm). will never get to exhibit their natural behaviors. Pigs love to bathe in the sun, snuffle in the mud, and create complex social relationships, yet in factory farms, they are confined to tiny concrete pens for their entire lives. Chickens love to flap their wings and clean themselves in a dust bath, yet they never leave a cage which is so small, they cannot even stand up straight or extend their wings, ever. Cows are very maternal creatures who enjoy grazing in fields, yet they are also confined to concrete pens where all they can do is sit or stand.

## Adv---Costs

### 1NC---TURN

#### The aff prevents a short-term crisis that causes a transition away from growth, which is unsustainable and otherwise causes extinction

Kirk 18 [Martin, co-founder and Director of Strategy for The Rules, former Head of Campaigns at Oxfam UK and Head of Global Advocacy for Save the Children, citing a study by Rodolfo Dirzo and Paul Ehrlich from the Stanford Woods Institute for the Environment and Gerardo Ceballos of the National Autonomous University of Mexico, “What if economic growth isn’t as positive as you think?,” <https://www.fastcompany.com/90202203/what-if-economic-growth-isnt-as-positive-as-you-think>]

But there are some new strains of thought that take a more nuanced and sophisticated view of growth. That say, yes, all other things being equal, economic growth is a positive thing. But all other things are not equal. There’s no such thing as a free lunch, and, for all its positives, economic growth has a dark side; its ecological impact. The impacts of our ever-growing economy have become so stark and so widespread that they are by any sane measure portents to catastrophe. Whether it’s the fact that Antarctic ice is now melting three times faster than we thought, or the unfolding “biological annihilation” that has already wiped out 50% of all animals and up to 75% of all insects, or the fact that, in spite of all this, we are pumping out CO2 at record levels, it takes willful ignorance or a blinding ideology to deny the severity of the crisis.

This creates a terrible paradox: Economic growth keeps economies stable today, but threatens not just future growth but medium-term social and civilizational cohesion, and ultimately the very capacity of this biosphere to sustain life. A paper published in the Proceedings of the National Academy of Sciences last year suggested that “the window for effective action is very short, probably two or three decades at most.” And that even this dire prediction is considered “conservative” by the authors, “given the increasing trajectories of the drivers of extinction.” In terms of practical politics, that means acting immediately, preferably yesterday.

Most politicians deal with this paradox by ignoring it. It’s by far the easiest option; one afforded every incentive and reward by this political economy and the beliefs that underpin it. This belief system has been dominant for a long time now. We are, as a society, deeply comfortable with it, which means many of its core assumptions are considered unassailable–too obvious to question. The most profound being this idea that growth is always good. Questioning this amounts to political suicide for any politician.

Or, at least, it used to. We are starting to see some movement in interesting corners of the global political landscape that suggest that some leaders are showing the sort of political courage needed to shift established norms. It may well be starting to become something of a bonafide political movement. It’s young and small, still, but so were all movements at one time.

A little thought experiment shows how growth can be a problem: Insert the word “a” before it. “A growth.” That feels very different from just “growth,” right? Growth is a big part of what we all understand happens in a healthy life. Children grow, knowledge grows, love grows. But “a growth” is what happens when life gets corrupted. “A growth” is when the growth is unchecked, and thus a symptom not of health but disease; when it takes on the character of an invader, attacking its host. The word for growth that gets out of control in this way, such that it becomes “a growth,” is, of course, cancer.

But wait, I hear you cry, technological progress will save us! We can just grow meat in test tubes rather than needing so much land and clean air space for cows and their methane-laden farts, or we can all switch to renewable energy, or recycle more and better, and then we can get back to the promise of infinite growth. Unfortunately, the evidence is clear that this is simply not possible. Yes, we can make dents in our impact with such measures, and we should with all possible speed, but the way the global economy is currently programmed means such things are important–but also entirely insufficient.

So, once we discard the vain hope of being able to grow the economy infinitely and indefinitely, what are we looking at? This is where the innovation and bravery come in.

A new alliance was formed in 2017, called the Wellbeing Economy Alliance. What they are shooting for is one–or many different–economic model(s) that have, “the fundamental goal of achieving sustainable well-being with dignity and fairness for humans and the rest of Nature.” Which means they cannot just reach for socialism or any other historical model–socialism, like capitalism, relies on growth, as does communism. They have recognized that we can’t rely on past thinking; we must genuinely put our best brains forward and innovate.

We’re not talking about a bunch of random, dreamy utopians here, but real politicians who have won real elections and are exercising real power. So far, the roster of governments signing up to the Alliance includes Scotland, Costa Rica, Slovenia, and New Zealand. Other governments that are actively looking at the issue include Italy, and there are political parties emerging, like the Alternative Party in Denmark, which is also embracing the innovation challenge. These are not what are often referred to as Tier 1 countries in the international order, but neither are they so small they are irrelevant.

Scotland, for example, provides a direct line into both the U.K. and (at least for the time being) the EU. Costa Rica has long been a pioneer of innovative economic and social thinking, with impressive results: It is routinely in the top three countries in the world when measured for the well-being and happiness of their people. New Zealand is, perhaps, the most newly bold. Its prime minster has not only called growth-at-all-costs capitalism “a “blatant failure” but also has said her government would no longer accept GDP as the sole, supreme measure of progress. “The measures for us have to change,” she said in October last year. “We need to make sure we are looking at people’s ability to actually have a meaningful life, an enjoyable life, where their work is enough to survive and support their families.”

And this is where social and economic forces start to align in very interesting and potentially powerful ways. And open the door for seeing electoral strategies in an agenda based on innovations to take us beyond traditional growth-at-all-costs economics.

Consider a few facts: More than 50% of millennials say they would take a pay cut to find work that matches their values, while 90% want to use their skills for good. And these trends are on the up. Deloitte’s 7th Annual Millennial Survey of 12,000 young people, for example–both millennials and gen Z–reports record low opinions of businesses. Fewer than half now believe that businesses behave ethically, and this directly affects how loyal they feel to their employers; 43% of millennials and a whopping 61% of gen-Zers expect to stay in a job no more than two years. And all this against a backdrop of general public opinion that is also looking increasingly unkindly on the economic paradigm we have.

These are conditions that can be worked with. They show that there is a large and growing instinct out there that thinks that we need fundamental change to the way we do economics. Not tweaking around the edges, but fundamental change at the very roots of the global economy. There is no neat or reliable evidence to suggest that challenging infinite growth is at the top of peoples’ minds, or likely to be a particularly easy sell. But there is significant doubt in growth-at-all-costs capitalism, and that is an opportunity for innovation. Combine that with the new thinking coming out of places like the Wellbeing Alliance, and you can start to sense the causes and conditions may well be aligning in favor of the emergence of wholly new, post-growth economies. It cannot come soon enough.

#### Growth-oriented AI ensures extinction---degrowth solves

Salvador **Pueyo 18**. 8 Department of Evolutionary Biology, Ecology, and Environmental Sciences, Universitat de Barcelona. 10/01/2018. “Growth, Degrowth, and the Challenge of Artificial Superintelligence.” Journal of Cleaner Production, vol. 197, pp. 1731–1736.

The challenges of sustainability and of superintelligence are not independent. The changing 84 fluxes of energy, matter, and information can be interpreted as different faces of a general acceleration2 85 . More directly, it is argued below that superintelligence would deeply affect 86 production technologies and also economic decisions, and could in turn be affected by the 87 socioeconomic and ecological context in which it develops. Along the lines of Pueyo (2014, p. 88 3454), this paper presents an approach that integrates these topics. It employs insights from a 89 variety of sources, such as ecological theory and several schools of economic theory. 90 The next section presents a thought experiment, in which superintelligence emerges after the 91 technical aspects of goal alignment have been resolved, and this occurs specifically in a neoliberal 92 scenario. Neoliberalism is a major force shaping current policies on a global level, which urges 93 governments to assume as their main role the creation and support of capitalist markets, and to 94 avoid interfering in their functioning (Mirowski, 2009). Neoliberal policies stand in sharp contrast 95 to degrowth views: the first are largely rationalized as a way to enhance efficiency and production 96 (Plehwe, 2009), and represent the maximum expression of capitalist values. 97 The thought experiment illustrates how superintelligence perfectly aligned with capitalist 98 markets could have very undesirable consequences for humanity and the whole biosphere. It also 99 suggests that there is little reason to expect that the wealthiest and most powerful people would be 100 exempt from these consequences, which, as argued below, gives reason for hope. Section 3 raises 101 the possibility of a broad social consensus to respond to this challenge along the lines of degrowth, 102 thus tackling major technological, environmental, and social problems simultaneously. The 103 uncertainty involved in these scenarios is vast, but, if a non-negligible probability is assigned to 104 these two futures, little room is left for either complacency or resignation. 105 106 2. Thought experiment: Superintelligence in a neoliberal scenario 107 108 Neoliberalism is creating a very special breeding ground for superintelligence, because it strives 109 to reduce the role of human agency in collective affairs. The neoliberal pioneer Friedrich Hayek 110 argued that the spontaneous order of markets was preferable over conscious plans, because markets, 111 he thought, have more capacity than humans to process information (Mirowski, 2009). Neoliberal 112 policies are actively transferring decisions to markets (Mirowski, 2009), while firms' automated 113 decision systems become an integral part of the market's information processing machinery 114 (Davenport and Harris, 2005). Neoliberal globalization is locking governments in the role of mere 115 players competing in the global market (Swank, 2016). Furthermore, automated governance is a 116 foundational tenet of neoliberal ideology (Plehwe, 2009, p. 23). 117 In the neoliberal scenario, most technological development can be expected to take place either in the context of firms or in support of firms3 118 . A number of institutionalist (Galbraith, 1985), post119 Keynesian (Lavoie, 2014; and references therein) and evolutionary (Metcalfe, 2008) economists 120 concur that, in capitalist markets, firms tend to maximize their growth rates (this principle is related 121 but not identical to the neoclassical assumption that firms maximize profits; Lavoie, 2014). Growth 122 maximization might be interpreted as expressing the goals of people in key positions, but, from an 123 evolutionary perspective, it is thought to result from a mechanism akin to natural selection 124 (Metcalfe, 2008). The first interpretation is insufficient if we accept that: (1) in big corporations, the 125 managerial bureaucracy is a coherent social-psychological system with motives and preferences of 126 its own (Gordon, 1968, p. 639; for an insider view, see Nace, 2005, pp. 1-10), (2) this system is 127 becoming techno-social-psychological with the progressive incorporation of decision-making 128 algorithms and the increasing opacity of such algorithms (Danaher, 2016), and (3) human mentality 129 and goals are partly shaped by firms themselves (Galbraith, 1985). 130 The type of AI best suited to participate in firms' decisions in this context is described in a 131 recent review in Science: AI researchers aim to construct a synthetic homo economicus, the 132 mythical perfectly rational agent of neoclassical economics. We review progress toward creating 133 this new species of machine, machina economicus (Parkes and Wellman, 2015, p. 267; a more 134 orthodox denomination would be Machina oeconomica). 135 Firm growth is thought to rely critically on retained earnings (Galbraith, 1985; Lavoie, 2014, p. 136 134-141). Therefore, economic selection can be generally expected to favor firms in which these are greater. The aggregate retained earnings4 137 RE of all firms in an economy can be expressed as: 138 RE=FE(R,L,K)-w⋅L-(i+δ)⋅K-g. (1) 139 Bold symbols represent vectors (to indicate multidimensionality). F is an aggregate production 140 function, relying on inputs of various types of natural resources R, labor L and capital K (including intelligent machines), and being affected by environmental factors5 141 E; w are wages, i are returns to 142 capital (dividends, interests) paid to households, δ is depreciation and g are the net taxes paid to 143 governments. 144 Increases in retained earnings face constraints, such as trade-offs among different parameters of 145 Eq. 1. The present thought experiment explores the consequences of economic selection in a 146 scenario in which two sets of constraints are nearly absent: sociopolitical constraints on market 147 dynamics are averted by a neoliberal institutional setting, while technical constraints are overcome 148 by asymptotically advanced technology (with extreme AI allowing for extreme technological 149 development also in other fields). The environmental and the social implications are discussed in 150 turn. Note that this scenario is not defined by some contingent choice of AIs' goals by their 151 programmers: The goals of maximizing each firm's growth and retained earnings are assumed to 152 emerge from the collective dynamics of large sets of entities subject to capitalistic rules of 153 interaction and, therefore, to economic selection.

#### Decline doesn’t cause war

Clary 15 – Christopher Clary, PhD in Political Science from MIT, M.A. in National Security Affairs, Postdoctoral Fellow, Watson Institute for International Studies, Brown University, 2015 (“Economic Stress and International Cooperation: Evidence from International Rivalries,” April 25th, Available Online via SSRN Subscription, AIvackovic)

Do economic downturns generate pressure for diversionary conflict?

Or might downturns encourage austerity and economizing behavior in foreign policy? This paper provides new evidence that economic stress is associated with conciliatory policies between strategic rivals. For states that view each other as military threats, the biggest step possible toward bilateral cooperation is to terminate the rivalry by taking political steps to manage the competition. Drawing on data from 109 distinct rival dyads since 19i9 50, 67 of which terminated, the evidence suggests rivalries were approximately twice as likely to terminate during economic downturns than they were during periods of economic normalcy. This is true controlling for all of the main alternative explanations for peaceful relations between foes (democratic status, nuclear weapons possession, capability imbalance, common enemies, and international systemic changes), as well as many other possible confounding variables. This research questions existing theories claiming that economic downturns are associated with diversionary war, and instead argues that in certain circumstances peace may result from economic troubles. I define a rivalry as the perception by national elites of two states that the other state possesses conflicting interests and presents a military threat of sufficient severity that future military conflict is likely. Rivalry termination is the transition from a state of rivalry to one where conflicts of interest are not viewed as being so severe as to provoke interstate conflict and/or where a mutual recognition of the imbalance in military capabilities makes conflict-causing bargaining failures unlikely. In other words, rivalries terminate when the elites assess that the risks of military conflict between rivals has been reduced dramatically. This definition draws on a growing quantitative literature most closely associated with the research programs of William Thompson, J. Joseph Hewitt, and James P. Klein, Gary Goertz, and Paul F. Diehl.1 My definition conforms to that of William Thompson. In work with Karen Rasler, they define rivalries as situations in which “[b]oth actors view each other as a significant political-military threat and, therefore, an enemy.”2 In other work, Thompson writing with Michael Colaresi, explains further: The presumption is that decisionmakers explicitly identify who they think are their foreign enemies. They orient their military preparations and foreign policies toward meeting their threats. They assure their constituents that they will not let their adversaries take advantage. Usually, these activities are done in public. Hence, we should be able to follow the explicit cues in decisionmaker utterances and writings, as well as in the descriptive political histories written about the foreign policies of specific countries.3 Drawing from available records and histories, Thompson and David Dreyer have generated a universe of strategic rivalries from 1494 to 2010 that serves as the basis for this project’s empirical analysis.4 This project measures rivalry termination as occurring on the last year that Thompson and Dreyer record the existence of a rivalry.

Economic crises lead to conciliatory behavior through five primary channels. (1) Economic crises lead to austerity pressures, which in turn incent leaders to search for ways to cut defense expenditures. (2) Economic crises also encourage strategic reassessment, so that leaders can argue to their peers and their publics that defense spending can be arrested without endangering the state. This can lead to threat deflation, where elites attempt to downplay the seriousness of the threat posed by a former rival. (3) If a state faces multiple threats, economic crises provoke elites to consider threat prioritization, a process that is postponed during periods of economic normalcy. (4) Economic crises increase the political and economic benefit from international economic cooperation. Leaders seek foreign aid, enhanced trade, and increased investment from abroad during periods of economic trouble. This search is made easier if tensions are reduced with historic rivals. (5) Finally, during crises, elites are more prone to select leaders who are perceived as capable of resolving economic difficulties, permitting the emergence of leaders who hold heterodox foreign policy views. Collectively, these mechanisms make it much more likely that a leader will prefer conciliatory policies compared to during periods of economic normalcy. This section reviews this causal logic in greater detail, while also providing historical examples that these mechanisms recur in practice.

### 1NC---AT: Inequality

#### Inequality doesn’t cause diversionary war

Gal Ariely 15, senior lecturer in the Department of Politics & Government, Ben-Gurion University of the Negev, PhD from the University of Haifa’s School of Political Sciences, “Does National Identification Always Lead to Chauvinism? A Cross-national Analysis of Contextual Explanations,” Globalizations, 2015, https://s3.amazonaws.com/academia.edu.documents/43980028/Ariely\_Globalizations\_2015.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1515397197&Signature=78lnbbHNRVjhLgOKyRPKm%2BK8M1o%3D&response-content-disposition=inline%3B%20filename%3DDoes\_National\_Identification\_Always\_Lead.pdf

With respect to internal explanations, the effects of income inequality and ethnic diversity are presented in Table 3. Models 3.1 and 3.2 indicate that neither directly affects chauvinism. H4 is therefore not supported. The results suggest, however, that both have a negative effect on the national-identification slopes. Contrary to our expectations, countries with higher levels of economic and ethnic division appear to exhibit a weaker relation between national identification and chauvinism. While these findings might seem to contradict H5, the pattern was caused by outliers. After excluding South Africa—the most unequal and ethnic diverse country in our sample—the effect of ethnic diversity is not even of borderline significance. After excluding Chile—the most unequal country in our sample—the interaction effects for economic inequality were also far from significant. The results, therefore, do not support H5.21¶ Conclusions¶ During the historic phone call between President Obama and Iranian President Sheikh Hasan Rouhani in September 2013, the latter stated that his country’s nuclear program ‘represents Iran’s national dignity’.22 This declaration reflects the common perception that Iran’s nuclear program mobilizes Iranians in support of resisting further national humiliation at the hands of foreigners (Moshirzadeh, 2007). This reflects the important role national feelings play in the contemporary international arena. Evidence from other examples—such as the Israeli-Palestine conflict—indicates that national identity serves as a key factor in conflict resolution. The prominence of national feelings is not limited to the Middle East, their effect on public attitudes towards international issues, and conflicts also being manifest in the West (Billig, 1995; Kinder & Kam, 2010).¶ It is thus hardly surprising that scholars seeking to develop a better understanding of conflicts adopt a social-psychology perspective, replacing the deterministic view that identification with one’s in-group necessarily leads to antagonism towards out-groups with an examination of the broader social context. In line with this approach, the present paper focuses on the way in which political and social contexts encourage chauvinistic views towards the international arena and how they affect the relation between national identification and chauvinism.¶ Integrating various social and psychological theories, we investigated two external contextual explanations (globalization and conflict) and an internal explanation (social division). Employing cross-national survey data, we examined the relation between national identification and chauvinism across 33 countries. The findings indicate that a positive relationship exists between national identification and chauvinism across most of the countries, although the level differs from country to country. Using a multilevel regression analysis, we tested to see whether globalization, conflict, and social division correlate with this variation. The results indicate that social and political contexts are related to chauvinism and the ways national identifi- cation and chauvinism are linked. Although a closer relation exists between national identification and chauvinism in more globalized countries, globalization failed to explain the variation in chauvinism itself. These findings support the notion that globalization highlights the importance of national identity (Calhoun, 2007; Castells, 2011). While those sections of globalized societies that are attached to their country also tend to resist international cooperation and endorse hostile views, the complexity of the phenomenon—as evinced by the divergent findings of previous studies (e.g. Jung, 2008; Norris & Inglehart, 2009)—calls for further research of this interpretation. The fact that the current study is cross-sectional must also be taken into account, the findings adducing the relation but not the causal relations between the variables. In contrast to experimental studies, the present design is similarly limited in its ability to offer a robust control for alternative explanations.¶ Another external factor found to be relevant—to a certain degree—was conflict. Countries that suffered large numbers of deaths in conflicts and mobilized resources and personnel exhibited higher levels of chauvinism. When other indices for conflict were used, however, these results were not replicated. A possible explanation for this finding lies in the inherent limitation in the way in which conflicts are measured across various countries. Measuring international conflicts is a challenging task (Anderton & Carter, 2011). While the ways of measuring conflict were chosen because they reflect different dimensions of conflict in order to be representative of a wide range of countries, the problem of comparability cannot be ignored. An alternative explanation may derive from the fact that only deaths from conflict and resources/personnel mobilization are sufficiently significant to contribute to chauvinism. The limitations of our measurements of conflict and research design mean that this idea must remain speculative, however. In addition, it is important to emphasize that the sample of countries is also limited as many countries are not involved in conflict and there is also limited variation in the types of conflicts.¶ Contrary to what the divisionary theory of national mobilization would lead us to expect, neither economic inequality nor ethnic diversity were related to chauvinism or affected the relation between national identification and chauvinism. This finding might also be explained by the limitation of the current research design. The number of countries included in the ISSP 2003 National Identity Module being relatively small and the sample only covering countries with available survey data, the results relate solely to this specific sample of countries. Across another set of countries, social division might play a far more significant role. Another explanation might be the meaning given to national identification and chauvinism across the countries. While evidence exists for the comparability of the scales across most of the countries, the divergent meaning probably attributed to them in Germany, the United States, and Israel might form an additional limitation.

## Adv---FTC

### 1NC---AT: Solvency

#### Vote neg on presumption:

#### zeno’s paradox

SEP 19 (Stanford Encyclopedia of Philosophy, <https://plato.stanford.edu/cgi-bin/encyclopedia/archinfo.cgi?entry=paradox-zeno>, EM)

The first asserts the non-existence of motion on the ground that that which is in locomotion must arrive at the half-way stage before it arrives at the goal. (Aristotle Physics, 239b11) This paradox is known as the ‘dichotomy’ because it involves repeated division into two (like the second paradox of plurality). Like the other paradoxes of motion we have it from Aristotle, who sought to refute it. Suppose a very fast runner—such as mythical Atalanta—needs to run for the bus. Clearly before she reaches the bus stop she must run half-way, as Aristotle says. There’s no problem there; supposing a constant motion it will take her 1/2 the time to run half-way there and 1/2 the time to run the rest of the way. Now she must also run half-way to the half-way point—i.e., a 1/4 of the total distance—before she reaches the half-way point, but again she is left with a finite number of finite lengths to run, and plenty of time to do it. And before she reaches 1/4 of the way she must reach 1/21/2 of 1/4=1/81/4=1/8 of the way; and before that a 1/16; and so on. There is no problem at any finite point in this series, but what if the halving is carried out infinitely many times? The resulting series contains no first distance to run, for any possible first distance could be divided in half, and hence would not be first after all. However it does contain a final distance, namely 1/2 of the way; and a penultimate distance, 1/4 of the way; and a third to last distance, 1/8 of the way; and so on. Thus the series of distances that Atalanta is required to run is: …, then 1/16 of the way, then 1/8 of the way, then 1/4 of the way, and finally 1/2 of the way (for now we are not suggesting that she stops at the end of each segment and then starts running at the beginning of the next—we are thinking of her continuous run being composed of such parts). And now there is a problem, for this description of her run has her travelling an infinite number of finite distances, which, Zeno would have us conclude, must take an infinite time, which is to say it is never completed. And since the argument does not depend on the distance or who or what the mover is, it follows that no finite distance can ever be traveled, which is to say that all motion is impossible. (Note that the paradox could easily be generated in the other direction so that Atalanta must first run half way, then half the remaining way, then half of that and so on, so that she must run the following endless sequence of fractions of the total distance: 1/2, then 1/4, then 1/8, then ….) A couple of common responses are not adequate. One might—as Simplicius ((a) On Aristotle’s Physics, 1012.22) tells us Diogenes the Cynic did by silently standing and walking—point out that it is a matter of the most common experience that things in fact do move, and that we know very well that Atalanta would have no trouble reaching her bus stop. But this would not impress Zeno, who, as a paid up Parmenidean, held that many things are not as they appear: it may appear that Diogenes is walking or that Atalanta is running, but appearances can be deceptive and surely we have a logical proof that they are in fact not moving at all. Alternatively if one doesn’t accept that Zeno has given a proof that motion is illusory—as we hopefully do not—one then owes an account of what is wrong with his argument: he has given reasons why motion is impossible, and so an adequate response must show why those reasons are not sufficient. And it won’t do simply to point out that there are some ways of cutting up Atalanta’s run—into just two halves, say—in which there is no problem. For if you accept all of the steps in Zeno’s argument then you must accept his conclusion (assuming that he has reasoned in a logically deductive way): it’s not enough to show an unproblematic division, you must also show why the given division is unproblematic.

#### anti-induction

SEP 19 (Stanford Encyclopedia of Philosophy, https://plato.stanford.edu/entries/induction-problem/, EM)

Hume asks on what grounds we come to our beliefs about the unobserved on the basis of inductive inferences. He presents an argument in the form of a dilemma which appears to rule out the possibility of any reasoning from the premises to the conclusion of an inductive inference. There are, he says, two possible types of arguments, “demonstrative” and “probable”, but neither will serve. A demonstrative argument produces the wrong kind of conclusion, and a probable argument would be circular. Therefore, for Hume, the problem remains of how to explain why we form any conclusions that go beyond the past instances of which we have had experience (T. 1.3.6.10). Hume stresses that he is not disputing that we do draw such inferences. The challenge, as he sees it, is to understand the “foundation” of the inference—the “logic” or “process of argument” that it is based upon (E. 4.2.21). The problem of meeting this challenge, while evading Hume’s argument against the possibility of doing so, has become known as “the problem of induction”. Hume’s argument is one of the most famous in philosophy. A number of philosophers have attempted solutions to the problem, but a significant number have embraced his conclusion that it is insoluble. There is also a wide spectrum of opinion on the significance of the problem. Some have argued that Hume’s argument does not establish any far-reaching skeptical conclusion, either because it was never intended to, or because the argument is in some way misformulated. Yet many have regarded it as one of the most profound philosophical challenges imaginable since it seems to call into question the justification of one of the most fundamental ways in which we form knowledge. Bertrand Russell, for example, expressed the view that if Hume’s problem cannot be solved, “there is no intellectual difference between sanity and insanity”

#### many worlds

Powell 19 (Corey, <https://www.nbcnews.com/mach/science/weirdest-idea-quantum-physics-catching-there-may-be-endless-worlds-ncna1068706>, EM)

Ever wonder what would have happened if you'd taken up the "Hey, let's get coffee" offer from that cool classmate you once had? If you believe some of today’s top physicists, such questions are more than idle what-ifs. Maybe a version of you in another world did go on that date, and is now celebrating your 10th wedding anniversary. The idea that there are multiple versions of you, existing across worlds too numerous to count, is a long way from our intuitive experience. It sure looks and feels like each of us is just one person living just one life, waking up every day in the same, one-and-only world. But according to an increasingly popular analysis of quantum mechanics known as the “[many worlds interpretation](https://urldefense.com/v3/__https:/plato.stanford.edu/entries/qm-manyworlds/__;!c3kmrbLBmhXtig!7R0VCJPvzByJzznSQY7gFCLBlF85Vk5M6Uf3Tzv-_wJEZSNqbcef1oQ63GS63sFafj4$),” every fundamental event that has multiple possible outcomes — whether it’s a particle of light hitting Mars or a molecule in the flame bouncing off your teapot — splits the world into alternate realities. Even to seasoned scientists, it’s odd to think that the universe splits apart depending on whether a molecule bounces this way or that way. It’s odder still to realize that a similar splitting could occur for every interaction taking place in the [quantum world](https://www.nbcnews.com/mach/science/google-claims-quantum-computing-breakthrough-ibm-pushes-back-ncna1070461). Things get downright bizarre when you realize that all those subatomic splits would also apply to bigger things, including ourselves. Maybe there’s a world in which a version of you split off and bought a winning lottery ticket. Or maybe in another, you tripped at the top of a cliff and fell to your death — oops. “It's absolutely possible that there are multiple worlds where you made different decisions. We're just obeying the laws of physics,” says Sean Carroll, a theoretical physicist at the California Institute of Technology and the author of a new book on many worlds titled "Something Deeply Hidden." Just how many versions of you might there be? “We don't know whether the number of worlds is finite or infinite, but it's certainly a very large number," Carroll says. "There’s no way it’s, like, five.” Carroll is aware that the many worlds interpretation sounds like something plucked from a science fiction movie. (It doesn’t help that he was an adviser on "Avengers: Endgame.") And like a Hollywood blockbuster, the many worlds interpretation attracts both passionate fans and scathing critics. Renowned theorist Roger Penrose of Oxford University dismisses the idea as “reductio ad absurdum”: physics reduced to absurdity. On the other hand, Penrose’s former collaborator, the late Stephen Hawking, [described](https://books.google.com/books?id=qjYbQ7EBAKwC&pg=PA345&lpg=PA345&dq=%22self-evidently+correct%22+hawking+many+worlds&source=bl&ots=F9WTAkliQA&sig=ACfU3U26vRO7r38BkcZbgTvWnMf0yN05hQ&hl=en&sa=X&ved=2ahUKEwjquoTgkK3lAhVhkeAKHZFJDZsQ6AEwCnoECAcQAQ#v=) the many worlds interpretation as “self-evidently true.” Carroll himself is comfortable with the idea that he’s but one of many Sean Carrolls running around in alternate versions of reality. “The concept of a single person extending from birth to death was always just a useful approximation,” he writes in his new book, and to him the many worlds interpretation merely extends that idea: “The world duplicates, and everything within the world goes along with it.” The mind-bending saga of the many worlds interpretation began in 1926, when Austrian physicist Erwin Schrödinger [mathematically demonstrated](https://plus.maths.org/content/schrodinger-1) that the subatomic world is fundamentally blurry. In the familiar, human-scale reality, an object exists in one well-defined place: Place your phone on your bedside table, and that’s the only spot it can be, whether or not you're looking for it. But in the quantum realm, objects exist in a smudge of probability, snapping into focus only when observed. “Before you look at an object, whether it's an electron, or an atom or whatever, it's not in any definite location,” Carroll says. “It might be more likely that you observe it in one place or another, but it's not actually located at any particular place.” Nearly a century of experimentation has confirmed that, strange as it seems, this phenomenon is a core aspect of the physical world. Even Einstein struggled with the notion: What happened to all of the other possible locations where the object could have been, and all the other different outcomes that could have ensued? Why should an object’s behavior depend on whether or not somebody was looking at it? In 1957, a Princeton student named [Hugh Everett III](https://space.mit.edu/home/tegmark/everett/everett.html) came up with a radical explanation. He proposed that all possible outcomes really do occur — but that only a single version plays out in the world we inhabit. All the other possibilities split off from us, each giving rise to its own separate world. Nothing ever goes to waste, in this view, since everything that can happen does happen in some world.

#### agrippa’s trilemma

SEP 19 (Stanford Encyclopedia of Philosophy, <https://plato.stanford.edu/entries/skepticism/#PyrrSkep>, EM)

Agrippa’s trilemma, then, can be presented thus:

If a belief is justified, then it is either a basic justified belief or an inferentially justified belief.

There are no basic justified beliefs.

Therefore, If a belief is justified, then it is justified in virtue of belonging to an inferential chain.

All inferential chains are such that either (a) they contain an infinite number of beliefs; or (b) they contain circles; or (c) they contain beliefs that are not justified.

No belief is justified in virtue of belonging to an infinite inferential chain.

No belief is justified in virtue of belonging to a circular inferential chain.

No belief is justified in virtue of belonging to an inferential chain that contains unjustified beliefs.

Therefore, There are no justified beliefs.

#### cartesian skepticism

DPM 4 (Dictionary of Philosophy of Mind, <https://sites.google.com/site/minddict/cartesian-skepticism#:~:text=Cartesian%20skepticism-,Cartesian%20skepticism,demons%2C%20or%20brains%20in%20vats>, EM)  
The gist of Cartesian-style skeptical arguments is that some empirical proposition (e.g. that there are trees) cannot be known because we might be deceived (e.g. we might be brains in vats hallucinating that there are trees). Related forms of these arguments attack our justification for believing some empirical proposition on grounds of possible deception. These 'justification' versions undermine claims to knowledge insofar as justification is a necessary condition on knowledge. The arguments I examine below are all of the 'knowledge' variety, but they can easily be transformed into arguments of the 'justification' variety by simply replacing all occurrences of 'knowledge' with 'justification'.

### 1NC---Alt Cause

#### Losing cases is an alt cause.

Marianela 1AC Lopez-Galdos 21. Global Competition Counsel at the Computer& Communications Industry Association, previously served as Director of Competition & Regulatory Policy, and is a professor at George Washington University Competition Law Center and at the University of Melbourne Law School. “Policy Decisions of Antitrust Institutions Series: The Future of the FTC and Its Perils”. Disruptive Competition Project. https://www.project-disco.org/competition/072821-policy-decisions-of-antitrust-institutions-series-the-future-of-the-ftc-and-its-perils/

But the current FTC leadership seems to have overlooked the agency’s history. As such, it has already promised to produce different policy outcomes and noted that the Section 5 Policy Guidelines were shortsighted. As a result, the current FTC has decided, with the support of the other two Democratic Commissioners, to rescind the Policy Guidelines.

It is unknown whether the current FTC will try to adopt different guidelines or whether it will start opening more cases under Section 5 of the FTC Act. Furthermore, it is less clear whether the new FTC leadership currently counts with the sufficient and aligned Neo-Brandeisian human talent to bring solid cases that are not based on the consumer welfare standard or to litigate before judges that support the Neo-Brandeisian vision of antitrust.

What seems clear is that the new agency’s leader might find it hard to bring all Commissioners to an agreement with respect to what the agency can do with Section 5 of the FTC Act, and this situation, in and of itself, puts the agency in peril.

The FTC’s Rulemaking Authority

Another important policy change that may be detrimental to the FTC is its expressed willingness to expand the agency’s rulemaking authority under, e.g., Section 18 of the FTC Act. It is well known that in addition to its authority to investigate law violations by individuals and businesses, the FTC also has federal rulemaking authority to issue industry-wide regulations.

However, the agency’s rulemaking authority has been self-limited since the 80s in an effort to ensure the institution doesn’t overuse its capacity to adopt industry-wide regulations and raise concerns with those policy makers that are against the legislature deferring its core mandate to an independent agency that doesn’t represent the people.

Traditionally the legislature has the constitutional mandate to create laws affecting different sectors of the economy. Whereas it is legally accepted to design independent agencies with constrained mandates to adopt regulations, such powers are not necessarily understood to construe independent agencies as substitutes for the legislature’s powers. It is a basic tenet of administrative law, that agencies are constrained by the enabling statute that gives them authority to promulgate regulations in the first place.

Against this background, it seems risky for the new leadership to engage in broad rulemaking endeavors that might raise concerns from an institution legitimacy perspective. In the long term, it is predictable that many policymakers might not be supportive of an agency that implements its rulemaking authority in its broadest sense. As a result, some degree of political backlash against the agency might not help the agency’s lifecycle, especially if the agency is not granted with specific legislative guidance in the form of new legislation.

The Future of the FTC

One of the most challenging matters to tackle when it comes to leadership of antitrust authorities, or administrative agency for that matter, is legacy and the impact for the future of the agency. To put it simply, while antitrust leaders leave agencies, the side effects of leadership’s successes and failures condition the future of the agencies. Their leadership has consequences and sets precedent which will bind the agency well into the future.

Under the current political context, it would not be surprising if the current Neo-Brandeisian FTC enjoyed political support and success with its decision to bring big cases, especially against leading tech companies. In the short term, if the FTC makes headlines for opening cases against “Big Tech”, policymakers pushing for antitrust reforms will surely applaud the new changes as they would reflect a commitment to enhanced enforcement outcomes notwithstanding the strength of the cases.

However, in the mid-and long-term, if the FTC loses the big cases, the commitment to policy outcomes won’t be met. And then, it is unlikely that the question would be whether the antitrust norms are fit for today’s economy, but rather if the agency is capable of executing its mandate effectively. The recent decision in the FTC v. Facebook case is a good example of this paradigm, where the Judge expressed that the FTC had not carried out a sufficiently robust analysis supported by evidence, and therefore dismissed the case.

Eventually, the agency’s short-term reputational gains could quickly turn into a debacle for the institution itself with the caveat that by then, most probably, Neo-Brandeisian leadership will be long gone. Unfortunately then, the U.S. antitrust system — which is the only one to keep two federal antitrust agencies, bringing about positive outcomes for consumers — might be at risk. Political support to merge these two institutions could gain even more support, as has happened in the past, to the detriment of consumers.

### 1NC---AT: Scamming

#### No scammers impact.

Pinker 18 Steven Arthur Pinker is a Canadian-American cognitive psychologist, Professor at Harvard University. [Enlightenment Now: The Case for Reason, Science, Humanism, and Progress, Viking, Penguin Group]

Serious threats to the integrity of a country’s infrastructure are likely to require the resources of a state. 50 Software hacking is not enough; the hacker needs detailed knowledge about the physical construction of the systems he hopes to sabotage. When the Iranian nuclear centrifuges were compromised in 2010 by the Stuxnet worm, it required a coordinated effort by two technologically sophisticated nations, the United States and Israel. State-based cyber-sabotage escalates the malevolence from terrorism to a kind of warfare, where the constraints of international relations, such as norms, treaties, sanctions, retaliation, and military deterrence, inhibit aggressive attacks, as they do in conventional “kinetic” warfare. As we saw in chapter 11, these constraints have become increasingly effective at preventing interstate war. Nonetheless, American military officials have warned of a “digital Pearl Harbor” and a “Cyber-Armageddon” in which foreign states or sophisticated terrorist organizations would hack into American sites to crash planes, open floodgates, melt down nuclear power plants, black out power grids, and take down the financial system. Most cybersecurity experts consider the threats to be inflated—a pretext for more military funding, power, and restrictions on Internet privacy and freedom.51 The reality is that so far, not a single person has ever been injured by a cyberattack. The strikes have mostly been nuisances such as doxing, namely leaking confidential documents or e-mail (as in the Russian meddling in the 2016 American election), and distributed denial-of-service attacks, where a botnet (an array of hacked computers) floods a site with traffic. Schneier explains, “A real-world comparison might be if an army invaded a country, then all got in line in front of people at the Department of Motor Vehicles so they couldn’t renew their licenses. If that’s what war looks like in the 21st century, we have little to fear.”52

### 1NC---AT: Terror

#### Terrorism are incompetent misfits.

Walt 16 – Stephen M. Walt, international relations professor at Harvard University. [My Top 5 Foreign-Policy Unicorns — and Why I Want to Kill Them, 9-8-2016, https://foreignpolicy.com/2016/09/08/my-top-5-foreign-policy-unicorns-and-why-i-want-to-kill-them/]

3. The terrorist mastermind. A close cousin to the nuclear rogue is the terrorist mastermind, busily concocting elaborate and highly destructive plots to bring the world to its knees. People like Osama bin Laden and Islamic State leader Abu Bakr al-Baghdadi have made extravagant and dire threats, but the good news is that they’ve never come close to toppling a foreign government, winning millions of followers, or threatening our way of life. I don’t deny that some terrorist groups have devised and executed successful assaults — of which the 9/11 attacks were by far the most damaging — but a word like “mastermind” conjures up images of Dr. Evil-style villains who will inevitably outwit our feeble efforts to stop them and unleash fearsome destruction on an innocent world. In fact, as John Mueller and others keep reminding us, the vast majority of contemporary terrorists are incompetent misfits, and even the very best of them fall well short of evil genius. They can and do stage small-scale attacks that cause modest amounts of harm, but they have repeatedly shown themselves to be incapable of orchestrating complicated operations that could actually bring a stable country to its knees. There have been serious terrorist attacks in Boston; London; Paris; Brussels; Orlando, Florida; and several other places in recent years, for example — yet in each case, these societies proved resilient, and they are thriving again today. Or just look at New York City, which suffered the worst single attack ever and has since fully recovered. Terrorism is a problem, the lives lost to it are an unfortunate tragedy, and those who employ it are dangerous criminals. A few terrorists are moderately clever; most are not. None rises to the level of a “mastermind,” and none poses an existential threat. Reporters, pundits, and speechwriters should drop this term from their lexicon, because this particular animal doesn’t exist. Fortunately.

# 2NC

## Adv---Inequality

### 2NC---M---AI

#### Outweighs on probability

**Turchin & Denkenberger ‘18** (Alexey Turchin & David Denkenberger 18. Turchin is a researcher at the Science for Life Extension Foundation; Denkenberger is with the Global Catastrophic Risk Institute (GCRI) @ Tennessee State University, Alliance to Feed the Earth in Disasters (ALLFED). 05/03/2018. “Classification of Global Catastrophic Risks Connected with Artificial Intelligence.” AI & SOCIETY, pp. 1–17.)(Shiv)

According to Yampolskiy and Spellchecker (2016), the probability and seriousness of AI failures will increase with time. We estimate that they will reach their peak between the appearance of the first self-improving AI and the moment that an AI or group of AIs reach global power, and will later diminish, as late-stage AI halting seems to be a low-probability event. AI is an extremely powerful and completely unpredictable technology, millions of times more powerful than nuclear weapons. Its existence could create multiple individual global risks, most of which we can not currently imagine. We present several dozen separate global risk scenarios connected with AI in this article, but it is likely that some of the most serious are not included. The sheer number of possible failure modes suggests that there are more to come.

#### And magnitude

Milan M. **Ćirković 19**. Future of Humanity Institute, Faculty of Philosophy, University of Oxford. 01/01/2019. “Space Colonization Remains the Only Long-Term Option for Humanity: A Reply to Torres.” Futures, vol. 105, pp. 166–173.

Perhaps a skeptic wants to believe (as a kind of anti-agent Moulder, of the X-Files’ fame) that extraterrestrial intelligence is nonexistent or vanishingly rare? To begin with, it would be strange to bet the long-term future of humanity on such a technical astrobiological issue, on which we can exert no influence whatsoever. Extraterrestrial life either exists or it does not, irrespectively of any amount of our ethical or political hand-wringing. So, lacking specific information for one or the other, we should certainly make strategies for both options. Further, the advances of astrobiology over the last quarter century offer many reasons for cautious belief in the conclusion that life and intelligence are reasonably abundant in astrophysically and astrochemically permissible ecosystems. Some of the arguments to that effect are summarized in Ćirković (2012).11 Even if, by some quirk of astrobiological evolution, humanity is the first intelligent species to arise in the Milky Way (as, for instance, per the well-known argument of Carter, 1983, 2008), following Torres’s advice and relinquishing space colonization will simply ensure that the second, third, or 275th intelligent species to evolve will indeed colonize the Galaxy instead of humans. If, on the other hand, Torres is wrong and it is possible to colonize the Galaxy in a peaceful and prosperous manner, humanity might survive on Earth in a kind of zoo or preserve, surrounded by friendly and considerate interstellar aliens – but obviously failing to realize its creative potential (which would also count as an existential catastrophe in Bostrom’s taxonomy).12 There is simply no way out of that quandary, unless one is a creationist who believes that humanity originated by Divine supernatural act and there is exactly zero probability of abiogenesis/noogenesis occurring elsewhere. In general, no naturalistic utilitarian calculus of various scenarios for the future of humanity could be complete if it does not take extraterrestrial intelligence into account.

#### Unethical AI development causes mindcrime---outweighs extinction

Nick **Bostrom 14**. Director, Future of Humanity Institute, Professor, Faculty of Philosophy & Oxford Martin School, University of Oxford. 2014. Superintelligence: Paths, Dangers, Strategies. 1st Edition, Oxford University Press.

Mind crime Another failure mode for a project, especially a project whose interests incorporate moral considerations, is what we might refer to as mind crime. This is similar to infrastructure profusion in that it concerns a potential side effect of actions undertaken by the AI for instrumental reasons. But in mind crime, the side effect is not external to the AI; rather, it concerns what happens within the AI itself (or within the computational processes it generates). This failure mode deserves its own designation because it is easy to overlook yet potentially deeply problematic. Normally, we do not regard what is going on inside a computer as having any moral significance except insofar as it affects things outside. But a machine superintelligence could create internal processes that have moral status. For example, a very detailed simulation of some actual or hypothetical human mind might be conscious and in many ways comparable to an emulation. One can imagine scenarios in which an AI creates trillions of such conscious simulations, perhaps in order to improve its understanding of human psychology and sociology. These simulations might be placed in simulated environments and subjected to various stimuli, and their reactions studied. Once their informational usefulness has been exhausted, they might be destroyed (much as lab rats are routinely sacrificed by human scientists at the end of an experiment). If such practices were applied to beings that have high moral status—such as simulated humans or many other types of sentient mind—the outcome might be equivalent to genocide and thus extremely morally problematic. The number of victims, moreover, might be orders of magnitude larger than in any genocide in history.

#### It’s the biggest possible impact

Turchin 17 Mini map of s-risks by [**turchin**](https://www.lesswrong.com/users/turchin)8th Jul 2017 https://www.lesswrong.com/posts/Ns2J5xxzqhMnAE7CC/mini-map-of-s-risks

*Types of most intensive sufferings:*

Qualia based, listed from bad to worse:

1. **Eternal**, but bearable in each moment suffering (Anhedonia)

2. **Unbearable sufferings** - sufferings, to which death is the preferable outcome (cancer, death in fire, death by hanging). However, as said Mark Aurelius: “Unbearable pain kills. If it not kills, it is bearable"

3. **Infinite suffering - qualia of the infinite pain**, so the duration doesn’t matter (not known if it exists)

4. **Infinitely growing eternal sufferings**, created by constant upgrade of the suffering’s subject (hypothetical type of sufferings created by malevolent superintelligence)

### 2NC---T/C---Populism

#### Growth locks in cycles of populism

Saad-Filho 16 (Alfredo, Professor of Political Economy in the Department of Development Studies, SOAS, University of London, “The end of the road? The global crisis and the disintegration of neoliberalism”, 6 December 2016, https://www.opendemocracy.net/alfredo-saad-filho/end-of-road-global-crisis-and-disintegration-of-neoliberalism)

A jammed political system The political project of neoliberalism includes an atrophied form of democracy designed to shield economic reproduction from political ‘interference’, and where popular participation is limited to choosing between shades of neoliberalism in a tightly regulated political market policed by a vitriolic right-wing media. Meanwhile, the substantive choices about social provision, the structure of employment and the distribution of income are made elsewhere. Neoliberalism has eroded social and economic structures in most countries; it has also imposed an almost impermeable membrane between political power and the economic domain. This has drastically reduced the capacity of peoples and institutions to resist and even to conceptualise alternatives. Under neoliberalism, ‘there is no alternative’ tends to become a self-fulfilling reality, even when neoliberalism is patently destructive, floundering, or failing. The isolation between a disabled politics and a dysfunctional economy derives, in part, from the material structures of neoliberalism. For example, the transnational integration of production and finance creates the need for international policy harmony through negotiation, regulation, conditionalities and competition between countries. Inevitably, they reduce the scope for national diversity and erode the established modalities of social reproduction. At a further remove, neoliberalism embeds the logic of finance into the country’s institutional fabric, as it imposes specific modalities of discipline on key social agents, with the workers at the forefront, but also upon capital, the state and finance itself. These are accompanied by a growing intolerance to all forms of dissent, from collective action to individual privacy. Finally, neoliberal democracy tends to splinter the political sphere between a myriad of competing parties, movements and NGOs with intransigently narrow horizons and lacking the vision, means and ambition to transform society. Their conflicting agendas ensure a permanent political paralysis that can be handled only by painful negotiations that, ultimately, secure the hegemony of conservative interests. Neoliberal democracy has spawned political deadlock, the disintegration of established forms of representation, and a generalised sense of alienation. Many neoliberal democracies are now engulfed in turmoil. In the Eurozone periphery, elected governments were replaced by so-called non-party technocrats ordered to implement, with greater energy, perverse strategies to address the economic crisis (Greece, Italy). Later, elected administrations advocating unconventional strategies were crushed (Greece). A dour conformity reigns among near-stagnant economies. Then the crisis of neoliberal politics reached the global periphery. There, authoritarian governments have been installed by different means, including more or less honest elections (Argentina, Hungary, India, Poland), judicial-parliamentary coups (Brazil, Honduras, Paraguay), the abuse of constitutional prerogatives (Turkey), and military coups (Egypt, Thailand). The malaise eventually reached the ‘core’ countries. A hard-right Trump administration was elected in the USA despite the ‘superior experience’ of Wall Street vassal Hillary Clinton. Japan drifts almost relentlessly towards ultra-nationalism; Brexit won the popular vote in the UK, despite ample disagreement about what the vote was for. In France, Marine Le Pen flutters above the Élysée while a harsh national security state trumps Liberté (Égalité lies in the dustbin, while Fraternité drowned long ago). Nativist populism thrives in Austria, Switzerland and Scandinavia and, in the eastern periphery of the EU, tinpot far-right politicians lead rudderless societies against enemies weaker than themselves: waves of dark-skinned refugees fleeing worse realities further south. The lumpenisation of neoliberal politics and the rise of nationalist authoritarianism The rise of nationalist authoritarianism is not a transient wobble on the march of neoliberal democracy towards the ‘end of history’. Quite the contrary: it is the incubus springing from the lumpenisation of neoliberal economies and societies through several rounds of restructuring under the guise of ‘adjustment’, inflation control and the pursuit of ‘competitiveness’, culminating in the ‘new normal’ of long-term economic stagnation punctuated by crises. In doing this, neoliberal restructuring has also begotten the lumpenisation of politics. As neoliberalism hollowed out economies it also eroded the social structures in most countries, with labour at the centre, creating a large and heterogeneous array of ‘losers’. The condition of labour has deteriorated for the informal workers, the traditional middle classes, and almost everyone else. Millions of skilled jobs have disappeared, and entire professions have either vanished or were exported to cheaper shores. Employment opportunities in the public sector shrunk, job stability retreated, and pay and conditions worsened everywhere. Hundreds of millions of people worldwide have been deskilled and, effectively, drowned into what Karl Marx described as the lumpenproletariat and the reserve army of labour. The ‘losers’ include informal workers with no realistic prospect of stable employment, underemployed skilled workers, employees fearing the disappearance of their jobs, indebted small business owners, bankrupt small farmers, endangered middle managers, threatened small business owners, anxious civil servants, panicky pensioners, and the remnants of erstwhile privileged social strata bewailing their mounting debts and inability to bequeath better circumstances to their offspring. These ‘losers’ lack a common culture or a sense of collectivity drawing upon shared material circumstances; they also distrust political systems that seem to bypass them. Heterogeneous, divided and disorganised, they are unable to resist the continuing rollout of ‘reforms’. Worse: just as the lumpenproletariat is highly vulnerable to political capture by the élite, the losers in lumpenised neoliberal societies are prone to capture by the political right. Under neoliberalism, left parties, trade unions and mass organisations have imploded because of social and economic change as well as repression. The entire political spectrum has shifted to the right, and the blockage of collective forms of dissent has fed political apathy, anomie, and the sense that politicians are there only for the taking. The ‘losers’ tend to perceive the evacuation of democracy through the lens of corruption and capture, in contrast to the sepia-tinted ‘good old days’ of economic certainty and (limited) privileges, including jobs for life, law and order, monochrome neighbours and obedient wives. They tend to see today’s political systems as serving primarily the rich (bankers, tax dodgers, self-perpetuating political élites, foreign tycoons), so-called ‘privileged minorities’ (constructed to mean women, selected ethnic or national groups, or supposed sexual ‘deviants’), and alien hordes. Annoyingly, all of them seem to draw state support, while the morally upright ‘losers’ find it impossible to make ends meet. Perhaps even worse than these economic hardships is the erosion of their proud, even if not elevated, social standing: it is difficult to understand what has hit them, and why. These woes lead lumpenised groups of ‘losers’ to project their hopes and fears onto a universalist (classless) ethics and reactionary political programmes drawing upon ‘common sense’. These tend to be framed through the language of rights, respect, taking back control, and the preservation of ancient privileges, and fronted by ‘strong’ leaders who can ‘get things done’. These choices reflect the desperate search for a way to short-circuit a logjammed political system and secure gains to those who have grown tired of losing out, and lack a sense of security grounded on income, assets, merit, citizenship, or anything else. Those agendas also express their revulsion at slick politicians delivering, time and again, convoluted excuses for inaction while the living conditions of the majority continue to deteriorate. The implosion of post-war social democracy can be directly related to these neoliberal pressures. Mainstream conservative parties have shown greater resilience, both because of their closer identification with neoliberal ideology and policy practice, and because the right is used to deploying misleading or unrealistic programmes and nationalist slogans. They are well positioned to offer disgruntled voters a random menu of desirables, regardless of contradiction even with neoliberalism itself. Those programmes tend to be naïve, exclusionary, divisive, xenophobic, racist and morally conservative. Yet, even those parties have been triangulating towards an increasingly strident nationalism. Down their necks breathes a new generation of proto- and neo-fascist movements parading even more aggressive slogans. The far right has a proven ability to mobilise on the basis of national, physical, religious or gender identity, and it thrives best in conditions of anomie: current conditions favour its continuing prosperity. The limits of nationalist authoritarianism Nationalist authoritarianism has emerged in response to the economic contradictions of neoliberalism, the sclerosis of the political institutions regulating its metabolism and the corrosion of its ideological foundations. It is, however, limited, because the aggregation of individual demands does not support transformative programmes grounded upon material reality, which are necessary to address the structural problems of accumulation and social reproduction under late neoliberalism and the ecological crisis. Even though authoritarian neoliberal leaders are unlikely to deliver their key promises, this does not prevent them from trying, or from achieving selected goals irrespective of cost or consequence. The (unavoidable) failures of nationalist authoritarianism can lead social dissatisfaction under late neoliberalism to remain unfocused, feeding unpredictable explosions followed by rapid evaporation. These cycles of revolt will be destabilising for the economic reproduction of neoliberalism and for constitutional politics. These grievances also tend to remain unresolved, fuelling further waves of instability.

### 2NC---T/C---Inequality

#### Growth does not reduce poverty AND trades off with policy measures to solve income inequality.

Giorgos **Kallis 18**. ICREA professor at ICTA, Autonomous University of Barcelona. 09/2018. “The Case for Degrowth.” Degrowth, Agenda Publishing.

What about poverty? To say that growth is necessary in order to reduce poverty is a tautology, since absolute poverty is measured in GDP terms. The total number of people and the share of the world population living in absolute poverty have declined (Figure 4.7), but this “convergence” is driven mostly by China (Hickel 2017). Assuming that current relationships between GDP growth and poverty reduction continue in the future, eliminating poverty through growth requires unrealistically high increases in global output (Woodward 2015). [[FIGURE 4.7 OMITTED]] In a rich country, even the poorest of the poor may have more than $l per day. But they are still poor. Relative rather than absolute measures of poverty are important. Overall, the number of relatively poor people around the world has been increasing (Ravillon 2012; Figure 4.7). And among OECD countries, the effect of income on poverty is weak and explains little of the variation in poverty rates (Figure 4.8), which basically means that growth does not reduce poverty. [[FIGURE 4.8 OMITTED]] That growth is not universally linked to objective well-being is reasonable. Growth increases well-being if the social benefits o f growth exceed its costs. That growth has substantial costs is well established (Mishan 1967). Data on well-being, coupled with data on environmental costs discussed below, suggests that growth, at least in rich countries, has become “un-economic” (Daly 1996): the benefits of growth do not exceed its costs. Bartolini (2014) goes further than that: he argues that most recent growth is “negative growth”, meaning growth driven by expenditures compensating for growing externalities - paying for private goods, for example, that promise to protect us from the decay of resources that were once common and free. It could also well be that stagnation of well-being is instead because of an increasingly skewed distribution of income, the result of neoliberal reforms. There is (contested) evidence that the median income in wealthy countries such as the United States has stagnated since the 1970s, even though average income has grown (Stiglitz 2012). If that is so, then the problem may not be growth itself, but the uneven distribution of its fruits. There might be a link between the two, however, insofar as the pursuit of growth is used to justify regressive tax policies, austerity and a relaxation of labour rights and social protections.

### 2NC---T/C---Terror

#### Growth turns terror---causality runs both ways---best stats

Gries et. Al 11 – Thomas Gries, Professor @ Center of International Economics, Paderborn University; Tim Kreiger, Professor of Constitutional Political Economy and Competition Policy; Daniel Meierrieks, Research Fellow, Dept. Economics, Paderborn University, (“Causal Linkages Between Domestic Terrorism and Economic Growth,” Defense and Peace Economics, <http://www.tandfonline.com/doi/abs/10.1080/10242694.2010.532943>, jwg)

The question of causality between terrorism and economic performance has not been settled. Does terrorism lead to noticeable damages to aggregate performance, does poor economic performance contribute to the generation of terror, or do both effects exist side by side? On the one hand, the allocation and accumulation of resources may be negatively influenced by terrorism, e.g., as investment or savings are discouraged, consequently also affecting economic growth. On the other hand, economic factors may play an important role in explaining terrorism, e.g., as low opportunity costs of violence (manifested in poor economic growth) may foster conflict. This contribution aims to identify the links between the intensity of domestic terrorism and the rate of real GDP per capita growth. 1 We investigate this relationship for seven Western European countries (France, Germany, Greece, Italy, Portugal, Spain and the United Kingdom). All investigated countries experienced substantial economic success in the past. Most countries grew between 2 and 4% p.a. between 1950 and 2004. Nevertheless, these countries also suffered episodes of major political violence, especially in comparison to other countries in this part of the world. In fact, the seven selected countries accounted for 97% of all reported terrorist attacks and 96% of all reported terror-related fatalities from 1950 to 2004, according to the Terrorism in Western Europe: Events Data (TWEED) dataset of Engene (2007). 2 Most domestic terrorist organizations in the investigated countries were driven by leftist, ethnic–nationalist or separatist ideologies (Engene, 2007). Thus, they were potentially motivated by political factors. However, terrorism cannot be sensibly explained by one ‘root cause’ only. With our analysis, we want to find out whether economic performance (economic growth) also swayed the terrorists' calculus. At the same time, we want to analyze whether terrorism negatively affected growth. We test for terrorism–growth Granger causality in a time-series framework. We try to detect causality only in a statistical but not purely philosophical (‘cause and effect’) sense. Our analysis is helpful in approximating philosophical causality without implying it, so corresponding interpretations should be made carefully. Causality between terrorism and growth can take four possible forms: terrorism may cause economic growth, growth may cause terrorist activity, both causal effects may exist side by side, or no causal relationship may be detected. In order to investigate for Granger causality in our empirical framework, we first examine the stationarity properties of the underlying time series through a unit root test. At this point we are also able to identify structural breaks, i.e., major changes in the country's economic or political history during the period of observation. We then process our data in accordance with the unit root test results. When we test for Granger causality, we rely on the Hsiao–Granger procedure to circumvent common problems associated with detecting Granger causality in time-series frameworks. In comparison to standard Granger causality tests, our procedure allows for high variations in lag length selection. In order to avoid omitted variable biases and to check for robustness, we test for causality in a bivariate and trivariate system. In the trivariate setting we use trade openness as a control variable. By testing for Granger causality in a time-series setting, we add to existing evidence which has mainly blanked out the question of causality between economic performance and terrorist violence. As our main results, we find that: 1. All the investigated growth and terror series exhibit structural breaks that match with important turning points in the countries' economic and political history. 2. In bivariate systems, economic growth leads terrorist violence in all cases, whereas terrorism causally influences growth only in the case of Portugal. It appears as if economic performance influences the terrorists' calculus, yet the resiliency of attacked economies is generally high, so terror-induced shocks do not feed through to growth. 3. Knowing that bivariate causality tests are prone to inconsistencies, we also perform causality tests in trivariate systems. The findings confirm that economies under attack are successful in adjusting to the threats of terror, so growth is not impaired. With respect to Granger causality running from growth to terrorism, the results weaken previous ones from the bivariate analysis. Economic performance robustly sways the terrorists' calculus only for Germany, Portugal and Spain, but not for the rest of the sample.

### 2NC---AT: Other Countries

#### Goes global

George Friedman 17, Geopolitical Forecaster and Strategist, “An American Recession And The World” https://www.huffingtonpost.com/entry/an-american-recession-and-the-world\_us\_5900b1f6e4b06feec8ac9251

Recessions are unpleasant and hurt some people disproportionately. However, the U.S. recession will likely hurt other countries more than the United States. When combined with other global economic problems, the recession will likely weaken Europe’s anemic recovery and strike another blow at the Chinese. It will also put further downward pressure on commodity prices, considering that the United States is the world’s largest importer and has been, to some extent, the engine stabilizing the international system.

The 2007-09 recession hurt the Chinese tremendously because their biggest export customers were the United States and Europe. In due course, the Chinese slowdown cut China’s consumption of industrial commodities, including oil, hitting countries like Russia and Saudi Arabia. This is part of the global exporters’ crisis I have written about previously. The United States avoided the worst of this because, while it is the second-largest exporter in the world, exports account for only about 12.6 percent of its GDP (the U.S. ranks only 161st in the world in terms of exports as a percent of GDP, according to the World Bank). In part, this lack of dependence on exports helped U.S. GDP grow on its internal engine. More important is that the U.S. is less vulnerable to global downturns than other countries.

The decline in the U.S. economy will inevitably involve a drop in U.S. imports. Under normal circumstances, this slump would not destabilize the system. But we have not been living under normal circumstances since 2008. More precisely, we are now living in a new normal. In the new normal, countries that were driven by exports are now using diminished export demand to simply maintain their economies in the hopes of generating enough domestic demand to replace lost markets. In most cases, they have achieved a fairly precarious balance at this point that is much more subject to destabilization than in previous cycles. A relatively small drop in global demand can have a substantial impact. Thus, a routine U.S. recession will lead to a small global decline, reversing gains in stabilization made in recent years.

The downturn in export demand will have a ripple effect because exporting countries are also importing countries. As American demand contracts, exporters’ economies will be affected and their need for imports will contract as well. This domino effect is normal. The problem is that the international system’s vulnerability has grown dramatically because many countries have become excessively reliant on exports, and this has been accompanied by a general weakness in their domestic economies. Therefore, the ripple effect, while not a tidal wave, will be more substantial than would have been the case before 2008.

### 2NC---AT: Transition Fails

#### Crisis now solves---waiting risks lock-in

Loorbach, et al, 16—DRIFT, Erasmus University, Rotterdam (Derk, with Flor Avelino, DRIFT, Erasmus University, Rotterdam, Alex Haxeltine, School of Environmental Sciences, University of East Anglia, Julia M. Wittmayer, DRIFT, Erasmus University, Rotterdam, Tim O'Riordan, School of Environmental Sciences, University of East Anglia, Paul Weaver, LUCSUS, Lund University, and René Kemp, ICIS, Maastricht University, “The economic crisis as a game changer? Exploring the role of social construction in sustainability transitions,” Ecology and Society 21(4):15)

Meanwhile, many political and public debates seem to be primarily concerned with standard, relatively short-term, economic issues, such as monetary losses, stop-and-start economic growth, increasing unemployment, falling real estate prices, failing banks, virtually bankrupt nations, and how to get back on course to economic growth. The standard responses when national governments are struggling to get their economies healthy again are mostly about inducing more money, austerity measures, and introducing financial regulations, all often part of a broader financial–economic logic (Stiglitz 2010). The dominant focus on fighting economic deficits and problems at the expense of investing in social and ecological deficits—thereby failing to address persistent problems in these areas—can be argued to be a short-term strategy to prop up an inherently unmanageable system. Examples are the support of system banks with public money and the green growth strategy (OECD 2009, 2013a). Transition theory (Grin et al. 2010, Markard et al. 2012) suggests that such short-term fixes are typical regime-based strategies to sustain existing structures, cultures, and practices, and to fend off the threats of more radical systemic change.

The transition perspective suggests that most regular policy and governance strategies essentially reproduce existing systems and, by definition, do not address the root causes of problems that are embedded in the same structures and cultures that determine how solutions are framed and implemented. Such path-dependent development optimizing existing institutional structures will inevitably lead to recurring crises and ultimately a more disruptive, shock-wise structural change of an incumbent regime. Transition studies thus argue that solutions that address symptoms rather than the underlying structural causes tend to reinforce a lock-in and result in further emergent problems (Rotmans and Loorbach 2010, Schuitmaker 2012). We argue that the underlying causes and mechanisms of the economic crises have not been thoroughly analyzed, let alone addressed through effective policies. In a globalized economy, fundamental changes will not likely come from actions by (national) governments or incumbent businesses, as these are inherently intertwined with and dependent upon the currently still dominant financial– economic systems and their governance. The need for alternative economic approaches, discourses, and systems is increasingly emphasized (Schor 2010, Simms 2013, Jackson 2013, van den Bergh 2013, Schor and Thompson, 2014). Even though the benefits of liberalization are still significant, it seems that the transfer of control from government to markets has substantially diminished possibilities for top-down policy making, adding to brittleness, complexity, and lock-in (Loorbach and LijnisHuffenreuter 2013).

In this paper, we take a transition perspective on transformative social innovation to conceptualize and map the systemic dynamics that have caused the economic crisis, as well as how it influences the dynamics of social transformation. We explore how the economic crisis might be considered as a phase in a broader economic transition and which types of changes coincide to develop into this direction. We thus view the economic crisis not as a phenomenon in isolation within a relatively short time frame, but as an intrinsic part, or perhaps a symptom, of deeper underlying structural societal changes over the longer term. The question we seek to address is how the economic crisis interacts with broader societal changes as well as which dynamics might accelerate or hamper more structural (sustainability) transitions. To this end, we ask when and how a macrolevel or landscape development like the economic crisis fundamentally changes the dominant logic, rules, and conditions of incumbent regimes. In other words, when does a macrodevelopment become a game changer (cf. Avelino et al. 2014)?

The paper builds upon theoretical work from the European FP7 project TRANSIT, which draws on transition theory to develop an empirically grounded theory on transformative social innovation. In this paper, we introduce the analytical perspective that we developed on transformative social innovation and two empirical examples. Although our analytical perspective suggests that alternatives and breakthroughs can come from any sector or actor, in this paper, we focus on the agency of social innovation and civil-society-led initiatives in providing and producing alternatives. The paper was developed through a number of iterations, workshops, and theoretical synthesizing. To develop our arguments, we build upon insights from sustainability transitions literature (Grin et al. 2010, Markard et al. 2012), social innovation research (Mulgan 2006, Murray et al. 2010, Franz et al. 2012, Westley 2013, Moulaert et al. 2013) and other fields aiming to understand the economic crisis. In addition, we include two empirical cases, transnational networks of social innovation, time banks, and the transition movement. For both cases, we draw upon a general literature review.

The paper is structured as follows. In the next section, “Economic change or transition?,” we introduce the economic crisis as a multifarious phenomenon, how we understand it from a transition perspective, and how it is understood from an economist’s point of view. We illustrate that it is an ambiguous phenomenon that is simultaneously seen as part of regular changes in that it is part of disruptive or transformative change. In the section “Making sense of the economic crisis?,” we present a number of alternative perspectives on the economic crisis that put forward particular fundamental and systemic causes of the economic crisis and how these are translated in so called “narratives of change.” In “Transformative social innovations,” we highlight two specific social innovation initiatives, time banks and transition towns, which have an evident transformative claim and potential, and reflect upon how such transformative social innovations relate (themselves) to the economic crisis. In “Reconceptualizing societal transformations and the role of the economic crisis,” we synthesize our findings and argue that the concepts of game changers and narratives could help to unpack the landscape and better understand how macro- and microlevels interact to trigger transformative changes at the mesolevel. In conclusion, we address the need for a better understanding of the transformative impacts of the different shades of change (in coevolution) vis-é-vis the restorative dynamics associated with incumbent regimes.

#### The support is there

Alperovitz, et al, 16—Lionel R. Bauman Professor of Political Economy at the University of Maryland, College Park Department of Government and Politics, former fellow of King's College, Cambridge, founding Fellow of the Harvard Institute of Politics, former Fellow at the Institute for Policy Studies, former Guest Scholar at the Brookings Institution, served as a Legislative Director in the US House of Representatives and the US Senate and as a Special Assistant in the US Department of State (Gar, with James Gustave Speth, Senior Fellow at The Democracy Collaborative, and is Co-Chair of The Next System Project, Ted Howard, President and Co-Founder of The Democracy Collaborative, and Joe Guinan, Executive Director of The Next System Project, Senior Fellow at The Democracy Collaborative, “Systemic Crisis and Systemic Change in the United States in the 21st Century,” <http://thenextsystem.org/wp-content/uploads/2016/09/NSPOberlin-final.pdf>)

The good news is that the inability of traditional politics and policies to address fundamental challenges has fueled an extraordinary amount of experimentation in communities across the United States and around the world. It has also generated increasing numbers of sophisticated and thoughtful proposals that build from the bottom and begin to suggest new systemic possibilities beyond the failed systems of the past and present. It is becoming possible to bring together and extend elements of innovative thinking and realworld practice in key areas to define the underlying structural building blocks of a range of alternatives capable of rebuilding the basis for democracy, liberty, equality, sustainability, and community in the United States in the twenty-first century. Unbeknownst to many, literally thousands of onthe-ground efforts have been developing. These include cooperatives, worker-owned companies, neighborhood corporations, and many little known municipal, state, and regional efforts. These emerging economic alternatives suggest different ways in which capital can be held in common by small and large publics. They include nonprofit community corporations and land trusts that develop lowincome housing, as well as community development financial institutions (CDFIs) that have over $108 billion in assets under their management.56 Employee ownership is also on the rise, involving three million more workers than are members of private sector unions. 57 A third of Americans belong to cooperatives, including credit unions that serve 107 million people and manage $1.3 trillion in assets, almost as much as is managed by Citi. 58 In the public sector, local government economic development programs invest in local businesses, while municipal enterprises build infrastructure and provide services, raising revenue and creating employment, diversifying the base of locally controlled capital. Public utilities, together with co-ops, make up nearly 90 percent of all electricity providers and generate over 20 percent of America’s electricity.59 From California to Alabama, public pension assets are being channeled into job creation and community development.60 Cities and states are looking to the creation of public banking systems like that of North Dakota. Trusts that allow for public ownership and management of natural resources provide revenue streams from capital, recalling the unjustly neglected ideas of James Meade.61 From parks and blood banks to libraries and the internet, commons management systems can provide an expanding zone of decommodification to buffer against the market. Public trusts can be extended into additional domains, from dry land to the electromagnetic spectrum, underwriting public services or issuing a citizen dividend. Community land trusts can ensure affordable housing and prevent disruptive gentrification and speculative real estate bubbles. New public strategies encompass both democratic public ownership and new planning capacities and functions. Even experts working on such matters rarely appreciate the sheer range of activity. Practical and policy foundations have been established that offer a solid basis for future expansion. A body of hardwon expertise is now available in each area, along with support organizations, and technical and other experts who have accumulated a great deal of direct problem-solving knowledge. The idea that we need a “new economy”—that the entire economic system must be radically restructured if critical social and environmental goals are to be met—runs directly counter to the American creed that capitalism as we know it is the best, and only possible, option. Most of the new projects, ideas, and research efforts have thus gained traction slowly and with little national attention. But in the wake of the financial crisis, they have proliferated and earned a surprising amount of support—and not only among advocates on the left. New terms have begun to gain currency in diverse areas with activist groups and constituencies, an indication that the domination of traditional thinking may be starting to weaken. Thus we encounter the sharing economy, the caring economy, the provisioning economy, the restorative economy, the regenerative economy, the sustaining economy, the collaborative economy, the solidarity economy, the gift economy, the resilient economy, the steady state economy, the new economy, and many, many more. There are calls for a Great Transition, or for a reclamation of the Commons. Creative thinking by researchers and engaged scholars is also contributing to the ferment, and policies at the state and local level can help move projects to much more powerful scale and community-wide impact. Larger scale strategic options that build on what is being learned locally are beginning to be sketched as the basis for longer-term national strategies. The press covers very little of this, but the various institutional efforts have begun to develop new strategies that suggest broader possibilities for change. One promising model builds on work in Cleveland, Ohio, where a linked group of workerowned companies has developed, supported in part by the massive purchasing power of local hospitals and universities. These cooperative firms include a solar installation and weatherization company, an industrial scale ecologically advanced laundry, and a greenhouse capable of producing over three million heads of lettuce and 300,000 pounds of herbs a year.62 This effort, modeled in part on the 74,000-person Mondragón cooperative network in the Basque region of Spain, will create new businesses, as time goes on.63 However, its goal is not simply worker ownership, but the democratization of wealth and sustainable community building in general in an extremely poor neighborhood of what was once a thriving industrial city. Linked by a community-serving non-profit corporation and a revolving fund, the companies cannot be sold outside the network; they also return ten percent of their profits to help develop additional worker-owned firms and grow the network. Cities across the United States—and overseas as well—are looking to the Cleveland Model as an inspiration for their own community wealth building efforts. A critical element of the overall sustainability strategy points to what is essentially a quasi-public community stabilizing planning model. Hospitals and universities in the area currently spend $3 billion a year on goods and services—none, until recently, purchased from the immediately surrounding neighborhood. The Cleveland Model is supported in part by decisions of these substantially publicly financed institutions to allocate part of their procurement to the worker-coops in support of a larger community-building agenda. The taxpayer funds that support institutions of this kind thereby do double duty by helping to support the broader community through the new localized purchasing arrangements. The same is true for a range of municipal, state, and other federal policies available to local businesses, including employee-owned firms. Note carefully that such stabilization also undercuts the growth imperative—and suggests principles that can also be applied at higher levels. Such approaches cannot claim to provide all the answers. But a number of exploratory efforts emphasize fundamental changes in underlying political-economic institutions. Developing detailed and sophisticated alternatives that can be refined over time is a prerequisite if we are to stimulate a serious and wide-ranging debate around a broader menu of institutional possibilities for future development than the narrow range of choices commonly discussed. The need for a major change of direction is increasingly obvious. Efforts to cobble together “solutions” to today’s challenges commonly draw upon the very same institutional arrangements and practices that gave rise to the problems in the first place. What is required is a self-conscious effort to face the fact that the system itself has to be changed and a different kind of political economy created. Although precisely what “changing the system” means is obviously a matter of debate, certain key points are clear. The new movements seek a cooperative, caring and community-nurturing economy that is ecologically sustainable, equitable, and socially responsible—one that is based on rethinking and democratizing the nature of ownership at every level and, along with this, challenging the growth paradigm that is the underlying assumption of all conventional policies. In short, these movements seek an economy that gives true priority to people, place, and planet. Such an economy, so different from our own, requires a new vocabulary, beyond the narrow choice between “capitalism” and “socialism.” It’s easy to overestimate the possibilities. Emerging ideas and institutional explorations are limited compared with the power of Wall Street banks and the other corporate giants of the American economy. On the other hand, precisely because the existing structures of power have created enormous economic problems and fueled public anger, the opportunity for a more profound shift exists. Unexpectedly rapid change is not out of the question. We have already seen how, in moments of crisis, the nationalization of auto giants like General Motors and Chrysler can suddenly become a reality. Such crises are likely to be repeated in the future, possibly with more far reaching outcomes over time. When the next financial breakdown occurs, huge injections of public money may well lead to the breakup or de facto takeover of major financial institutions. At the same time, various forms of larger institutional experimentation—and pressure for further experimentation—are also clearly in the cards.

#### Transition isn’t hard

Monbiot 19 (George Monbiot, citing Erica Chenoweth - the Berthold Beitz Professor in Human Rights and International Affairs at Harvard Kennedy School, Foreign Policy magazine ranked her among the Top 100 Global Thinkers in 2013 for her efforts to promote the empirical study of civil resistance, she received the Karl Deutsch Award, which the International Studies Association gives annually to the scholar under the age of 40 who has made the greatest impact on the field of international politics or peace research. And together with Maria J. Stephan, she won the 2013 Grawemeyer Award for Ideas Improving World Order, which is presented annually in recognition of outstanding proposals for creating a more just and peaceful world order. Their book, Why Civil Resistance Works, also won the 2012 Woodrow Wilson Foundation Award, given annually by the American Political Science Association in recognition of the best book on government, politics, or international affairs published in the U.S. in the previous calendar year. 4-1-2019, "Only rebellion will prevent an ecological apocalypse," Guardian, <https://www.theguardian.com/commentisfree/2019/apr/15/rebellion-prevent-ecological-apocalypse-civil-disobedience> accessed: 8-29-2019) //bp

As the environmental crisis accelerates, and as protest movements like YouthStrike4Climate and Extinction Rebellion make it harder not to see what we face, people discover more inventive means of shutting their eyes and shedding responsibility. Underlying these excuses is a deep-rooted belief that if we really are in trouble, someone somewhere will come to our rescue: “they” won’t let it happen. But there is no they, just us. The political class, as anyone who has followed its progress over the past three years can surely now see, is chaotic, unwilling and, in isolation, strategically incapable of addressing even short-term crises, let alone a vast existential predicament. Yet a widespread and wilful naivety prevails: the belief that voting is the only political action required to change a system. Unless it is accompanied by the concentrated power of protest – articulating precise demands and creating space in which new political factions can grow – voting, while essential, remains a blunt and feeble instrument. The media, with a few exceptions, is actively hostile. Even when broadcasters cover these issues, they carefully avoid any mention of power, talking about environmental collapse as if it is driven by mysterious, passive forces, and proposing microscopic fixes for vast structural problems. The BBC’s Blue Planet Live series exemplified this tendency. Those who govern the nation and shape public discourse cannot be trusted with the preservation of life on Earth. There is no benign authority preserving us from harm. No one is coming to save us. None of us can justifiably avoid the call to come together to save ourselves. I see despair as another variety of disavowal. By throwing up our hands about the calamities that could one day afflict us, we disguise and distance them, converting concrete choices into indecipherable dread. We might relieve ourselves of moral agency by claiming that it’s already too late to act, but in doing so we condemn others to destitution or death. Catastrophe afflicts people now and, unlike those in the rich world who can still afford to wallow in despair, they are forced to respond in practical ways. In Mozambique, Zimbabwe and Malawi, devastated by Cyclone Idai, in Syria, Libya and Yemen, where climate chaos has contributed to civil war, in Guatemala, Honduras and El Salvador,, where crop failure, drought and the collapse of fisheries have driven people from their homes, despair is not an option. Our inaction has forced them into action, as they respond to terrifying circumstances caused primarily by the rich world’s consumption. The Christians are right: despair is a sin. As the author Jeremy Lent points out in a recent essay, it is almost certainly too late to save some of the world’s great living wonders, such as coral reefs and monarch butterflies. It might also be too late to prevent many of the world’s most vulnerable people from losing their homes. But, he argues, with every increment of global heating, with every rise in material resource consumption, we will have to accept still greater losses, many of which can still be prevented through radical transformation. Every nonlinear transformation in history has taken people by surprise. As Alexei Yurchak explains in his book about the collapse of the Soviet Union – Everything Was Forever, Until It Was No More – systems look immutable until they suddenly disintegrate. As soon as they do, the disintegration retrospectively looks inevitable. Our system – characterised by perpetual economic growth on a planet that is not growing – will inevitably implode. The only question is whether the transformation is planned or unplanned. Our task is to ensure it is planned, and fast. We need to conceive and build a new system based on the principle that every generation, everywhere has an equal right to enjoy natural wealth. This is less daunting than we might imagine. As Erica Chenoweth’s historical research reveals, for a peaceful mass movement to succeed, a maximum of 3.5% of the population needs to mobilise. Humans are ultra-social mammals, constantly if subliminally aware of shifting social currents. Once we perceive that the status quo has changed, we flip suddenly from support for one state of being to support for another. When a committed and vocal 3.5% unites behind the demand for a new system, the social avalanche that follows becomes irresistible. Giving up before we have reached this threshold is worse than despair: it is defeatism. Today, Extinction Rebellion takes to streets around the world in defence of our life-support systems. Through daring, disruptive, nonviolent action, it forces our environmental predicament on to the political agenda. Who are these people? Another “they”, who might rescue us from our follies? The success of this mobilisation depends on us. It will reach the critical threshold only if enough of us cast aside denial and despair, and join this exuberant, proliferating movement. The time for excuses is over. The struggle to overthrow our life-denying system has begun.

#### Even if there’s resistance, the transition is forced

David Holmgren 13, founder of Holmgren Design Services, an environmental design and consulting firm, inventor of the Permaculture system for regenerative agriculture, 2013, “Crash on Demand: Welcome to the Brown Tech Future,” Simplicity Institute report, <http://simplicityinstitute.org/wp-content/uploads/2011/04/CrashOnDemandSimplicityInstitute.pdf>

The evidence that the global financial system is a not-so-slow moving train crash is getting stronger. That investors and the billion or so middle class people who have any savings and discretionary expenditure are losing faith, might be an understatement. It may be that paralysis and inertia is all that is holding the system together. A collapse in credit could make it very difficult to raise the finance necessary for the ongoing extraction of tar sands, shale gas and other mad resource extraction projects that are accelerating the production of GGE[Greenhouse Gas Emissions]. A deflationary spiral that follows from a credit crisis and collapsing asset (housing, etc.) values could change behaviour to the extent that people stop spending on anything but essentials because of job insecurity and the fact that everything will be cheaper next month. I believe the chances of global economic collapse (in the next five years) being severe enough to achieve this have to be rated at least 50%. Further I believe many climate activists and policy professionals are shifting to at least privately hoping this might be the case because the chances of a planned powerdown seems to be fading. If we accept a global financial crash could make it very difficult, if not impossible, to restart the global economy with anything other than drastically reduced emissions, then an argument can be mounted for putting effort into precipitating that crash, the crash of the financial system. Any such plan would of course invite being blamed for causing it when it happens. No one wants to be strung up along with the bankers for causing a global version of Greece, Egypt or many other countries, let alone the horrors of Syria. On the other hand, we have no precedent to indicate how bad conditions might be in currently affluent countries. The picture I am building is that it is almost inevitable that those who warn of the crisis will get the blame for causing it. So if we are going to be blamed anyway, we could be proactive about it and at least get the advantage for humanity of crisis now, rather than later. For the people of Syria caught in the grip of climate, energy and geopolitical struggle, all this hardly matters because it couldn't get worse for them. In fact conditions in such stricken places could actually improve if global superpower competition is disabled by the collapse of the global finance. Even the average citizen in Greece or Egypt might be hoping to see the remaining affluent countries get a 'taste of their own medicine'. The complexity of global human overshoot, so long predicted, and now unfolding, is far too multifaceted to be captured by any simple story about good, innocence, evil and blame. Before considering whether this is a good idea or not, I want to consider whether concerted action by limited numbers of activists could bring it about? Given the current fragilities of global finance, I believe a radical change in the behaviour of a relatively small proportion of the global middle class could precipitate such a crash. For example a 50% reduction of consumption and 50% conversion of assets into building household and local community resilience by say 10% of the population in affluent countries would show up as 5% reduction in demand in a system built on perpetual growth and a 5% reduction in savings capital available for banks to lend. Small fluctuations in the supply-demand balance can have a massive effect on prices. Further, when the system has been growing due to rising debt, arguably for decades, then the vulnerability to drops in demand can be massive. For example, small drops in demand for new houses and the high fuel costs of commuting for those servicing mortgages, triggered the collapse of the housing bubble in the USA and other countries. It seems obvious to me that it is easier to convince a minority that they will be better off by disengaging from the system than any efforts to build mass movements demanding impossible outcomes or convincing elites to turn off the system that is currently keeping them in power. I accept that many people find the idea of assisting economic collapse abhorrent, even if that collapse is becoming more and more likely as a collective outcome of human actions. Daryl Taylor uses the caring metaphor "hospicing and euthanasing" the old/dying system along with "doula-ing and midwifing the new/emerging system. Whatever the metaphors, climate activists who believe we are on the verge of runaway catastrophic climate change that will be far worse than simply stalling the economy, do have options other than shouting louder for mitigation or shifting to adaptation and defence. Rather than simply planning for bad and rocky energy descent delivered initially by economic depression, they could choose to focus their energy on actively trying to destroy faith in the financial system.

### 2NC---M---Environment

#### Environment outweighs---its try or die---land, overfishing, deforestation, food and water shortages have cascading effects on bio-d that’s key to survival

Richard Smith 14, economic historian, has written on capitalism and the environment for The Ecologist, the International Journal of Ecological Economics and Statistics, Real-World Economics Review, and others, and has a PhD in economic history from UCLA. Green Capitalism: The God That Failed, truth-out.org/news/item/21060-green-capitalism-the-god-that-failed

Given the enormous dangers that such a high target implies, critics have asked why Stern is so reluctant to aim for a safer target? Marxist ecologist John Bellamy Foster and his colleagues suggest that the answer is to be found in Stern's economics, not the science: The Stern Review is very explicit, however, that such a radical mitigation of the problem should not be attempted. The costs to the world economy of ensuring that atmospheric CO₂e stabilized at present levels or below would be prohibitive, destabilizing capitalism itself. "Paths requiring very rapid emissions cuts," we are told, "are unlikely to be economically viable." If global greenhouse gas emissions peaked in 2010, the annual emissions reduction rate necessary to stabilize CO2e at 450 ppm, the Stern Review suggests, would be 7 percent, with emissions dropping by about 70 percent below 2005 levels by 2050. This is viewed as economically insupportable.(39) Stern asserted that "the world does not have to choose between averting climate change and promoting growth and development."(40) But if the science is right that we need to keep emissions below 400 ppm, or even get them back below 350 ppm, then more growth is out of the question. Indeed, we would have to make radically deeper cuts in GDP than even the 7 percent reduction per year that Stern calculates would be necessary just to get us down to 450 ppm. Because, under capitalism, a contraction of economic output on anything like that scale would mean economic collapse and depression, it is difficult to see how we can make the reductions in greenhouse gases we have to make to avoid climate catastrophe unless we abandon capitalism. This is the dilemma. So far most scientists have tended to avoid getting into the contentious economic side of the question. But with respect to the issue of growth, the science is unequivocal: Never-ending growth means the end of civilization, if not humanity itself - and in the not-so-distant future. For a summary of the peer-reviewed science on this subject, read a few chapters of Mark Lynas' harrowing Six Degrees.(41) Global warming is surely the most urgent threat we face, but it is far from the only driver of global ecological collapse. For even if we switched to clean renewable electric power tomorrow, this would not stop the overconsumption of forests, fish, minerals, fresh water. It would not stop pollution or solve the garbage crisis or stop the changes in ocean chemistry. Indeed, the advent of cheap, clean energy could even accelerate these trends.(42) Numerous credible scientific and environmental researchers back up what the climate scientists have been telling us, to demonstrate why perpetual growth is the road to collective social suicide. For example: In 2005 the United Nations Millennium Ecosystem Assessment team of 1,300 scientists from 95 countries issued a landmark report on humanity's overconsumption of "nature's services." The scientists reported that 60 percent (15 of 24) of the ecosystems examined that are critical for human survival are being "degraded or used unsustainably," including fresh water, capture fisheries, coral reefs, wetlands, drylands and forests. Around the world, many of these are deteriorating or on the verge of collapse. Thus nature's ability to provide the resources for growing future populations is very much in doubt unless radical steps are taken soon. In its Living Planet Report 2010, the World Wide Fund for Nature (WWF) similarly concluded that people are plundering the world's resources at a rate that far outstrips the planet's capacity to sustain life. As of 2007, the world's 6 billion-plus people were using up 50 percent more natural resources per year than can be naturally regenerated (and many resources, like oil, cannot be replenished at all). Put another way, humanity's current "global footprint" is equal to 1.5 planets. Under a business-as-usual scenario, even with modest projections for population growth, consumption and climate change, the UN predicts that by 2030 humanity will need the capacity of two Earths to absorb CO2 waste and support natural resource consumption. Of course we don't all consume equally: The footprint of high-income countries is three times that of middle-income countries and five times that of low-income countries. Americans have the biggest footprint of all, consuming the most energy and producing the most waste. If everyone lived like Americans do, we would need 5.3 planets to support all this. James Leape, director general of WWF, says, "The implications are clear. Rich nations must find ways to live much more lightly on the Earth - to sharply reduce their footprint, in particular their reliance on fossil fuels. The rapidly growing emerging economies must also find a new model for growth - one that allows for them to improve the well-being of their citizens in ways the Earth can actually sustain."(43) And in its own 2010 State of the World Report, the World Watch Institute says that: As consumerism has taken root in culture upon culture over the past half-century, it has become a powerful driver of the inexorable increase in demand for resources and production of waste that marks our age. ... More than 6.8 billion human beings are now demanding ever greater quantities of material resources, decimating the world's richest ecosystems, and dumping billions of tons of heat-trapping gases into the atmosphere each year. Despite a 30-percent increase in resource efficiency, global resource use has expanded 50 percent over the past three decades. And those numbers could continue to soar for decades to come as more than 5 billion people who currently consume one tenth as many resources per person as the average European try to follow the trail blazed by the world's affluent.(44)

### 2NC---AT: Regrowth

#### Can’t rebuild industrial civilization.

John **Jacobi 17**. Leads an environmentalist research institute and collective, citing Fred Hoyle, British astronomer, formulated the theory of stellar nucleosynthesis, coined the term “big bang,” recipient of the Gold Medal of the Royal Astronomical Society, professor at the Institute of Astronomy, Cambridge University. 05-27-17. “Industrial Civilization Could Not Be Rebuilt.” The Wild Will Project. <https://www.wildwill.net/blog/2017/05/27/industrial-civilization-not-rebuilt/>

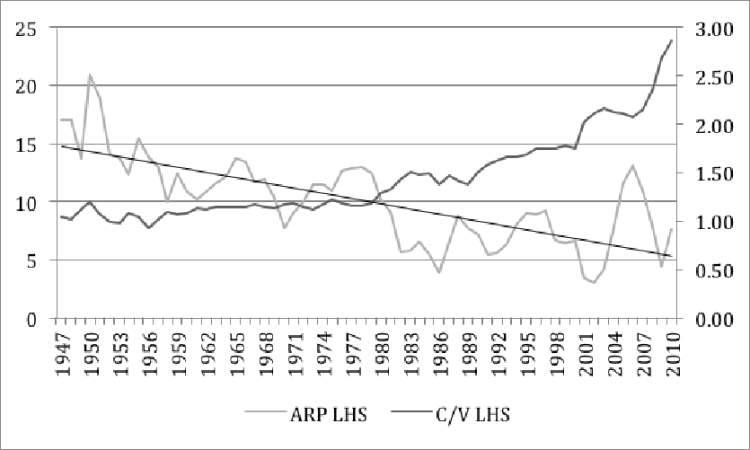
A suggestion, for the sake of thought: If industrial civilization collapsed, it probably could not be rebuilt. Civilization would exist again, of course, but industry appears to be a one-time experiment. The astronomist Fred Hoyle, exaggerating slightly, writes: It has often been said that, if the human species fails to make a go of it here on Earth, some other species will take over the running. In the sense of developing high intelligence this is not correct. We have, or soon will have, exhausted the necessary physical prerequisites so far as this planet is concerned. With coal gone, oil gone, high-grade metallic ores gone, no species however competent can make the long climb from primitive conditions to high-level technology. This is a one-shot affair. If we fail, this planetary system fails so far as intelligence is concerned. The same will be true of other planetary systems. On each of them there will be one chance, and one chance only. Hoyle overstates all the limits we actually have to worry about, but there are enough to affirm his belief that industry is a “one-shot affair.” In other words, if industry collapsed then no matter how quickly scientific knowledge allows societies to progress, technical development will hit a wall because the builders will not have the needed materials. For example, much of the world’s land is not arable, and some of the land in use today is only productive because of industrial technics developed during the agricultural revolution in the 60s, technics heavily dependent on oil. Without the systems that sustain industrial agriculture much current farm land could not be farmed; agricultural civilizations cannot exist there, at least until the soil replenishes, if it replenishes. And some resources required for industrial progress, like coal, simply are not feasibly accessible anymore. Tainter writes: . . . major jumps in population, at around A.D. 1300, 1600, and in the late eighteenth century, each led to intensification in agriculture and industry. As the land in the late Middle Ages was increasingly deforested to provide fuel and agricultural space for a growing population, basic heating, cooking, and manufacturing needs could no longer be met by burning wood. A shift to reliance on coal began, gradually and with apparent reluctance. Coal was definitely a fuel source of secondary desirability, being more costly to obtain and distribute than wood, as well as being dirty and polluting. Coal was more restricted in its spatial distribution than wood, so that a whole new, costly distribution system had to be developed. Mining of coal from the ground was more costly than obtaining a quantity of wood equivalent in heating value, and became even more costly as the 54 most accessible reserves of this fuel were depleted. Mines had to be sunk ever deeper, until groundwater flooding became a serious problem. Today, most easily accessible natural coal reserves are completely depleted. Thus, societies in the wake of our imagined collapse would not be able to develop fast enough to reach the underground coal. As a result of these limits, rebuilding industry would take at least thousands of years — it took 10,000 years the first time around. By the time a civilization reached the point where it could do something about industrial scientific knowledge it probably would not have the knowledge anymore. It would have to develop its sciences and technologies on its own, resulting in patterns of development that would probably look similar to historical patterns. Technology today depends on levels of complexity that must proceed in chronological stages. Solar panels, for example, rely on transportation infrastructure, mining, and a regulated division of labor. And historically the process of developing into a global civilization includes numerous instances of technical regression. The natives of Tasmania, for example, went from a maritime society to one that didn’t fish, build boats, or make bows and arrows. Rebuilding civilization would also be a bad idea. Most, who are exploited by rather than benefit from industry, would probably not view a rebuilding project as desirable. Even today, though citizens of first-world nations live physically comfortable lives, their lives are sustained by the worse off lives of the rest of the world. “Civilization . . . has operated two ways,” Paine writes, “to make one part of society more affluent, and the other more wretched, than would have been the lot of either in a natural state.” Consider the case of two societies in New Zealand, the Maori and the Moriori. Both are now believed to have originated out of the same mainland society. Most stayed and became the Maori we know, and some who became the Moriori people settled on the Chatham Islands in the 16th century. Largely due to a chief named Nunuku-whenua, the Moriori had a strict tradition of solving inter-tribal conflict peacefully and advocating a variant of passive resistance; war, cannibalism, and killing were completely outlawed. They also renounced their parent society’s agricultural mode of subsistence, relying heavily on hunting and gathering, and they controlled their population growth by castrating some male infants, so their impact on the non-human environment around them was minimal. In the meantime, the Maori continued to live agriculturally and developed into a populated, complex, hierarchical, and violent society. Eventually an Australian seal-hunting ship informed the Maori of the Moriori’s existence, and the Maori sailed to the Chathams to explore: . . . over the course of the next few days, they killed hundreds of Moriori, cooked and ate many of the bodies, and enslaved all the others, killing most of them too over the next few years as it suited their whim. A Moriori survivor recalled, “[The Maori] commenced to kill us like sheep . . . [We] were terrified, fled to the bush, concealed ourselves in holes underground, and in any place to escape our enemies. It was of no avail; we were discovered and eaten – men, women, and children indiscriminately.” A Maori conqueror explains, “We took possession . . . in accordance with our customs and we caught all the people. Not one escaped. Some ran away from us, these we killed, and others we killed – but what of that? It was in accordance with our custom.” Furthermore, we can deduce from the ubiquitous slavery in all the so-called “great civilizations” like Rome or Egypt that any attempt to rebuild a similar civilization will involve slavery. And to rebuild industry, something similar to colonization and the Trans-Atlantic Slave Trade would probably have to occur once again. After all, global chattel slavery enabled the industrial revolution by financing it, extracting resources to be accumulated at sites of production, and exporting products through infrastructure that slavery helped sustain. So, if industrial society collapsed, who would be doing the rebuilding? Not anyone most people like. It is hard to get a man to willingly change his traditional way of life; even harder when his new life is going into mines. And though history demonstrates that acts like those of the Maori or slave traders are not beyond man’s will or ability, certainly most in industrial society today would not advocate going through the phases required to reach the industrial stage of development.

### 2NC---AT: Growth Sustainable

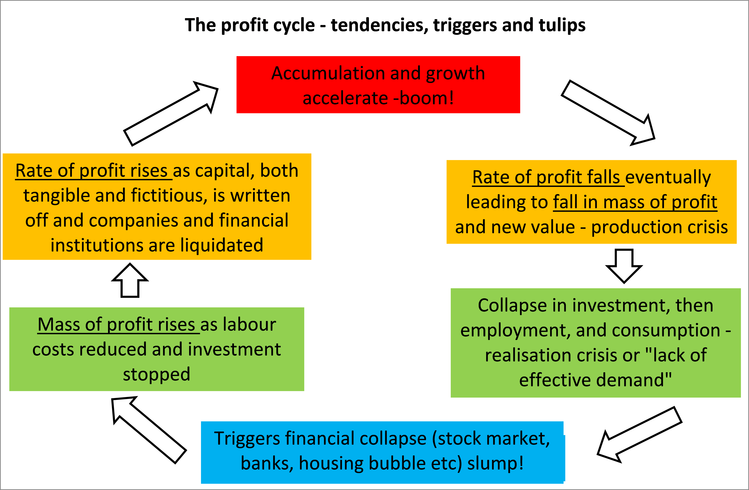
#### Marx’s law of profitability explains cyclical recessions and renders capitalism unsustainable

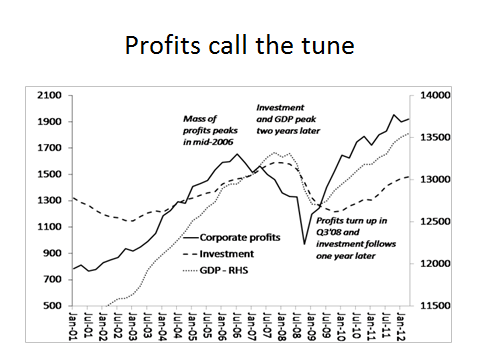
Roberts 15 - London economist (Michael, https://thenextrecession.wordpress.com/2015/12/29/the-marxist-theory-of-economic-crises-in-capitalism-part-two/, emuse)

Does Marx’s law fit the facts? Some Marxist critics of Marx’s law of profitability reckon that the law cannot be empirically proven or refuted because official statistics cannot be used to show Marx’s law in operation. But there are plenty of studies by Marxist economists that show otherwise. The key tests of the validity of the law in modern capitalist economies would be to show whether 1) the rate of profit falls over time as the organic composition of capital rises; 2) the rate of profit rises when the organic composition falls or when the rate of surplus value rises faster than the organic composition of capital; 3) the rate of profit rises, if there is sharp fall in the organic composition of capital as in a slump. These would be the empirical tests and there is plenty of empirical evidence for the US and world economy to show that the answer is yes to all these questions. For example, [Basu and Manolakos](http://gesd.free.fr/basumano.pdf) applied econometric analysis to the US economy between 1948 and 2007 and found that there was a secular tendency for the rate of profit to fall with a measurable decline of about 0.3 percent a year “after controlling for counter-tendencies.” In [my work on the US rate of profit,](http://gesd.free.fr/mr1213.pdf) I also found an average decline of 0.4 percent a year through 2009. And here is a figure by G Carchedi for the rise in the organic composition of capital (OCC) in the industrial sector of the US since 1947 versus the average rate of profit (ARP). It tells the same story. US ARP and OCC (i.e. C/V) versus the average rate of profit (ARP). It tells the same story. US ARP and OCC (i.e. C/V)

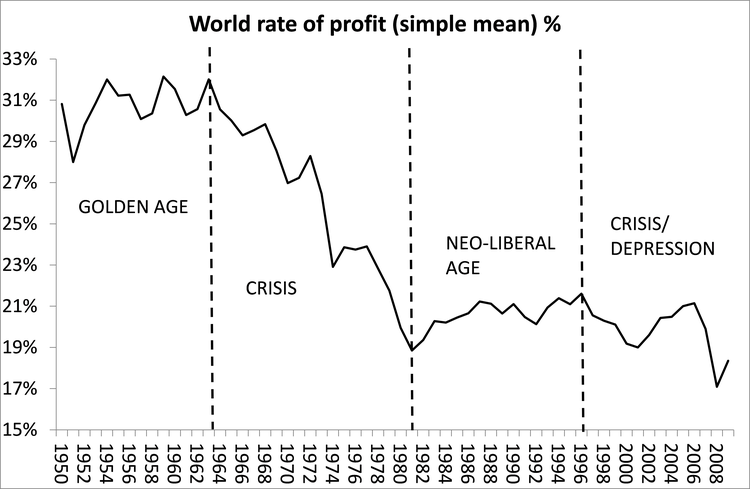
[](https://thenextrecession.files.wordpress.com/2015/12/arp.png)

There is a clear inverse correlation between a rising organic composition of capital and a falling rate of profit. Can Marx’s law explain crises? How does Marx’s law of profitability work as an explanation and forecast of slumps in capitalist economies? The law leads to a clear causal connection to regular and recurrent crises (slumps). It runs from falling profitability to falling profits to falling investment to falling employment and incomes. A bottom is reached when there is sufficient destruction of capital values (the writing off technology, the bankruptcy of companies, a reduction in wage costs) to raise profits and then profitability. Then rising profitability leads to rising investment again. The cycle of boom recommences and the whole ‘crap’ starts again, to use Marx’s colourful phrase. [There is a cycle of profit alongside the long-term tendency for the rate of profit to fall.](https://thenextrecession.files.wordpress.com/2013/07/cycles-in-capitalism.pdf)

[](https://thenextrecession.files.wordpress.com/2015/12/profit-cycle.png) The evidence of this causality between profit and investment is available. Jose Tapia Granados, using regression analysis, finds that, over 251 quarters of US economic activity from 1947, profits started declining long before investment did and that pre-tax profits can explain 44% of all movement in investment, while there is no evidence that investment can explain any movement in profits. I find a higher ‘Granger causality’ of 60% from annual changes in profit and investment (unpublished) and a correlation of 0.67 for the period since 2000. And see this by G Carchedi ([Carchedi Presentation](https://thenextrecession.files.wordpress.com/2015/06/carchedi-presentation.pptx)). In the period leading up to the Great Recession 2008-9, we can see the causality visually for US profits, investment and real GDP in the graphic below. The mass of US corporate profit peaks in mid-2006, investment and GDP follows two years later. Profits turn back up in late 2008 and investment follows one year later.

[](https://thenextrecession.files.wordpress.com/2015/12/profits-lead.png)

There are two basic regularities shown by the data: that a change in profits tends to be followed next year by a change in investment in the same direction; and that a change in investment is usually followed in a few years by changes in profits in the opposite direction. Thus we have a cycle. From these results, the “regularity” of the business cycle, and the fact that profitability stagnated in 2013 and declined in 2014 (and now the mass of profits in 2015) after growing between 2008 and 2012, it can be concluded with some confidence that a recession of the US economy, which will be also part of a world economic crisis like the Great Recession, will occur again in the next few years. And Marx’s law of the tendency of the rate of profit to fall makes an even more fundamental prediction: that the capitalist mode of production will not be eternal, that it is transitory in the history of human social organisation. The law of the tendency predicts that, over time, there will be a fall in the rate of profit globally, delivering more crises of a devastating character. Work has been done by modern Marxist analysis that confirms that the world rate of profit has fallen over the last 150 years. See the graph below ([data from Esteban Maito](https://thenextrecession.files.wordpress.com/2015/05/maito-esteban-the-historical-transience-of-capital-the-downward-tren-in-the-rate-of-profit-since-xix-century.pdfhttp:/gesd.free.fr/mrwrate.pdf) and ‘doctored’ by me).

[](https://thenextrecession.files.wordpress.com/2015/12/world-rate-of-profit-maito.png) Maito’s data for the 19th century have recently been questioned ([DUMENIL-LEVY on MAITO](https://thenextrecession.files.wordpress.com/2015/12/dumenil-levy-on-maito.pdf)), but in a recent work using different sources and countries, I find a similar trend for the post-1945 period globally ([Revisiting a world rate of profit June 2015](https://thenextrecession.files.wordpress.com/2015/12/revisiting-a-world-rate-of-profit-june-2015.pdf)). And earlier groundbreaking work by Minqi Li and colleagues, as well as by Dave Zachariah, show a similar trend. As Maito concludes: “The tendency of the rate of profit to fall and its empirical confirmation highlights the historically limited nature of capitalist production. If the rate of profit measures the vitality of the capitalist system, the logical conclusion is that it is getting closer to its endpoint. There are many ways that capital can attempt to overcome crises and regenerate constantly. Periodic crises are specific to the capitalist mode of production and allow, ultimately, a partial recovery of profitability. This is a characteristic aspect of capital and the cyclical nature of the capitalist economy. But the periodic nature of these crises has not stopped the downward trend of the rate of profit over the long term. So the arguments claiming that there is an inexhaustible capacity of capital to restore the rate of profit and its own vitality and which therefore considers the capitalist mode of production as a natural and a-historical phenomenon, are refuted by the empirical evidence.” So the law predicts that, as the organic composition of capital rises globally, the rate of profit will fall despite counteracting factors and despite successive crises (which temporarily help to restore profitability). This shows that capital as a mode of production and social relations is transient. Capitalism has not always been here and it has ultimate limits, namely capital itself. It has a ‘use-by-date’. That is the essence of the law of profitability for Marx. Alternative theories This is not to deny other factors in capitalist crises. The role of credit is an important part of Marxist crisis theory and indeed, as the tendency of the rate of profit to fall engenders countertendencies, one of increasing importance is the expansion of credit and the switching of surplus value into investment in fictitious capital rather than productive capital to raise profitability temporarily, but with eventually disastrous consequences, as The Great Recession shows ([The Great Recession](https://thenextrecession.files.wordpress.com/2013/08/the-great-recession.pdf); [Debt matters](https://thenextrecession.files.wordpress.com/2012/11/debt-matters.pdf)). Alternative theories of crisis like underconsumption, or the lack of effective demand, are taken from theories from the reactionary Thomas Malthus and the radical Sismondi in the early 19th century and then taken up by Keynes in the 1930s and by modern inequality theorists like Stiglitz and [post-Keynesian economists](http://bilbo.economicoutlook.net/blog/?p=15854). But lack of demand and rising inequality cannot explain the regularity of crises or predict the next one. These theories do not have strong empirical backing either ([Does inequality causes crises](https://thenextrecession.files.wordpress.com/2015/11/does-inequality-causes-crises.pdf)). Professor Heinrich, after concluding that Marx did not have a theory of crisis and dropped the law of profitability, [does offer a vague one of his own](https://thenextrecession.wordpress.com/2015/05/19/the-two-michaels-heinrich-and-roberts-in-berlin-dogmatism-versus-doubt/): namely capital accumulates and produces more means of production blindly. This gets out of line with consumption demand from workers. So a ‘gap’ develops that has to be filled by credit, but somehow this cannot hold up things indefinitely and production then collapses. Well, it is a sort of a theory, but pretty much the same as the underconsumption (overproduction) theory that Heinrich himself dismisses and [Marx dismissed 150 years ago.](http://www.mcg-j.org/swp_arc/english/etheory/economics/eprm29-2.htm) It seems way less convincing or empirically supported that Marx’s own theory of crisis based on the law of profitability. No other theory, whether from mainstream economics or from heterodox economics, can explain recurrent and regular crises and offer a clear objective foundation for the transience of the capitalist system.

#### Inevitable, unpredictable shocks

**Lechner et al. 16**. European Commission, Joint Research Centre (JRC), Institute for the Protection and the Security of the Citizen (IPSC). 10/01/2016. “Resilience in a Complex World – Avoiding Cross-Sector Collapse.” International Journal of Disaster Risk Reduction, vol. 19, pp. 84–91.

In a more and more globalized world we have created unprecedented connectivity, mainly by striving for better business opportunities. But with such a strong global connectivity, the risks associated have also changed: formerly local issues can now have global impact, and systems are often too complex to fully understand their interdependencies. In addition, the speed of change is increasing in many sectors of society and the economy. So we are building a future world with more and more interdependencies of which we understand less and less, and this process is accelerating sharply. This means that we are mixing together the typical ingredients for an upcoming crash, which in the worst case could mean the collapse of society as we know it. To avoid such a scenario, a coordinated effort of public authorities, civil society, industry, and academia will be required. 1. Introduction Predictions about the collapse of society are probably as old as society itself, but only in the last decades has mankind managed to approach – and sometimes even overstep – the planetary boundaries [1,2] in several dimensions, often irreversibly. The scientific approach of modeling human societies on the basis predator (mankind) and prey (planetary resources) [3], also points to the possibility of a large-scale collapse. We often reassure ourselves by noting that all the models used are based on assumptions, that they have many uncertainties, that they only approximate our highly complex reality. Critical analyses of the limits of modeling seem to confirm this [4], and we know that technical models clearly do not take into account our human ingenuity at getting ourselves out of difficulties – but is this reassurance reasonable? Even the assumption that we can define our own future within the planetary boundaries is questioned by critical voices like Russell [5], warning us against the belief in unlimited growth of exponential curves, and drawing drastic conclusions about the future of mankind. Nevertheless, our economic strategies seem to assume continuously greater efficiency in the future and even faster economic growth with literally no limit. This method of forecasting future development by extrapolation from the past is risky in two different ways. Firstly, it does not respect natural limits to growth. These may arise from the limited availability of resources, or from physical boundaries which seemed far away in the past, but now have come into reach. A good example for the latter is Moore's law [6], predicting in 1965 a doubling of the maximum number of transistors in integrated circuits every 12 months. This “law”, adjusted to 24 months in 1975 and confirmed as ‘not going to stop soon’ in 1995 [7,8], remained valid for some 50 years, but it is now at or near its limits [9], imposed by several paradigms of fundamental physics. Although completely new approaches might one day circumvent some of these limits [10], Moore's law simply cannot remain valid for another 50 years for integrated circuits as we currently know them. Secondly, a prediction based solely on experience from the past does not foresee unexpected and potentially disruptive events. The Fukushima nuclear disaster of 2011 and the global financial crisis of 2007–08 are prominent examples of sudden events ending high-flying hopes for controlled risk in energy supply or ever-increasing economic profits, respectively. Looking at the large number of fascinating growth stories from sources like digital industries, Chinese GDP, or investment banking profits, we tend to forget about the fate of the stars from the past when they reached their limits: US automotive industries, Canadian and European cell phone producers or Japanese efficiency champions all have in common that they could not maintain their excellent growth rates for eternity. We need to pay attention to the limits of growth very carefully when looking at the long-term resilience of our global society. 2. Objectives We will show that globalization and the digital revolution have led to more interdependencies, higher complexity and rapid acceleration of change in most sectors of our societies and economies. For this reason, the long-term resilience of a nation, a region or an industry cannot be considered any more as a confined matter that has little to do with the global environment. We will demonstrate by several examples from the recent years that interconnection, complexity and acceleration thereof as ingredients of globalization and digitization have increased the risk of major shocks, propagating not only inside but also across individual sectors, and to society as a whole. We will show that there are strategies to limit this risk but also show that these strategies could not have been implemented successfully so far in our current economically driven environment. During the discussion we will look at two important concepts which are relevant to resilience, but are not at the center of the attention of our growth-oriented efforts today: fairness, which is important to avoid tensions within societies, and risk transfer, which in many examples seems to flow from the better-informed expert stakeholders to the less-informed parts of our society. We make a number of suggestions as to how science can support policy decisions in a highly complex world. We also propose a radically different pattern of business incentives, aimed at taking some steps towards improving fairness, at decoupling economic growth from consumption and above all at making risk-taking at someone else's expense less attractive. 3. Methods Although there is abundant literature about resilience, sustainability and risk, there are very few scientific discussions of hyper-complex issues spanning multiple sectors of our societies, policies and economies. The notion of so-called post-normal science, introduced by Funtowicz and Ravetz [11], is a step in the direction of understanding complex systems at the borderline between science and policy, but it only gives theoretical backing rather than direct guidance. More on the practical side, Taleb [12] provides many important examples, including valuable considerations on the human inability to assess risks correctly in complex environments. The issue of the human mind often being misled is also underlined by Spiegelhalter [13], showcasing several disruptive events with economic or health impact. Because resilience and sustainability are typically discussed in communities focused on the business perspective (such as re-insurance companies), at the national level (governments), or in a particular community (e.g. the civil protection community), there is no obvious forum for a broader scale discussion at supranational level, connecting economic, political and societal dimensions. We started such a dialog on the work of the European Commission's Joint Research Centre (JRC), when around 2012 we realized that the typical crisis management activities are related to civil protection, but the predominant crisis of these years was the financial crisis, in which the JRC was performing completely different activities such as modeling the probabilities of bank failure or assessing the trends and issues in public finances of Eurozone Member States. From the idea of resilience cutting across sectors and being relevant in many places, we identified many sectors in society, policy and economy where resilience matters, and documented them in an overview report [14]. In a series of related workshops and conferences we discussed the facets of resilience with the stakeholder community and gathered valuable insights. In a 2014 workshop on 'Thinking the impossible' at the JRC in Ispra, Italy, we looked at risks that sound highly unlikely but could be devastating. At the Global Risk Forum 2014 in Davos we ran a dedicated session on risks across sectors of society. At the European Climate Foundation in Brussels early 2015 we followed up on the matter, and at a big conference of the European Commission in September 2015 (also in Brussels) we had a plenary presentation on resilience, complexity and risk across sectors of society. Finally, in joint session of the International Council of Science (ICSU) and the JRC at the World Science Forum of November 2015 in Budapest we discussed resilience in a changing world. The findings and conclusions of these workshops and conferences are presented in this article. 4. Results 4.1. Increased dependencies across sectors Crises can spread globally, and in our modern world they can easily also impact business sectors that at first glance do not seem exposed. In the following section we will show examples of how effects can hop from the digital world into the finance sector, from finance to government, on to geopolitics, to energy and finally to societal stability. The related damage in each hop amounts to several billions. Although the examples listed are not connected, in the future we might see cross-sector cascading effects. 4.1.1. From digital to finance In the digital world, computer viruses can cause damages in the millions, but these damages are usually distributed over a very large number of users and businesses. Other digital risks strike more centrally: high-speed trading algorithms, making autonomous decisions at the stock exchanges in milliseconds, caused the so-called flash crashes at the New York Stock exchange in 2010 and at the Singapore stock exchange in October 2013, with the latter reportedly wiping out 6.9bn USD [15]. It took more than four months to analyze the reasons behind the 15-min New York crash, and the report by the US authorities came to the conclusion that there was no clearly identifiable root cause that sparked the crash. They considered the events 'an important reminder of the inter-connectedness of our derivatives and securities markets' and stated that they 'clearly demonstrate the importance of data in today's world of fully-automated trading strategies and systems'[16]. Although many stocks rebounded right after the dip, the reaction of software algorithms could easily have ruined companies, and in Singapore some stocks lost 87% of their value. Safeguards were consequently installed in the systems of the stock exchanges, but other unpleasant and new surprises might come from different directions: high-frequency trading, for instance, can be vulnerable to the effects of solar storms [17], but not all financial institutions are aware of these very indirect effects: originating on the surface of the sun, solar outbreaks can create electromagnetic disturbances strong enough to take out the GPS signal, which is widely used for time synchronization in financial trading. 4.1.2. Financial to economic After the collapse of Lehman Brothers in 2008, a major shock went through the US banking system. Not only the US housing market had gone sour, but credit default swaps had been spread all over the globe – and a cascade of repackaged and distributed risk started, jumping the Atlantic Ocean easily and hitting EU banks. Some of these were hit so hard that they had to be bailed out by their governments, so the risk continued in the governments. Some EU governments needed central support, and the EU used the opportunity to overhaul its financial system. Nevertheless, the governments of eleven EU Member States resigned or were ousted over the crisis, some of them several times (Latvia and the Czech Republic in 2009, Ireland, Portugal, Greece, Italy and Spain, in 2011, Romania, the Netherlands, and Italy again in 2012, Slovenia in 2013, Italy a third time and France in 2014 and Portugal in 2015). The link between the US banking sector and EU government stability is obvious in hindsight, but very few if any observers had noted it before 2007. More obvious is the link from government to geopolitics. The Arab Spring gave rise to unstructured power relations and laid the ground for extremism and radicalism. Ukraine's attempt to sign an association agreement with the EU led to massive demonstrations and a regional political crisis, including a (civil) war. The civil war in Syria, ongoing since more than five years, has destroyed stability and economy in the region. And we recently saw in the gas supply discussions between Russia, Ukraine and the EU that geopolitics links to energy. It took a well-prepared last-minute effort to conclude a gas supply deal, which finally was agreed only shortly before winter, during the last days of October 2014. 4.1.3. Energy to society Energy is at the core of the economic development of many countries, and the power grid has become an indispensable critical infrastructure. A fictional but well-researched scenario on what the world would look like after a widespread collapse of the power grid is available in the book by Elsberg [18]. Elsberg considers an IT-based collapse, but that is not the only hazard to the power grid: several reports and studies on severe space weather suggest that this too could cause major damage, up to USD 2.6 trillion in the first year in the US alone [19,20]. In addition, energy has an obvious relation to climate policies, to the real economy and even to digital processes: modern computing centers depend on energy availability, and new digital concepts like the blockchain [21] of the bitcoin currency even exploit the obstacle of not being able to calculate highly complex matters without consuming significant energy [22]. There are numerous other examples where sectors that were reasonably independent in the past are now coupled across the globe. E. coli contaminated food traveled all across Europe. Pandemics like SARS or bird flu spread through intercontinental travelers. Ebola cases were spread by infected passengers from Africa to Europe and to the US; the disease was only contained through a major international initiative. All these examples show clearly that not only has the interrelation between sectors increased, but also the complexity of interdependencies in financial markets, of energy grids, of high-speed trading algorithms, of the food chains, of environmental changes and of global travel has grown hugely. Indeed, in many cases we only perceive these interdependencies after a major perturbation, and there is no agreement on what body or institution has the responsibility for identifying, monitoring, and controlling the risks created. The context of change is formally given a global perspective by the Global Risks Report 2016[23], which draws attention to ways global risks could evolve and interact in the next decade. The top five global risks in terms of likelihood are ranked to be: 1. large-scale involuntary migration; 2. extreme weather events; 3. failure of climate change mitigation and adaptation; 4. interstate conflict with regional consequences; and 5. major natural catastrophes. The report's Global Risks Interconnectedness Map 2016 shows strong interconnections across sectors, e.g. between environmental and societal risks (failure on climate change and water crises), but also across societal, geopolitical and economic risks (with strong links from state collapse to migration and between social instability and unemployment). 4.2. Increased complexity of systems and processes The financial crisis has brought to our attention that the lending relations in the interbanking market have become highly complex [24], which decreases systemic resilience. Haldane and May [25] identify modularity as a key feature for the topology of a stable financial system, as it helps limit contagion. Typically, one would expect that a good connectivity in financial networks allows for a sound distribution of risk, but Battiston et al. [26] have shown that in the presence of a financial accelerator (which we clearly had in the financial crisis, where the robustness of an entity was strongly assessed on the basis of its past trend) this only holds until a certain threshold is reached. Over the threshold, additional connectivity turns counterproductive and creates a pernicious feedback loop, increasing individual and systemic risk. The situation during the financial crisis was even worse than that depicted by the theoretical approaches. Little was known about the real connectivity in the banking system. Rumors about new candidates for bankruptcy were traveling fast, and the biggest unanswered question about the distribution of debt was literally: 'Where is the money?' In addition, banks were rushing to pass on questionable debt for as long as it was still possible, creating a dynamism which could not be controlled easily. The failure to understand the complexity of the market is perhaps depicted most prominently by the fact that the German KfW Bank transferred 320 million Euros to Lehman on Monday, September 15th, 2008, the very day Lehman collapsed. Luckily for the KfW, the majority of the sum was recovered later [27]. But the financial markets are just one example of a sector that has become so complex that we simply do not understand it anymore. The fact that we have also lost track of the details of our food chain became obvious when in 2011 the European E. coli bacteria outbreak caused several fatalities in Germany and beyond, and a frantic search for the origin started. Due to the precautionary principle, also suspect traces had to be addressed, resulting in Spanish cucumbers being wrongly identified as contaminated with E. coli. This led to reported weekly Spanish losses of 200 million Euros [28] due to the decline in consumer trust, whereas finally bean sprouts of completely different origin were identified as the root cause for the E. coli outbreak, although even this was contested. The issue showed how little we know about the origin and stopovers of our food. Another less damaging but unexpected complexity could be observed after the Fukushima nuclear disaster, when Ford Motors in the US and other international car makers could no longer produce models in a particular metallized black [29] due to a shortage in the Xirallic® pigment, produced by Merck plant near Fukushima, which had been affected by the catastrophe. (Note that strong impact from Fukushima also arrived on the other side of the planet, when the German government issued its Energiewende policy to abandon nuclear power as a consequence of the disaster in Japan.) This example shows that it is not only in the food sector that the complexity of supply chains has grown beyond our comprehension. The power grid is another infrastructure which has become so complex that we do not fully understand it anymore. On 4 November 2006, the cruise ship Norwegian Pearl was planned to make its way on the German river Ems to the North Sea, requiring a shutdown of a 380 kV power line across the river for safety reasons. Although a routine operation, this shutdown resulted in cascading effects all across Europe, leaving an estimated 15 million households in Germany, France, Italy, Belgium, Spain, and Portugal without power for more than an hour [30]. These examples show that our technologically driven world has developed structures and processes that cannot be fully understood or easily modeled anymore. Even if we had the time to carefully analyze this, it would not be very helpful: reality is moving on, and complexity is added on a daily basis. In a competitive world with tightly fought margins we cannot expect the complex processes to be stable over time. The opposite is true: the speed of change is even increasing in many domains. 4.3. Acceleration of interconnectedness and complexity The exponential growth of Moore's law has boosted performance and minimized the size of microelectronics. The availability of ever smaller and more powerful digital technologies has also accelerated other areas such as climate modeling, agriculture, industry automation, material sciences, genetics, economic assessment, finance, transport, construction and many other sectors. In addition, modern information technology has created a wealth of business opportunities for the digital economy. Smartphones put the information of the internet at our fingertips, social networks arose, satellite navigation systems helped with orientation and timing, digital imaging and new sensors gave us a better picture of the world, and all of these results can be joined into what we call big data. In December 2015 the international science community, Science International, published a joint statement, on Open Data in a Big Data World: An international accord[31]. They identified the opportunities and challenges of the data revolution as today's predominant issue for global science policy and proposed some fundamental principles, noting that the scientific community has a distinctive voice. The acceleration of all of these sectors has also changed many business models, which has two negative consequences for the resilience of modern society. Firstly, there is a stronger dependency of almost all of the processes of our daily life on very few players, and secondly – though associated to the first effect – we can observe a more and more uneven distribution of profits, leading to tensions in societies. Dependency has been created by new concepts such as Information as a Service (IaaS) or Software as a Service (SaaS), binding customers to suppliers in a far stronger way than the traditional model of producing and selling. Ten years ago we would buy a CD and own it, whereas today we need to sign up to music platforms which provide us with the desired content – and monitor our behavior continuously. The associated business models are pushing into other sectors of industry. Traditional companies in the automotive sector have to face competition from IT companies developing autonomous driving, thereby harvesting even more data. E-books are so convenient that hardcover and paperback revenues are sharply declining, non-digital photography has almost disappeared and smart phone apps are replacing travel agencies and taxi companies. This digital acceleration might be creating more choices for the customer, but comes at the price of dependency on very few digital players. In addition to this dependency, which is detrimental to resilience, there is a mid-term issue with wealth distribution: the agreed measure for macroeconomic growth is still GDP, which does not contain any fairness component. So we are striving for economic growth, sometimes also for inclusive growth, but not necessarily for a fair distribution of growth. An example illustrates the differences: from 2007–2015, a period covering the financial crisis, the OECD countries on average experienced moderate growth in terms of GDP [32], but the general aggregate is not telling a lot. The GDP per capita of different countries developed quite differently, and in 2015 Germany and Greece were at 107.65% and 76.75% of their 2007 values, respectively. This created significant political tensions, and is not expressed in monitoring the aggregate OECD total (which is 106.45%). But the problem also exists at national level: the majority of EU households might not agree on having experienced any economic growth since 2007, but would rather recall austerity measures, income cuts, and tax increases. The growth measured must therefore have arrived in other places – but we do not have detailed, up-to-date statistics on this. Some evidence originates from a study [33] of the European Central Bank (ECB) in 2013, comparing the mean and the median values of household wealth in the Eurozone and coming to the conclusion that fairness has suffered. Germany's households, for example, are on average (mean) comparably well-off, but the difference between the mean household wealth and the median one is the largest in Europe, indicating significant unfairness in the detailed distribution. A very clear analysis of the ECB study can be found in [34]. In addition to potential tensions in society, the risky business models leading to uneven distribution are undermining resilience even further. We were reminded during the financial crisis that our modern world is targeted at short-term profit, possibly at the expense of the system, and that governments have to intervene if society is not to end up paying the price of excessive risk taking by comparably few market players.. This strategy of leaving behind the risk for the bank (or afterwards for the government and for society) should have been known well since February 1995, when Barings Bank, the oldest UK merchant bank, was brought down by a single rogue trader [35]. But in a fierce global competition every penny counts, and we cannot expect our job-creating entrepreneurs to give way to competitors for fairness's sake. Production lines of companies are transferred for profitability reasons from Central Europe to Eastern Europe, later to China and from there to Vietnam. Domestic jobs are lost and costs are being saved, while dependencies rise and unfairness increases. So a certain share of the digital revolution may just be a silent conversion of thousands of jobs into an enormous cash flow towards the few big digital shareholders. The evolution of wealth distribution in the US is very telling, and the perceived rule of billionaires has even been exploited with some success by Bernie Sanders in his 2016 US presidential candidature campaign for the Democrats. Europe also needs to monitor its trends very carefully. The situation of many young Greek graduates without a job, in combination with loopholes for the wealthy in the national tax regime (or its enforcement) has already created massive tensions, led to government changes and to discussions with EU partners, put pressure on EU solidarity and weakened EU resilience during the financial crisis. 5. Discussion 5.1. Current situation When analyzing the resilience of our modern and complex society, we start from the UNISDR Terminology on Disaster Risk Reduction [36], defining resilience as 'The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.' The United Nations’ definition has an important addendum, expressed by the following note: 'Resilience means the ability to “resile from” or “spring back from” a shock. The resilience of a community in respect to potential hazard events is determined by the degree to which the community has the necessary resources and is capable of organizing itself both prior to and during times of need'. This notion of springing back from a shock is nicely expressed as 'Why things bounce back' by Zolli and Healy [37], who formally define resilience as 'the capacity of a system, enterprise, or a person to maintain its core purpose and integrity in the face of dramatically changed circumstances'. For a resilience assessment we therefore need to understand both the change we are exposed to and our capability to cope with it. Are we already living in dramatically changed circumstances, are dramatic changes just ahead of us, or will there be a dramatic change only at a more distant point in the future? Comparing the world of today with the world in the late 1980s, we can see huge differences, e.g. in globalization and in digitization, but there are also many areas that have remained comparably stable, such as peace in Central Europe, the economically strong position of the US, the mechanisms of the United Nations, or the simple fact that the majority of our cars still run on four wheels and are fueled by hydrocarbons. Dramatic changes there have been, but often not arriving with a big bang, but silently inserting themselves into our daily lives (e.g. the internet). The process is continuing and accelerating. Our capacity to 'bounce back' – or more formally to cope with dramatic change – is also difficult to assess. There is no formally agreed measure for resilience that could serve as a benchmark, but we have created powerful political processes to cope with change globally, such as the Sustainable Development Goals [38], the Paris Climate Agreement [39], or the global Sendai Framework for Disaster Risk Reduction 2015–2030 [40]. The latter includes in its Priorities for Disaster Risk Reduction, the statement 'Enhancing disaster preparedness for effective response, and to ‘Build Back Better’ in recovery, rehabilitation and reconstruction'. The Sendai Conference included a session on Disaster Risk in the Financial System which concluded that, by 2020, 1-in-100 and 1-in-20 risk analyses should be developed to enable the understanding of levels of resilience across all capital and support the adoption of standards by global regulators. These international agreements were all made in 2015 but it is notable that all of these instruments and procedures were the culmination of decades of work. The Paris agreement (called COP21 because it was signed at the 21st annual meeting of the Conference of the Parties of the UNFCCC) was preceded by the Kyoto [41] climate agreement of 1997 and its Doha amendment [42] of 2012. The Sendai Framework was preceded by the 2005 Hyogo Framework for Action [43]. The sustainable development goals were preceded by the original Millennium Development Goals [44] of 2000. Altogether, the international community has been working on resilience for at least 20 years in quite a determined way. Nevertheless, while global agreements on resilience and sustainability have been concluded over the last 20 years, the exploitation of resources has continued, and our remaining planetary reserve has been depleted more and more. Significant economic development took place and growth was achieved in many regions of the world, including places like China, Brazil, India and South Africa, the OPEC countries, Southeast Asia, but also in Europe, Australia and in North America. However, much of this growth was accompanied by massive exploitation of natural resources, often associated with major catastrophes. Offshore drilling created disasters like the Deepwater Horizon incident with an estimated settlement of approximately $7.8bn [45]. Massive irrigation caused a significant loss of natural water reservoirs and dried out the Aral Sea [46], and biodiversity is decreasing at a speed that made Chapin et al. [47] request the establishment of a new international body to assess changes in biodiversity already in 2000. Our complex technology has created nuclear incidents with global impact, such as the Fukushima meltdown in 2011. Even our technological progress in successfully exploring space has left so much space debris behind that it will jeopardize the success of future missions, and Hall states in [48]'… the space community is realizing that the failure to solve the problem would be disastrous.'. The role of media in these changes is complex, but important. On the one hand the mass media, often powered by an explicit political agenda, can choose to sensationalise some aspects of global risks while concealing others, thereby aggravating the problem and making it more difficult for society to find solutions; on the other hand the media – especially modern social media – can create awareness and encourage solutions. In modern democracies there should be no compromise with the principles of free speech, even where the effect may be destructive; but responsible media leaders, journalists and other commentators can be encouraged to understand the risks and help towards mitigating them. Other important factors are known but cannot be reliably predicted: the geopolitical power balance, the strength of the influence of supranational organizations and institutions, or the power of the civil society play an important role when assessing the risk of societal collapse. The authors acknowledge that these factors – as well as other drivers such as cultural, religious or historical developments – should be considered in a comprehensive assessment but go beyond the scope of this article. 5.2. Key questions Starting from the above definitions, the key questions when looking at the resilience of our current societies are (i) how much flexibility do we have left, and (ii) how can we carry on from today. It seems particularly with regards to global energy needs that whatever coping capacity is left on our planet (e.g. shale gas or nuclear fusion energy) will either be exhausted very soon or contribute to a further acceleration of the negative effects. Therefore, unless we can decouple growth from the use of resources, we are heading for, at worst, a crash, or at best an unpleasant downward spiral, even though currently the slope is still pointing up. Ehrlich [49] concludes that our modern society has a different risk of collapse than former societies which collapsed locally or regionally only. He claims that complex, multi-level systems may be better able to cope with complex, multi-level problems, but we fear that this statement only holds up to a point where the complexity of systems itself becomes an additional risk. Carrying on from today is even more difficult. Our short-term thinking often limits our vision to the next few years, and although we could still change course, we rather exercise ourselves in denial and promises of continuous and never-ending growth, missing the point that even the growth we are experiencing today is more and more unfair and therefore already eroding our social solidarity and, as a consequence, our resilience. Diamond [50] has analyzed the differences between today's dangers and the dangers that past societies faced, and identified twelve main problems specific to the world of today, including inequality. He also researched why many of the formerly ruling societies failed to recognize that big problems were looming up before they fell, and concludes that this reflex of denial has not changed over the centuries. We enjoy the speed and acceleration – but can we distinguish between the thrust of the engine and the free fall as we go over the cliff? Currently we simply try to outperform each other on speed, and leave it at that. The interconnectedness, complexity and acceleration of our modern society have brought us to the limits of exponential growth and have simultaneously exhausted the resources of the planet in several dimensions, weakening our resilience. To capitalize on what is left of it, a major rethink in society is required. In a fierce global competition such reconsideration will clearly not happen on its own, but needs to be accomplished by the right incentives to avoid unnecessary interconnectedness, reduce systemic complexity and slow down an acceleration that cannot be maintained forever anyway. But how can we achieve this? Key elements for accomplishing this challenge will be decoupling growth from consumption, introducing more fairness into the system and identifying and mastering risk. Especially this last requires a better understanding of risk in our complex systems, especially if there is a risk of major systemic failure. In addition, we need to prevent the transfer of systemic risk to less knowledgeable stakeholders (the general public, the taxpayer, etc.) not connected with the original transaction in which the risk was created. 5.3. Suggestions for a way ahead We therefore suggest three initiatives to lay the ground for an economy and society aiming at sustainable wealth rather than chasing for unrealistic never-ending growth, turning from a continued depletion of resources to a resilient continuum. The initiatives are not meant to suffocate or kill the economy but to move it rapidly from a destructive and short-term mode to a long-term healthy equilibrium. This might sound ambitious, and might be perceived as threatening by the homo economicus of our modern days, but any profit-oriented activity has long had to consider political side constraints, and moving the incentives to different objectives will only regulate markets in the desired direction, not abolish them or move to socialism. History shows that with the right incentives a single human generation is sufficient not only to turn the mindset of modern society but also to create a highly competitive technology position in the markets. Between 1970 and 2000, environmental thinking in Europe and in the US was fostered by regulators, civil society and industry altogether, and created new markets and green growth to the benefit of nature. Another example, still ongoing, is the global effort on CO2-reduction and climate change agreements, which started roughly 15 years ago and has made significant progress with the COP21 agreement of 2015. Science will have to play an important role in this respect, and a number of international initiatives with scientific involvement have already been started in the related area of sustainability. The International Council for Science (ICSU), UN agency partners and other non-governmental organizations including the International Social Sciences Council, Sustainable Development Solutions Network and Science and Technology in Society Forum, with the World Business Council for Sustainable Development (WBCSD) as an observer, have created a new global research program Future Earth: Research for Global Sustainability[51]. The goal is to provide the knowledge required for societies in the world to face risks posed by global environmental change and to seize opportunities in a transition to global sustainability. The Integrated Research on Disaster Risk Programme (IRDR) [52] (focusing on 'natural' hazards) is another approach to research on disaster risk through an international, multidisciplinary (natural, health, engineering and social sciences) collaborative programme. The Program has created IRDR International Centres of Excellence such as one on Vulnerability and Resilience Metrics and another on Disaster Resilient Homes, Buildings and Public Infrastructure. Another newly-started research programme, recognizing the importance of the urban scene and health is Urban Health and Wellbeing[53], which is an interdisciplinary research effort whose overall aim is to generate policy-relevant knowledge that will improve health status, reduce health inequalities and enhance the well-being of urban dwellers. It will focus on systems approaches to address the complexity of urban issues and their influence on health. The International Council for Science is working with UN agencies to bring together the science from these three international research programs in an integrated way to provide advice to the Climate Convention, the Sendai Agreement, the Sustainable Development Goals and other international issues. The next thirty years should be sufficient time to instill a sustainability and resilience philosophy into policies, civil society and the economy – turning from unfair growth to healthy growth. The start of any such initiative could even bring direct economic benefits: The World Business Council for Sustainable Development identified significant business opportunities in sustainability, and underlines the importance of being first in the green race [54], and first business models in creating a sustainable future have already emerged [55]. This means we have arrived at a point where not acting might make us fall behind. With the right political, economic and societal incentives, resilience will pay off, whereby it will no longer be economically viable to go for extreme risks (as the consequences could not be passed on to others). The following three suggestions by the authors are meant to support a sustainable and resilient society, and are derived from the analysis above: (1) Cut down interdependencies by putting incentives to avoid business models which – create unnecessary global interdependencies, – do not create local jobs (or no jobs at all), – force people to move, – limit customer choices and flexibility without a need, – exploit the weakest parts of society. (2) Reduce complexity by putting incentives to avoid business models which – create unnecessarily complex procedures, – transfer risk into remote places, to the taxpayer, or to less knowledgeable parties – gamble on rights not being enforceable, – exploit taxation loopholes or taxation enforcement weaknesses. (3) Stop the acceleration of interconnectivity and complexity by putting strong economic incentives for simple business models creating local or community benefit. Research can make a major contribution to setting the right incentives, as nowadays many traditional concepts are not fit for purpose, and new ways of measuring resilience, fairness and sustainability need to be established. We therefore suggest developing a scientifically solid measure for fair GDP (FGDP) as an internationally acknowledged benchmark for growth to avoid extreme inequality and tension in societies. In addition, initiatives to measure resilience of societies in their multidimensional facets, trying to identify drivers of fragility as well as tipping points for slowly increasing instability, are recommended. 6. Conclusion The world has come to an unprecedented status of interconnectedness and complexity, both growing at an enormous speed, and it urgently requires a transition from short-term thinking to sustainable resilience. Such a change needs to be triggered by the right political, economic and societal incentives. There are clear ways ahead, but they need to be accompanied by organized support from the stakeholder groups involved. It will require a joint effort of public authorities, civil society, industry, and academia to lead the global transition towards a resilient society, offering fair long-term growth in a healthy and sustainable societal equilibrium.

#### Holistic modelling

Hickel and Kallis 19 (Jason Hickel - Professor @ Goldsmiths University of London specializes in development, finance, democracy, violence, and global political economy, PhD in Anthropology at the University of Virginia. & Giorgos Kallis- ICREA Professor in Environmental Sciences, PhD in Environmental Policy and Planning from the University of the Aegean in Greece , 4-17-2019, Taylor and Francis, “Is Green Growth Possible?” <https://doi.org/10.1080/13563467.2019.1598964> accessed: 7-14-2019 \*\*graphs are in the middle of text due to their placement in article, but I completed separated words and removed fragments) //bp

Carbon Emissions – Is Growth Compatible with the Paris Agreement? Unlike with resource use, there is a steady long-term trend toward relative decoupling of GDP from carbon emissions, and we know that absolute reductions in carbon emissions are possible to achieve. When it comes to climate change, however, the objective is not simply to reduce emissions (a matter of flows), but to keep total emissions from exceeding specific carbon budgets (a matter of stocks). For green growth theory, then, the question is not only whether we can achieve absolute decoupling and reduce emissions, but whether we can reduce emissions fast enough to stay within the carbon budgets for 1.5°C or 2°C, as per the Paris Agreement, while still continuing economic growth. A number of high-income countries have seen declining emissions in the twenty-first century, despite continued economic growth. Figure 4(a) shows declining emissions in the US and EU28, in both territorial and consumption-based terms, from 2006 to 2016 (i.e. absolute decoupling). However, emissions from the global South have continued upward, albeit at a slower rate than GDP (i.e. relative decoupling). China’s emissions declined slightly between 2014 and 2016 (a brief period of absolute decoupling), before growing again in 2017. On a global level, CO2 emissions have increased steadily, falling only during periods of economic recession (Figure 4(b)). Global emissions did level off in 2015 and 2016 while GDP continued to rise, prompting the International Energy Agency, a research arm of the OECD, to announce ‘Decoupling of global emissions and economic growth confirmed’ (IEA 2016), while media outlets celebrated ‘peak emissions’ (Meyer 2016). This news briefly came to constitute a key element of optimistic green growth narratives, until global emissions began to rise again in 2017 (1.6 per cent) and 2018 (2.7 per cent). Analysts attribute the temporary plateau to a shift in China away from coal and (mostly) toward oil and gas, and a shift in the US to natural gas.5 Once these shifts were complete, continued economic growth drove emissions up again. Overall, global carbon productivity has been slowing. World Bank data shows that carbon productivity (CO2 per 2010 $US GDP) improved steadily from 1960 to 2000, with decarbonisation happening at an average rate of 1.28 per cent per year (relative decoupling). However, from 2000 to

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2014 there was no improvement in carbon productivity – in other words, not even relative decoupling has been achieved in the twenty-first century.6 High-income nations have done better, at least in terms of territorial emissions (the World Bank does not track consumption-based emissions), but even so progress has slowed, from an average rate of 1.91 per cent per year from 1970 to 2000, down to 1.61 per cent per year from 2000 to 2014. Existing trends are incompatible with the Paris Agreement targets. Business-as-usual is set to lead to 4.2°C of warming (2.5°C to 5.5°C) by 2100. Even with the Nationally Determined Contributions and Intended Nationally Determined Contributions under the Paris Agreement, global warming is still projected to reach 3.3°C (1.9°C to 4.4°C) – an improvement over the BAU scenario but still far exceeding the 1.5°C and 2°C thresholds.7 In order to keep warming below these thresholds, the world will have to make much more aggressive emissions reductions. The IPCC’s Fifth Assessment Report (AR5) includes 116 mitigation scenarios that are consistent with Representative Concentration Pathway 2.6 (RCP2.6), which offers the best chances of staying below 2°C. All of these scenarios are green growth scenarios in that they stabilise global temperatures while global GDP continues to rise. Rising GDP is a built-in feature of the Shared Socio-Economic Pathways (SSPs), which form the basis for the IPCC mitigation scenarios (Kuhnhenn 2018). AR5 warns, however, that these scenarios ‘typically involve temporary overshoot of atmospheric concentrations’ and ‘typically rely on the availability and widespread deployment of bioenergy with carbon capture and storage (BECCS)’ (2014, p. 23). Indeed, the vast majority scenarios for 2°C (101 of the 116) rely on BECCS to the point of achieving negative emissions.8 BECCS entails growing large tree plantations to sequester CO2 from the atmosphere, harvesting the biomass, burning it for energy, capturing the CO2 emissions at source and storing it underground. Relying on these ‘negative emissions technologies’ allows for a much larger carbon budget (about double the actual size) by assuming that we can successfully reduce global atmospheric carbon in the second half of the century. BECCS is highly controversial among climate scientists. It was first proposed by Obersteiner et al. (2001) and Keith (2001) at the turn of the century. IPCC modelling teams began including it in their scenarios from 2005, despite having no firm evidence of its feasibility. With the publication of AR5, BECCS was enshrined as a dominant assumption. Obersteiner has expressed alarm at the rapid uptake of his idea; he considers BECCS to be what he calls a ‘risk-management strategy’, or a ‘backstop technology’ in case climate feedback loops turn out to be worse than expected, and says the IPCC has ‘misused’ it by including it in regular scenarios to take pressure off of conventional mitigation pathways (i.e. emissions reductions) (Hickman 2016). In Keith’s (2001) initial formulation of the idea, he noted that while ‘measured use’ of biomass could help mitigate environmental problems, ‘large scale use of cropped biomass will not.’ Anderson and Peters (2016) point out that the ‘allure’ of BECCS is due to the fact that it allows politicians to postpone the need for rapid emissions reductions: ‘BECCS licenses the ongoing combustion of fossil fuels while ostensibly fulfilling the Paris Commitments.’ There are a number of concerns. First, the viability of power generation with CCS has never been proven to be economically viable or scalable; it would require the construction of 15,000 facilities (Peters 2017). Second, the scale of biomass assumed in the AR5 scenarios would require plantations covering land two to three times the size of India, which raises questions about land availability, competition with food production, carbon neutrality, and biodiversity loss (Smith et al. 2016; Heck et al. 2018). Third, the necessary storage capacity may not exist (De Coninck and Benson 2014, Global CCS Institute 2015). Anderson and Peters conclude that ‘BECCS thus remains a highly speculative technology’ and that relying on it is therefore ‘an unjust and high stakes gamble’: if it is unsuccessful, ‘society will be locked into a high-temperature pathway.’ This conclusion is shared by a growing number of scientists (e.g. Fuss et al. 2014, Vaughan and Gough, 2016, Larkin et al. 2017, Van Vuuren et al. 2017), and by the European Academies’ Science Advisory Council (2018). It is not clear that we can justifiably rely on BECCS, an unproven technology, to underwrite green growth theory. If we accept this point, then we must return to asking whether it is possible to maintain growth without relying on BECCS to stay within the carbon budgets consistent with the Paris Agreement. Without BECCS, global emissions need to fall to net zero by 2050 for 1.5°C, or by 2075 for 2°C.9 This entails reductions of 6.8 per cent per year and 4 per cent per year, respectively (Figure 5). Theoretically, this can be accomplished with (a) a rapid shift to 100 per cent renewable energy to eliminate emissions from fossil fuel combustion (Jacobson and Delucchi 2011); plus (b) afforestation and soil regeneration to eliminate emissions from land use change; plus (c) a shift to alternative industrial processes to eliminate emissions from the production of cement, steel, and plastic. The question is, can all of this be accomplished quickly enough? Only 6 of the 116 scenarios for 2°C in AR5 exclude BECCS. These work by assuming ‘optimal full technology’ in all other areas, plus mass afforestation, and with high mitigation costs. These represent theoretically possible pathways, but without any empirical evidence as to their feasibility. Results of empirical studies are not promising. Schandl et al. (2016) model what might be achieved with aggressive mitigation policies, without relying on BECCS. Their high-efficiency scenario has a carbon price starting at $50 per ton (rising by 4 per cent per year to $236 by 2050) plus a doubling in the material efficiency of the economy due to technological innovations (improving from a historical average rate of 1.5 per cent per year up to 4.5 per cent). Schandl et al provide no evidence for the feasibility of the efficiency improvements that they assume. Even so, the result shows that with global growth of 3 per cent per year, annual emissions plateau to 2050 but do not decline. In this scenario,

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growth in energy demand outstrips the rate of decarbonisation, violating the carbon budgets for 1.5°C and 2°C. The International Renewable Energy Association (IRENA 2018) have modelled a scenario for continued GDP growth compatible with 2°C by relying on a rapid shift to renewable energy (consistent with Jacobson and Delucchi 2011). The scenario requires adding 12,200 GW of solar and wind capacity by 2050, with a dramatic increase in installation rates (2.3 to 4.6 times faster than the present).10 The scenario also requires that the energy intensity of the global economy falls by twothirds (by 2.8 per cent per year, double the historical rate), lowering energy demand in 2050 to slightly less than 2015 levels.11 This is feasible inasmuch as the transition to wind and solar itself improves energy efficiency (Jacobson and Delucchi 2011).12 Still, even this optimistic scenario accomplishes only 90 per cent of the necessary emissions reductions for 2°C (likely because it pays no attention to emissions from land use change and cement production). The model relies on negative emissions technology to cover most of the remainder. Van Vuuren et al. (2018) consider ‘alternative pathways’ for meeting the Paris Agreement targets without relying on widespread use of negative emissions technologies. They model rising GDP in accordance with SSP2. In addition to a carbon tax and other aggressive mitigation strategies, their optimistic scenario includes the following settings: global population peaks at 8.4 billion in 2050 and declines to 6.9 billion by 2100; meat consumption declines 80 per cent by 2050; all new cars and airplanes are efficient from 2025; the world shifts to the most efficient technologies for steel and cement production, etc. Even with these highly optimistic assumptions in place, they find that the pressures of continued growth drive emissions to exceed the carbon budgets for 1.5°C and 2°C, without negative emissions technologies. Another way to approach this question is by looking at projected rates of decoupling. If we assume global GDP continues to grow at 3 percent per year (the average from 2010 to 2014), then decoupling must occur at a rate of 10.5 per cent per year for 1.5°C, or 7.3 per cent per year for 2°C. If global GDP grows at 2.1 per cent per year (as PWC predicts), then decoupling must occur at 9.6 per cent per year for 1.5°C, or 6.4 per cent per year for 2°C. All of these targets are beyond what existing empirical models indicate is feasible. The Schandl et al model indicates that decoupling can happen by at most 3 per cent per year under optimistic conditions. Other models arrive at similar conclusions. Before adopting BECCS assumptions, the IPCC (2000) projected decoupling of 3.3 per cent per year in a global best-case scenario. The C-ROADS tool (developed by Climate Interactive and MIT Sloan) projects decoupling of at most 4 per cent per year under the most aggressive possible abatement policies: high subsidies for renewables and nuclear power, plus high taxes on oil, gas and coal. All of these results fall short of the decoupling rate that must be achieved if the global economy continues to grow at expected rates. Holz et al. (2018) find that if we rule out widespread use of negative emissions technologies, the required rate of decarbonisation for meeting the Paris Agreement is ‘well outside what is currently deemed achievable, based on historical evidence and standard modelling.’ The challenge is even more difficult for rich nations. Anderson and Bows (2011) have modelled the emissions reductions necessary for achieving a 50 per cent chance of staying under 2°C (more relaxed than the two-thirds chance that the UNFCC calls for), without BECCS. They proceed from the principle of ‘common but differentiated responsibility’, whereby rich nations (Annex-1 nations) make more aggressive emissions reductions than poor nations, owing to their greater historical responsibility for emissions and their greater capacity for managing the costs of transition. They assume that Non-Annex 1 nations defer peak emissions until 2025, and thereafter reduce emissions by 7 per cent per year. They acknowledge that these are extremely ambitious assumptions but consider them to be the most feasible compromise between practicality and equity. To stay within the remaining carbon budget, Annex 1 nations need to reduce emissions by 8–10 per cent per year, beginning in 2015. This model was developed with data up to 2010; as the remaining carbon budget is now smaller, Anderson estimates that Annex 1 nations need to reduce emissions by 12 per cent per year.13 If we accept that Annex 1 nations need to achieve emissions reductions of 12 per cent per year, and if we assume that GDP growth in Annex 1 nations continues at 1.86 per cent per year (the average from 2010 to 2014), then decoupling must occur at a rate of 15.8 per cent per year.14 For perspective, this is eight times faster than the historic rate of decoupling in Annex 1 nations (viz., 1.9 per cent per year from 1970 to 2013), and it is important to bear in mind that the rate of decoupling has generally slowed over this period.15 It also exceeds the decoupling rate implied by the average G20 Nationally Determined Contributions under the Paris Agreement (viz., 3 per cent per year) by a factor of five. There is one empirical model that feasibly accomplishes emissions reductions consistent with the Paris Agreement, without relying on negative emissions technologies. Published by Grubler et al. (2018), it was included in the IPCC Special Report on 1.5°C (2018) in response to growing critiques of the IPCC’s reliance on BECCS. The scenario, known as ‘Low Energy Demand’ (LED), accomplishes emissions reductions compatible with 1.5°C by reducing global energy demand by 40 per cent by 2050. In addition to decarbonisation and afforestation, the key feature of this scenario is that global material production and consumption declines significantly: ‘The aggregate total material output decreases by close to 20 per cent from today, one-third due to dematerialization, and twothirds due to improvements in material efficiency.’ Dematerialisation is accomplished by shifting away from private ownership of key commodities (like cars) towards sharing-based models. LED differentiates between the global North and South. Industrial activity declines by 42 per cent in the North and 12 per cent in the South. With efficiency improvements, this translates into industrial energy demand declining by 57 per cent in the North and 23 per cent in the South. The LED scenario projects continued GDP growth at just over 2 per cent per year, which would make it consistent with green growth theory. However, the empirical basis for this GDP trend is not robust. It is derived from the MESSAGE-Globium model, which calculates GDP from only two inputs: labour supply (population size and productivity) and energy. The low energy demand in the LED scenario does not affect growth because it is offset by efficiency improvements. As the model is insensitive to changes in material throughput, reductions in production and consumption do not affect output. The paper offers no evidence that GDP will continue to grow despite such reductions. Charlie Wilson, one of the paper’s authors, acknowledged that ‘we did not consider broader questions of GDP growth or degrowth, and we did not explicitly report relationships between our scenario and GDP outcomes for this reason.’ 16 Conclusions and discussion The empirical data demonstrate that while absolute decoupling of GDP from emissions is possible and is already happening in some regions, it is unlikely to happen fast enough to respect the carbon budgets for 1.5°C and 2°C against a background of continued economic growth. Growth increases energy demand, making the transition to renewable energy more difficult, and increases emissions from land use change and industrial processes. Models that do project green growth within the constraints of the Paris Agreement rely heavily on negative emissions technologies that are either unproven or dangerous at scale. Without these technologies, the rates of decarbonisation required for 1.5°C or 2°C are significantly steeper than extant models suggest is feasible even with aggressive mitigation policies.

#### Price reactions

Winter 12 (Ralph A. Winter is a Professor of Strategy and Business at the Sauder School of Business, University of British Columbia. He is the President of the Canadian Economics Associatio n and the President of the Canadian Law and Economics Association. He is an associate editor for the RAND Journal of Economics. H is the author of “The Economics of Supply Chain Contracting,” “Organizational Form and Quality of Output,” and “Exclusionary Contracts.” “Innovation and the Dynamics of Global Warming,” 2/7/12, https://are.berkeley.edu/documents/seminar/WinterPaper.pdf)//tb

The innovation and development of clean energy sources such as wind and solar energy are emerging as a key strategy in the battle against global warming. The strategy rests on a seemingly obvious proposition: innovation lowers the cost of clean energy, leading to substitution away from fossil fuels, which lowers carbon emissions and mitigates the problem of global warming. The proposition, unfortunately, is false. Innovation in clean energy can set global temperatures on a permanently higher path. The subsidy of innovation, as a naked policy instrument unsupported by carbon pricing, is not merely suboptimal policy. Subsidizing innovation can make global warming worse. To develop the economic relationship between clean-energy innovation and climate change, I start with a paradox familiar to environmental economists. Fossil fuels are an exhaustible resource. Suppose that tomorrow a clean, inexhaustible energy substitute were universally available at a cost equivalent to 60 dollars per barrel of oil. The owner of any conventional fuel deposit with low extraction costs would prefer to sell at 59.99 or less rather than share the energy market with the substitute. Oil from these deposits will therefore be sold before clean energy captures any market share and at lower prices as a result of the innovation. The effect of the innovation in clean energy is that fuel will be exhausted - and carbon emitted – more intensively and at an earlier date. This paradox is that carbon emissions are initially higher as a result of clean energy innovation. 1 As set out in the literature, however, the theory predicts that in the long run clean energy innovation helps in the battle against global warming. Innovation in clean energy has two effects on carbon emissions. First, as in the example above, carbon is released earlier into the atmosphere as a result of innovation. In existing models, this will be left in the ground rather than extracted. Less carbon is emitted into the atmosphere – a clear benefit of clean-energy innovation. The net effect is that the paradox disappears in the long run. The prediction is that innovation eventually works as intended. 2 This prediction is too optimistic. The theory offered here represents carbon in the biosphere via two state variables, carbon in the atmosphere and carbon on the earth’s surface. This allows us to include a fundamental feature of carbon cycle dynamics: positive feedback effects. As greater atmospheric carbon raises the global temperature, reactive ice-yields melt and methane gas is released from melting permafrost (to take just two examples), resulting in a higher *rate* of flow of carbon to the atmosphere. The effect is that an initial increase in carbon emissions that raises global temperature will increase the rate at which carbon escapes from the earth’s surface and accumulates in the atmosphere. Innovation combined with the sufficiently strong feedback effects then yields higher temperature paths not just in the short run but permanently. The acceleration of carbon emissions (the first effect of innovation) may overwhelm even in the long run the benefit of reduced total carbon emissions (the second effect). Because of positive feedbacks, even a small innovation may lead the temperature path to a discretely higher steady- state temperature. Global warming is a long run problem and it is the long run consequences of global warming policies that are critical for policy. The theory here argues against clean energy innovation subsidies as a naked policy instrument. As a component of a portfolio of policies, however, clean-energy innovation subsidies are of value because the other main policy instrument, carbon pricing, eliminates the “dark side” of innovation. To render innovation of value, carbon prices must be reactive to innovation successes – and reactive in a non-obvious way. When a new innovation gives clean energy producers an advantage over conventional energy, a reactive carbon price policy is often one that magnifies this advantage, by raising the tax on fossil fuel use. Fossil fuel producers are hit with a double whammy. Carbon pricing is thus an important complementary instrument to clean energy innovation, being necessary even to ensure that the net impact of innovation is positive. This complementarity is not well understood among policymakers. With carbon taxes seemingly impossible to implement given U.S. politics, clean-energy research and development is becoming the focus across a range of the political spectrum. 3 Support for the policy trend presupposes that carbon pricing and clean energy subsidies are substitutes in the battle against global warming. This is natural assumption, given that these are two instruments available to solve the same problem, but the assumption is misguided. Carbon pricing is even more essential when clean energy innovation is successful than when it is not. This paper contributes to a growing literature on global warming and an earlier literature on exhaustible resource economics. The clean energy paradox, or green paradox, in terms of the impact of innovation described is developed in Strand (2007) and very clearly in Hoel (2008) as discussed in footnote 1. Acemoglu et al (2011) develop a dynamic model integrating the economy with climate change in which the driver of policy design is endogenous technical change. These authors assume a constant rate of environmental regeneration. This assumption would allow the environment to recover completely from any past damages if the rate of emissions could be reduced sufficiently. It is never too late to recover.

#### Financialization

Nafeez M. Ahmed 17, Executive Director of the Institute for Policy Research and Development, *Failing States, Collapsing Systems: BioPhysical Triggers of Political Violence*, 2017, pp. 28-30

Despite the verdict of BP to the effect that a significant decoupling between energy production and economic growth is already taking place due to increasing energy efficiency, finer-grained studies looking closely at the relevant data come to quite different conclusions. BP has argued that energy intensity, the quantity of energy required per unit of GDP, will decline by 36 % from 2012 to 2035 (Kaminska 2014 ). Outside of the oil industry, the jury is still out on whether decoupling in this form can actually take place. An independent econometric study in Energy Economics finds instead “that the growth of per capita energy use has been primarily driven by economic growth, convergence in energy intensity, and weak decoupling. There is no sign of strong decoupling” (Csereklyei and Stern 2015 ). The most compelling critique of the decoupling mythology was published in the Proceedings for the National Academy of Sciences , which found that data used to claim success in decoupling ignored the role of resource consumption in the expanding role of international trade. Using a consumption-based indicator of resource use known as a Material Footprint (MF) framework, the study found that: “Achievements in decoupling in advanced economies are smaller than reportedor even nonexistent… countries’ use of nondomestic resources is, on average, about threefold larger than the physical quantity of traded goods. As wealth grows, countries tend to reduce their domestic portion of materials extraction through international trade, whereas theoverall mass of material consumption generally increases. With every 10 % increase in gross domestic product, the average national MF increases by 6 %” (Wiedmann et al. 2015 ). Indeed, analyses like that of BP’s ignore extensive evidence that economic growth, to the extent that it has been able to continue, is being driven largely by an increasing availability of cheap credit—rather than any fundamental and permanent transformations in energy intensity. The ratio of global debt, excluding financial institutions, has grown from 175 % of global GDP on the eve of the 2007/2008 fi nancial crisis to 210 % today. Cheap credit has enabled excessive borrowing, risk taking and sharply rising asset prices, driving the same form of unsustainable debtdriven growth that partly led to the 2008 fi nancial crash (Stewart 2015 ). For this reason, the seeming decoupling between energy production and GDP growth detected by analysts at BP and elsewhere is illusory, and conceals the extent to which growth, especially since the 1970s, has been premised increasingly on the financialization of the economy through the creation of new instruments of credit creation to permit extensive leveraging. Such debt-driven growth, however, by accelerating debt and socializing the costs in the event of a financial crisis onto general consumers, while protecting the financial institutions most responsible for debt-generation. In the energy sector, as oil prices have slumped, growth has increasingly been driven by debt. Oil majors ExxonMobil, Royal Dutch Shell, BP, and Chevron hold a combined net debt of $184 billion, more than double their 2014 debt levels (Williams and Olson 2016 ).

#### Supply chains

Guillaume Pitron 18, M.A. in International Law from the University of Georgetown, French journalist and documentary maker for France's Leading Television Channels, 10/30/18, “The energy transition will be a metallic one,” https://www.linkedin.com/pulse/energy-transition-metallic-one-guillaume-pitron?articleId=6463071096034983936#comments-6463071096034983936&trk=prof-post

From December 3rd to 14th, the world will have its eyes set on Katowice. The 24th United Nations Climate Change Conference (COP 24) will take place in this southern Polish city. Green Climate Fund (GCF) subsidies, carbon trading mechanisms, precise deadlines setting... 196 delegations will work for "the practical fulfillment of the Paris climate agreement," signed in 2015 during the COP 21. As laudable as these goals might be, a significant stake risks to go unreported in Katowice: the vast amounts of mining resources necessary for the achievement of the energy transition.¶ Electric cars, windmills, solar panels, cities and intelligent network... All these "green" and digital technologies share the specificity of being highly metal-consuming. Technology minerals include basic metals such as iron, copper or zinc as well as less abundant ones. Cobalt, tungsten, Rare Earth elements, tantalum, vanadium, indium, or gallium are sought after for their great optical, catalytic or magnetic properties. These "small metals" are the lesser known base of digital and green tech, presented as environment-friendly.¶ We already consume over two billion tons of mineral resources each year, i.e., about 500 Eiffel Towers daily. Given these new needs, the German agency for mineral resources predicts that the demand for metals such as germanium could double up around 2035, that for dysprosium and tantalum could quadruple and needs for cobalt could be multiplied by 24. In a 2017 report, the World Bank estimated that lithium extraction, could, on the medium term, grow by 1000% because of the demand for batteries.¶ The energy transition is a metallic one. And yet, the 2015 Paris agreement on climate doesn't say a word on environmental, economic and geopolitical challenges surrounding this new dependency. Words such as "metals," "minerals" or "raw materials" aren't even mentioned. Will we avoid this fatal mistake in Katowice?¶ The question is all the more crucial given that the environmental impact of rare metals' extraction and refining contradict the incantatory spells on the coming of a greener world. In Chile, the Democratic Republic of Congo or even Kazakhstan, copper, cobalt and chrome extraction and refining go hand in hand with ecosystems' pollution and massive sanitary consequences. China has paid a very hefty price. We visited the mining areas of the southern Jiangxi province and the Inner Mongolia Autonomous Region. We can testify about the paradox of green energies. So-called clean technologies require metals which extraction is particularly damaging. Likewise for "renewable" energies: they do not function without non-renewable ones. As for digital technologies meant to dematerialize our lifestyles, they benefit from phenomenal amounts of solid materials.¶ Which ones among these thirty heads of State expected in Katowice know about this darker side of green energies? In the West, the question was concealed from the beginning of the 1990's. At the time, many States closed their mines and refining factories, deemed as too polluting, while less industrialized countries would take on this burden to catch up with their industrial delay. In other words, the westerners have delocalized green technologies' pollution, and these political choices lead the world to a binarism between the dirty ones and those pretending to be clean.¶ The parenthesis of the "happy globalization," with every resource handy, anywhere and at any cost, shuts down little by little. The "markets' invisible hand" is not sufficient to smooth the new tensions around rare metals' supply. We expect the first mineral resource shortages to happen long before petroleum ones! A question arises, incongruous yet essential. Could we fail in leading the energetic transition achievement, not due to a lack of agreement on either GCF or carbon finance in Katowice, on December 14th, instead because we will lack minerals and energies to industrialize them?¶ The COP24 could be the occasion to shut up the doom-mongers while engaging a courageous and practical dialogue on the necessary rationalization of mineral resources. A robust circular economy of metals implies tackling waste ending up in electric discharges on the African continent. This goal also means that we eco-design technological products, an essential condition for better recycling of rare metals (the recycling rate of some doesn't go beyond 1%). The fight against planned obsolescence should as well be systematized.¶ A successful, energetic transition implies to rethink our economic models, that are too focused on short-term benefit and a religious seeking of the lower cost. The deployment of an economy based on functionality that gets most of its profits not from its products but its related-services is an inspiring track. The question of the frugality of our consumption habits is central because without adequate resource management, as the World Banks reminds, "a future founded on green technologies [...] could ruin [...] sustainable development goals".

### 2NC---AT: Tech Solves

#### Tech can’t solve---CCS and renewables fail, empirics, rebound, outsourcing, and politics

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The first heroic assumption underpinning techno-optimist solutions is the ongoing reliance in many of the most influential large scale decarbonization strategies on CCS (carbon capture and storage). While CCS may play a valuable, albeit modest, long term role, the current state of knowledge suggests that we are still a very long way from affordable and scalable CCS deployment. Even the Global CCS Institute (2013: 5) has recently reported that, “while CCS projects are progressing, the pace is well below the level required for CCS to make substantial contribution to climate change mitigation”. The growing “emissions gap” is also providing increasing impetus for speculation about the “necessity” of geoengineering “solutions” with all their attendant concerns about ethical implications and unintended consequences (see Hamilton 2013).

The second debatable assumption is that technological innovation will necessarily and rapidly translate into global reductions in energy consumption. Important questions remain about the speed with which 100% renewable energy can realistically be achieved (see e.g. Smil 2010, 2014); the extent of fossil fuel energy consumption required to drive the initial massive expansion in renewable energy infrastructure; and the full life cycle energy return on investment (EROI) outcomes of solar and wind energy—particularly if these calculations factor in the full costs of energy storage (see e.g. Palmer 2013; Prieto and Hall 2013). Noting that emissions reductions of 4% p.a. in an economy growing at 2% p.a. are likely to require carbon intensity improvements of around 6% p.a., Anderson (2013) notes that he has yet to find any credible mainstream economist prepared to argue that prolonged emissions reductions of 3% or 4% or more are compatible with economic growth.

Indeed, as Lord Stern (2006: 231) himself has noted: There is likely to be a maximum practical rate at which global emissions can be reduced. At the national level, there are examples of sustained emissions cuts of up to 1% per year associated with structural change in energy systems... whilst maintaining strong economic growth. However, cuts in emissions greater than this have historically been associated only with economic recession or upheaval, for example, the emissions reduction of 5.2% per year for a decade associated with the economic transition and strong reduction in output in the former Soviet Union. These magnitudes of cuts suggest it is likely to be very challenging to reduce emissions by more than a few percent per year while maintaining strong economic growth.

The third reason for caution in assuming overly optimistic relationships between technological innovation, carbon intensity and emissions reductions is the impact of the “rebound effect” (see Jevons 1865; Herring and Sorrell 2009; Holm and Englund 2009; Jackson 2009). This phenomenon refers to the tendency for innovation and efficiency gains to be rapidly overwhelmed as cheaper unit costs combined with the formidable reach and power of the global advertising industry enable and encourage individuals to consume more of the same or alternative services and products. The harsh reality remains that global emissions continue to grow (IPCC 2013)—along with the global trends in the consumption of energy and resources—with apparent improvements in developed economy energy efficiency often masking the reality of energy intensive production being offshored to developing economies.

The likelihood of full and fast deployment of new technologies is the fourth problematic assumption that needs to be addressed given the formidable political and social obstacles standing in the way of rapid implementation. As noted in the recent Post Carbon Pathways review of learning from the implementation of large-scale decarbonization strategies (see Wiseman et al. 2013), experienced climate scientists and policymakers consistently come to the conclusion that the key obstacles standing in the way of rapid decarbonization are political and social rather than technological. Key roadblocks include the following.

### 2NC---AT: Monbiot

#### Empirically disproven---recessions decrease pollution

**Long, et al, 18**—Department of Sociology, Oklahoma State University (Michael, with Michael Lynch, Department of Criminology, University of South Florida, and Paul Stretesky, Department of Social Sciences, Northumbria University, “The Great Recession, the Treadmill of Production and Ecological Disorganization: Did the Recession Decrease Toxic Releases Across US States, 2005–2014?,” Ecological Economics Volume 146, April 2018, Pages 184-192, dml) [TRI=Toxic Release Inventory, the EPA’s database of pollution levels; ToP=treadmill of production]

In this paper we found evidence that the recession **reduced pollution** as measured by TRI emissions. We did this in two ways. First, we mapped TRI levels before, during and after the recession by state. An inspection of the three maps **clearly shows lower levels** of TRI emissions across states during the recession **compared with** states **before** and **after** the recession. Next, we employed fixed-effects regression equations to model the effect of the recession on TRI emissions, controlling for other macro-economic production-related variables. We found a **unique negative effect** for the recession on TRI levels controlling for GDP per capita, population and indicators of the size and performance of the manufacturing sector. Our findings support the ToP and ecological Marxism literatures which suggest that increases in productivity are the **primary drivers of ecological disorganization** and **vice versa**, that decreases in production should **decrease pollution** (e.g. Foster, 1992; Lynch et al., 2013; O'Connor, 1988; Schnaiberg, 1980; Stretesky et al., 2013b). We use GDP per capita as a proxy measure for economic performance and find that increases in GDP per capita are positively related to increases in TRI emissions. However, we also find that there is a unique effect of the recession on TRI levels that is different from economic performance and growth measured using GDP per capita, and size and performance of the manufacturing sector. This is an interesting finding, which deserves the attention of future research. While unpacking what this recession effect might be empirically is beyond the scope of this paper, we will offer a few possibilities. First, the levels of each chemical recorded in the TRI have a base threshold that must be crossed in order to require reporting. Therefore, during economic downturns like the recession of 2008–09, production decreases which means that **toxic releases should also decrease** (as the coefficient of GDP per capita demonstrates in the above analysis). In some cases, the reduction in some TRI chemicals during recessionary periods may drop firms below the TRI reporting thresholds, and therefore appears to reduce TRI emissions more than what actually occurred because they are no longer required to report their emissions. Additionally, companies may be more willing to put the effort into reducing TRI emissions below the threshold in times of economic uncertainty because they are worried about staying profitable and therefore do not have to pay costs associated with TRI monitoring and reporting(see also De Marchi and Hamilton, 2006). However, during times of **economic growth**, companies are **less likely to worry** about the **money saved from reporting** because the profits generated from increased productivity will **dwarf any savings** from not having to report to the EPA. Second, some of the chemicals that get released in production processes may have economic value. During recessionary periods where firms are **attempting to stay profitable**, the cost of capturing and retaining these chemicals may be **mitigated by their value**. One result of this process could be a **reduction in the levels of toxic chemicals released** by the companies and therefore **lower levels of emissions** reported to the TRI. Third, treadmill of production theory indicates that the pace of production was accelerated following World War II by increased reliance on fossil fuel and chemical labor. In theory, and as we suggest our data illustrates, the **continued expansion of the treadmill of production** as well as its **contraction during the recessionary period**, **affects toxic emissions** independently of GDP. Controlling for GDP in this case is important since a large proportion of US GDP is generated by the service sector. In the US, the service sector accounts for approximately 79% of total GDP, with manufacturing/industry/mining/construction/accounting for about 20%, and agriculture about 1% of GDP. Thus, the GDP measure is primarily measuring the impact of the service sector on GDP, and not the specific impact of the treadmill of production. With respect to the above, it should also be noted that the **close connection** between the treadmill of production and the fossil fuel sector plays a potential role in the **production of toxic waste**. As one would expect, during the recession oil consumption in the US **declined dramatically**, and reached its lowest level at the end of the Great Recession, declining from about 40 quadrillion Btu in 2006, to a low of 35.5 quadrillion Btu by the end of 2008, or to about the same level of oil consumed in 1996. This reflects both a change in the **scope of the treadmill of production** and **personal consumption habits** related to gasoline consumption. According to the Energy Information Administration, fuel prices peaked in the US in 2008 during the recession at about $4.10 per gallon, declining sharply during 2009 to around $1.60 per gallon, and rising thereafter as the economy recovered and demand for fossil fuel increased. At the same time, according to the Institute for Energy Research, US oil production was declining prior to the Great Recession, stabilized during the recession, and increased following the recession. Thus, despite stability in manufacturing's share of GDP, and a sharp drop in crude oil and natural gas production in 2009, there were subsequently significant increases in crude oil and natural gas production and prices in the US, which are central components of the treadmill of production's driving mechanism. The **sharp rise** in post-recession fossil fuel consumption **expanded the deleterious effects** of the treadmill of production on the ecosystem through **increased ecological withdrawals** and **additions**. Evidence of this effect can be seen in Fig. 3 in the post-recession period, which indicates that several of the states with increased ecological additions were also states where there is significant oil production and refining.

#### Reject Monbiot---he tampers with ev

**Bishop Hill 10**—website of Andrew Montford, guest post by Julian Williams and Shub Niggurath

(“George Monbiot: scrubbing the record clean”, <http://bishophill.squarespace.com/blog/2010/9/18/george-monbiot-scrubbing-the-record-clean.html?currentPage=2#comments>)

It was always faintly funny that the Monbiot should accuse Richard North of ‘smearing Pachauri’. We saw that Monbiot’s harmless IPCC-inspired pushing of the party line had shallow foundations that would one day be swept away by the growing awareness of the public. But we should revise that opinion. It is one thing to put forward one own points of view and cite half-truths as evidence; it is quite another to tamper with and remove facts from the public record to support an argument that does not stand up. To call for evidence and then hide is both hypocritical and paradoxical. Monbiot should be asking questions and releasing evidence, not covering it up to protect public figures like Pachauri. One wonders how long this charade will last.

### 2NC---AT: AI Inev

#### Slow growth prevents unfriendly AI

Yudkowsky, 13—co-founder and research fellow at the Machine Intelligence Research Institute, celebrated Harry Potter fanfiction author (Eliezer, “Do Earths with slower economic growth have a better chance at FAI?,” <http://lesswrong.com/lw/hoz/do_earths_with_slower_economic_growth_have_a/>, dml) [(U)FAI=(Un)Friendly AI]

But suppose my main-line projection is correct and the "probability of an OK outcome" / "astronomical benefit" scenario essentially comes down to a race between Friendly AI and unFriendly AI. So far as I can tell, the most likely reason we wouldn't get Friendly AI is the total serial research depth required to develop and implement a strong-enough theory of stable self-improvement with a possible side order of failing to solve the goal transfer problem. Relative to UFAI, FAI work seems like it would be mathier and more insight-based, where UFAI can more easily cobble together lots of pieces. This means that UFAI parallelizes better than FAI. UFAI also probably benefits from brute-force computing power more than FAI. Both of these imply, so far as I can tell, that slower economic growth is good news for FAI; it lengthens the deadline to UFAI and gives us more time to get the job done. I have sometimes thought half-jokingly and half-anthropically that I ought to try to find investment scenarios based on a continued Great Stagnation and an indefinite Great Recession where the whole developed world slowly goes the way of Spain, because these scenarios would account for a majority of surviving Everett branches. Roughly, it seems to me like higher economic growth speeds up time and this is not a good thing. I wish I had more time, not less, in which to work on FAI; I would prefer worlds in which this research can proceed at a relatively less frenzied pace and still succeed, worlds in which the default timelines to UFAI terminate in 2055 instead of 2035.

#### Uniqueness goes neg---we haven’t built UFAI yet---slowing growth is the best way to keep it that way

Nordhaus, 15—Sterling Professor of Economics; Cowles Foundation, Yale University (William, “Are We Approaching an Economic Singularity? Information Technology and the Future of Economic Growth,” Cowles Foundation Discussion Paper No. 2021, dml)

f. Competition among the superintelligent If superintelligent agents develop, we must contemplate the prospect of competition among rival powers. The parallel here is to the game-theoretic dynamics of weaponry. Even though the innovators (of bows and arrows, machine guns, tanks, nuclear weapons, and drones) had an initial advantage over their adversaries, their advantage was temporary. Even the most closely held technological secrets diffuse slowly around the world. We must therefore assume that those who develop the engines of superintelligence will eventually find they are soon shadowed by their military, commercial, and political adversaries. Moreover, to the list of adversaries will be added the superintelligent machines themselves. We might take comfort in Asimov’s Three Laws of Robotics, of which the First Law is, “A robot may not injure a human being or, through inaction, allow a human being to come to harm.” But to take refuge here would surely be super-naïve. It would only take one unethical designer to launch a superintelligent agent who did not incorporate the Laws of Robotics. This would probably launch an arms race among rival superintelligent powers. So the point here is that the approaching Singularity is not one of unambiguous economic and social improvement. This was appreciated by nuclear-weapons developer John von Neumann (1955): Useful and harmful techniques lie everywhere so close together that it is never possible to separate the lions from the lambs. This is known to all who have so laboriously tried to separate secret, classified science or technology (military) from the open kind; success is never more nor intended to be more than transient, lasting perhaps half a decade. Similarly, a separation into useful and harmful subjects in any technological sphere would probably diffuse into nothing in a decade. XI. Concluding Comments on Singularity So the conclusion as of today is that “the Singularity is not near.” This conclusion is based on several tests that place the theory of the Singularity within the context of economic growth theory. Much of the computer science literature on the Singularity examines the growth in specific sectors or processes (such as flops or storage), but the economic perspective insists that the growth must be weighted by the economic valuation of the good or service. The major insight of economics is to emphasize the heterogeneity of both inputs and outputs of the economic system. It is surely true that technological change in the production of raw computation has been phenomenal over the last century. We can process information at a speed that is millions of billions times faster and cheaper than was possible for the fastest lightning calculators of the nineteenth century. Suppose that trend continues indefinitely, including the ability to devise ever more ingenious software and artificial intelligence (AI). For increasing capabilities of computers to lead to the Singularity would require that AI could encompass all human activities, not just add numbers, solve equations, play chess, and interpret speech; but also lay hands on patients, read bedtime stories to children, and select presidential candidates. Whereas computerized AI might do many routine tasks, the non-routine tasks are less easily programmed, and they evolve over time in response to the economic environment, including the environment of artificial intelligence itself. Particularly if we view the world with potential superintelligence as a competition between humans and machines, then we definitely would need a team of humans to consider how to protect humans from machines. We routinely spend 5% of output on defense, and this might rise to a much larger number when faced with a more potential enemies like superintelligent machines. So one occupation at least would survive into the Era of Singularity. Whether other sectors and tasks would be immune to the rise of superintelligence is an open question. The empirical question is the degree of substitutability between information and human efforts. Given the complexity of both humans and jobs, it is unlikely that the question can be decided a priori. The analysis above indicates that information and computers will come to dominate the economy only if the informational capital takes a rising share of inputs. This requires that the expenditure shares or input cost shares of information rise over time, which in turn requires that the volume of inputs rises more rapidly than the relative prices fall. We can call these the “substitution tests” to be concise. There are six tests on the supply side. The conclusions from the empirical tests proposed here is that the substitution tests fail or are ambiguous for four of six tests and succeed barely for two of the six tests. However, the growth trajectories of the variables which pass the test (the share of capital in total income and the share of informational capital in total capital) are extremely slow. Projecting the trends of the last decade or more, it would be in the order of a century before these variables would reach the level associated with the growth Singularity. The conclusion is therefore that the economic Singularity is not near.

#### Chinese AI leadership is net better

Kai-Fu Lee and Paul Triolo 17, Kai-Fu Lee, Ph.D., is a Co-Founder, Chairman, President, Chief Executive Officer, and Managing Partner of Sinovation Ventures, Paul Triolo is a China Digital Economy Fellow at New America and the geo-technology practice head at the Eurasia Group, “China’s Artificial Intelligence Revolution: Understanding Beijing’s Structural Advantages”, <https://www.eurasiagroup.net/files/upload/China_Embraces_AI.pdf> //AP

Beijing’s AI policy priorities are clear. The “Next Generation Artificial Intelligence Development Plan,” announced by China’s State Council in July 2017, called for China to catch up on AI technology and applications by 2020, and to become a global AI innovation hub by 2030. Chinese President Xi Jinping hammered the point home in his 19th Party Congress speech in October, when he mentioned the development of advanced manufacturing and the promotion of further integration of the Internet, big data and artificial intelligence with the real-world economy. Beijing has placed huge bets on AI for a host of political and economic reasons, from improving governance capacity to improving policy development and surveillance. The plan calls for China to lead the way in developing a regulatory environment to both encourage AI development and to mitigate the potential downsides of AI. A few months after the national plan’s announcement in July, the Ministry of Science and Technology (MOST) designated Baidu to lead the autonomous vehicle platform, Tencent for medical, Alibaba for Smart Cities, and iFlyTek for speech interfaces. These plans should be taken seriously, as the Chinese government has shown a strong track record in delivering results. For example, Beijing announced in 2010 that China would become the world’s leader in adopting high-speed rail (HSR). Today it has 60% of the world’s HSR market. In 2014, the Chinese government announced the “Mass Entrepreneurship and Innovation Plan.” Today there are business 8000 incubators in China, compared to 1400 in 2014. These plans have teeth, both due to the deadlines and metrics set out at the national level, as well as the local companies that are likely to take these directions as top priorities. We can expect a similar trajectory for China’s AI policies. Historically, the Chinese government has been open-minded towards technology development. When a new technology comes out, the government will give it the benefit of doubt and let it grow, rather than stifle it with policy or endless debates. Also, the environment in China is more conducive to fast launch and iteration. There is a general belief that it is better to launch something and then get it approved later. This allows Chinese businesses to generate real data at scale, which in turn allows technology to improve over a shorter period of time, particularly once AI is introduced into the equation. For example, while in the US, truckers’ unions are petitioning the Department of Transportation to delay autonomous truck testing, in China, the Xiong’an New Area, a planned smart city development southwest of Beijing, is being designed from the ground up with full autonomy in mind. Various highway authorities are willing to develop road augmentation, special lanes, or move warehouses near highway exits, all to facilitate faster deployment of autonomous trucks. We also see major initiatives in cities, following the central government’s call to action. Shanghai, Nanjing, Wuhan, and Tianjin are but a few of the cities coming out with their own AI initiatives. As with past policies, much of the resources will be applied at the provincial and city government levels. The types of resources may include subsidies for top talent (especially overseas talent); guidance for top VC funds, with the government playing the role of limited partner (LP) but offering some of its upside to the general partners (GPs) of the funds; special programs for top AI companies and start-ups (free rent, subsidy for local hiring, housing and private school for top talents); and technical awards for companies and individuals. Finally, the US, EU, and China will also compete to be out in front on developing a regulatory regime around AI technologies and applications. The National Plan’s explicit recognition of the need for regulatory, legal, and ethical principles for AI development and use represents an uncommonly foresighted approach. Of course, the government’s approach to AI regulation, ethics, and economic adjustment will reflect Beijing’s broader model of governance and ideology. Given its preference for a state-centric approach to international issues, for example, it is possible China will launch an initiative via the UN to establish first an automation/AI-related “code of conduct,” or basic regulatory approach, followed by a special committee on the topic and eventually an oversight body operating within a UN framework. Such an initiative would put China at the forefront of developing a global approach to these issues. Beijing has attempted a similar approach on cybersecurity issues, which it argues have a global impact and require a global regulatory response.

#### US regs are always truthless

George Dvorsky 17, Bioethicist and senior reporter for Gizmodo, “Powerful Lobby Group Wants to Keep AI Unregulated”, <https://gizmodo.com/powerful-lobby-group-wants-to-keep-ai-unregulated-1819842165> //AP

The Information Technology Industry Council (ITI)—a Washington D.C.-based lobby group that boasts Google, Amazon, and Microsoft among its many clients—is telling governments to think twice about establishing laws to regulate AI. But given mounting safety, ethical, and social justice concerns, is that such a good idea? On Tuesday, ITI released its “AI Policy Principles,” in which the lobby group outlined “specific areas where industry, governments, and others can collaborate, as well as specific opportunities for public-private partnership.” In the new document, ITI acknowledged the need for the tech sector to promote the responsible development and use of AI, while calling upon governments to support, incentivize, and fund AI research efforts. But as for letting governments take a peek at an ITI client’s source code, or enact laws to steer the safe and ethical development of AI, that’s something it’s a bit less enthused about. “We also encourage governments to evaluate existing policy tools and use caution before adopting new laws, regulations, or taxes that may inadvertently or unnecessarily impede the responsible development and use of AI,” notes ITI in its new list of AI principles. “This extends to the foundational nature of protecting source code, proprietary algorithms, and other intellectual property. Failure to do so could present a significant cyber risk.” According to its mandate, ITI seeks to “encourage all governments around the world—including the US government—to develop policies, standards, and regulations that promote innovation and growth for the tech industry.” It represents some of the heaviest hitters in the tech sector, including Amazon, Facebook, Google, IBM, and Microsoft, while claiming to be “the global voice of the tech sector” and “a catalyst for preparing an AI world.” ITI’s document is timely given just how important AI is starting to become, both in terms of its burgeoning influence on our lives (whether it be a photo-sorting app or an algorithm that invents new medicines), and in the global economy (ITI estimates that AI will add at least $7 trillion to the global economy by 2025). But it’s also timely given the recent calls for oversight and regulation. As Bloomberg reporters Gerrit De Vynck and Ben Brody write: Big tech companies, and their software, are coming under more scrutiny in the wake of news that Russian-sponsored accounts used social networks to spread discord and try to influence the outcome of the 2016 U.S. presidential election. Algorithms designed by Facebook, Twitter Inc. and Google have also been criticized for increasing political polarization by giving people the type of news they already agree with, creating so-called “filter bubbles.” And the concerns don’t stop there. Developers are starting to be criticized for allowing their AI systems to adopt human biases and prejudices (a recent Princeton study, for example, showed that some AI systems are sexist and racist). There’s also uncertainty about how AI will contribute to technological unemployment, automated warfare, and computer hacking. And there’s still no consensus on the specific ethical or moral codes that need to be imbued into these systems. There’s also the frightening potential, as thinkers like Elon Musk, Stephen Hawking, and others have pointed out, for something to go horribly wrong with AI. As the recent AI breakthrough by Google-owned DeepMind demonstrated, a fast takeoff event, in which AI evolves into a superintelligent form, may happen relatively quickly and without warning, thus introducing catastrophic—and possibly existential—threats. As all of this is happening, it shouldn’t come as a surprise that some concerned observers are calling for the government to step in. Musk has warned that governments need to implement regulations “before it’s too late,” and that it’s only after things get out of hand that we tend to act. Two years ago, the White House implemented a preliminary AI strategy, saying AI needs to be ethical, that it must augment, and not replace, humans, and that everyone should have a chance to participate in the development of these systems. But as for formal regulations, the White House said it’s still premature. As former US president Obama told Wired last year, “Most people aren’t spending a lot of time right now worrying about the Singularity—they are worrying about ‘Well, is my job going to be replaced by a machine?’” Patrick Lin, director of the Ethics + Emerging Sciences Group at California Polytechnic State University, says that regulating new technologies is always a delicate balancing act. “If you set regulation too early, then you may be betting on the wrong standards, and that would be terrible for commercialization, which is important,” Lin told Gizmodo. “The same problem exists with setting too many or unnecessary regulations; they can create barriers to innovation. But commercialization isn’t the only value at stake here; public safety is another value in the equation. So, if there’s little or no regulation for technologies that can have serious impact on our lives—from self-driving cars to AI systems that make criminal sentencing and bank lending decisions—then that will be bad for society. It’s a mistake to have a knee-jerk reaction either way, reflexively for or against regulation. Each technology is different and needs to be considered carefully on its own merits.” Lin says this conversation is currently happening in regards to autonomous vehicles, with one camp arguing that regulatory standards will put manufacturers on the same page about safety-critical functions (which would protect the industry from some liability), with the other camp saying we don’t know enough to start forging standards. “A middle path between no regulation and state regulation is to let industry regulate itself, which is the ITI approach,” says Lin. “But this is far from ideal as well: it’s letting the fox guard the henhouse. There’s no teeth to enforce self-regulations if a company breaks rank; there may be even less transparency than with government regulators; and many other problems.” Currently, the US has no federal agency dedicated to regulating or monitoring AI, and it’ll probably be a while before we see anything like that (if ever). In the meantime, it’ll be up to various groups, both inside and outside the government, to monitor developments in AI, such as the National Highway Traffic Safety Administration (to oversee development of autonomous vehicles) and the Department of Homeland Security (to monitor cybersecurity threats). Some private individuals and companies have created their own groups, such as Musk’s OpenAI initiative and Google’s DeepMind Ethics & Society group. But as Lin points out, there’s a “having your cake and eat it, too” aspect to self-regulation. “On one hand, industry (correctly) says that AI is going to be this game-changing, super-revolutionary thing, but on the other hand, they often tell us not to worry about it, that they have it handled,” he said. “Worse, because the AI industry is so fragmented and full of start-ups—or even individuals without formal education or professional training, working from their basements—you couldn’t possibly get them all on board with your self-imposed regulations, whereas government regulations can use the full force of law to achieve compliance.” Lin says that self-regulation may be better than no regulation or uninformed regulation, especially when it’s about a technology that could cause major problems for society. As examples, he points to fake news, dieselgate, biased decision systems, and so on. Sara Wachter-Boettcher, author of Technically Wrong: Sexist Apps, Biased Algorithms, and Other Threats of Toxic Tech, says she’s happy to see an acknowledgement of the problem and development of shared principles, but the underlying message to her seems to be, “trust us, we’re working on it.” “I would ask, what evidence do we have that they’ve got a handle on removing bias from AI? Why should we trust tech companies when we see examples of them embedding bias into software, or launching products with unintended consequences, every day?,” Wachter-Boettcher told Gizmodo. “I understand that it’s not as simple as lifting the curtain and letting the public look at the code, but there needs to be agreed-upon and enforced levels of transparency and accountability. While industry says it’s afraid of slowing down innovation, I think the rest of us should be a lot more worried about the real risk of flying headfirst into even more inequality, bias, and unintended harm.” In an email to Gizmodo, Jaan Tallinn, the co-founder of Skype, said “we need regulation eventually, but first we need more research into what a positive and effective regulation should look like.” And indeed, those arguing for regulations are having some difficulty articulating what actually needs regulating, and how it should be implemented and enforced. Thankfully, however, these conversations have started and the frameworks for AI regulation are starting to emerge. As Tallinn noted, we’re going to need regulations eventually. The self-serving principles set out by ITI can be seen as pre-emptive attack to delay the inevitable, and to protect its clients from what it sees as meddlesome and potentially costly intrusions. And self-serving it is; it can hardly be said, for example—and as stated in the new list of principles—that the ITI clientele could use some additional financial support from the government. As Oxford philosopher Nick Bostrom wrote last year, “Great resources are devoted to making [progress in AI] happen, with major (and growing) investments from both industry and academia in many countries.” At the same time, investments “in long-term AI safety...remains orders of magnitude less than investment in increasing AI capabilities.” That ITI did not list the funding of AI safety initiatives by industry, government, and private sources as an “AI principle” is as problematic as it is revealing. Moreover, it’s not immediately obvious that profit-driven companies with cranky shareholders in the background are in any way interested in constraints imposed by outside forces, or in voluntarily contributing to the public good. Regulations and government oversight exists in the absence of pro-social forces within the overarching capitalist framework. “We can hope that corporate self-interest will align with public interests, but that is a giant leap of faith, and many companies in ITIC don’t exactly have a great track record at winning public trust,” Lin told Gizmodo. “It’s important to remember that they’re not in the business of protecting the public or promoting democracy—their business is business. When profit motives and humanitarian motives collide, take a wild guess which one usually wins.”

### 2NC---AT: LIO

#### It structurally fails and doesn’t promote democracy or prevent war

Dr. Paul Staniland 18, Associate Professor of Political Science and Chair of the Committee on International Relations at the University of Chicago, 7/29/18, "Misreading the ‘Liberal Order:’ Why We Need New Thinking in American Foreign Policy;" Lawfare, <https://www.lawfareblog.com/misreading-liberal-order-why-we-need-new-thinking-american-foreign-policy>

Pushing back against Trump’s foreign policy is an important goal. But moving forward requires a more serious analysis than claiming that the “liberal international order” was the centerpiece of past U.S. foreign-policy successes, and thus should be again. Both claims are flawed. We need to understand the limits of the liberal international order, where it previously failed to deliver benefits, and why it offers little guidance for many contemporary questions.

First, advocates of the order tend to skim past the policies pursued under the liberal order that have not worked. These mistakes need to be directly confronted to do better in the future.

Proponents of the order, however, often present a narrow and highly selective reading of history that ignores much of the coercion, violence, and instability that accompanied post-war history. Problematic outcomes are treated as either aberrant exceptions or as not truly characterizing the order. One recent defense of the liberal order by prominent liberal institutionalists Daniel Deudney and G. John Ikenberry, for instance, does not mention Iraq, Afghanistan, Vietnam, or Libya. Professors Stephen Chaudoin, Helen Milner, and Dustin Tingley herald the order’s “support for freedom, democracy, human rights, a free press.” Kori Schake writes that Western democracies’ wars are “about enlarging the perimeter of security and prosperity, expanding and consolidating the liberal order.” Historian Hal Brands argues that the order has advocated “political liberalism in the form of representative government and human rights; and other liberal concepts, such as nonaggression, self-determination, and the peaceful settlement of disputes.”

Other analysts have persuasively argued that these accounts create an “imagined” picture of post-World War II history. Patrick Porter outlines in detail how coercive, violent, and hypocritical U.S. foreign policy has often been. To the extent an international liberal order ever actually existed beyond a small cluster of countries, writes Nick Danforth, it was recent and short-lived. Thomas Meaney and Stephen Wertheim further argue that “critics exaggerate Mr. Trump’s abnormality,” situating him within a long history of the pursuit of American self-interest. Graham Allison—no bomb-throwing radical—has recently written that the order was a “myth” and that credit for the lack of great power war should instead go to nuclear deterrence. Coercion and disregard for both allies and political liberalism have been entirely compatible with the “liberal” order.

The last two decades have been a bumpy ride for U.S. foreign policy. Since 9/11, we have seen the disintegration of Syria, Yemen, and Libya, a war without end in Afghanistan, the collapse of the Arab Spring, the rise and resurgence of the Islamic State, and the distinctly mixed success of strategies aimed at managing China’s rise. At home, the growth of a national-security state has placed remarkable power in the hands of Donald Trump. Simply returning to the old order is no guarantee of good results. Grappling openly with failure and self-inflicted wounds—while also acknowledging clear benefits of the order—is essential for moving beyond self-congratulatory platitudes.

Second, the liberal order in its idealized form had very limited reach into what are now pivotal areas of U.S. security policy: Asia, the Middle East, and the “developing world” more broadly. The core of the liberal order remains transatlantic, but Asia is now growing dramatically in wealth and military power. What is the record of the order in the region? There was certainly some democracy promotion when authoritarian regimes began to totter, but there was also deep, sustained cooperation with dictators like Suharto and Ferdinand Marcos; while there are some regional institutions (such as ASEAN), they are comparatively weak; while there are some rules, they have been deeply contested. Close U.S. allies like Japan, Taiwan, and South Korea (the latter two experiencing long bouts of U.S.-allied autocracy) were not integrated into a broad alliance pact like NATO. India and Pakistan were never part of the core order, and China was only very partially integrated (primarily into the economic pillar of the order, and through ad hoc security cooperation from the 1970s). Southeast Asia has been a site of warfare and authoritarianism for much of its post-1945 history.

The United States has long considered the Middle East vital to its security, but the extent to which the United States should invest its own blood and treasure in protecting the area was always up for debate. It was only in the 1970s that the United States decided it was prepared to use force to defend the region; “dual containment” in the 1990s was always controversial, while the invasion of Iraq and its chaotic aftermath revealed deep fissures over how much presence was enough. Meanwhile, liberalism, democracy, human rights, and international institutions have not made much of a mark in the region. Jake Sullivan, in a rather odd defense of the order, suggests that “Middle Eastern instability has been a feature, not a bug, of the system.” This is not reassuring about the order’s ability to structure politics in the area. The same can be said about the order’s history in Africa, with deep Western involvement in civil wars, support for authoritarian regimes, and often-counterproductive demands for economic liberalization contributing to ongoing instability.

The legacy of the “liberal order” is both far more complex and shallower outside of the north Atlantic core than within it. Invocations of the order are seen with greater cynicism and suspicion in these areas than in Washington or Berlin. Yet they are precisely the regions that are increasingly the focus of U.S. security policy.

Finally, and as the preceding already suggests, the idea of “liberal order” is itself frequently too vague a concept, and was too incomplete a phenomenon, to offer guidance on a number of key contemporary questions. Allison goes so far as to call it “conceptual Jell-o.” The extremely abstract principles that experts use to define the order are confronted with a reality of extreme historical variation. This amorphousness undermines its usefulness as an actual guide to future foreign policy.

U.S. alliances in Western Europe since World War II looked dramatically different than those in East Asia. Both have achieved their basic goals, so which should be the model for the future? The United States often applied pressure to coerce its allies into adopting economic and security policies conducive to U.S. interests—going so far as to threaten abandonment of close European allies—even as it simultaneously built key elements of the liberal order. The core of the liberal order was a more tenuous and contested political space than we often remember.

This inconsistency applies to involvement in the domestic politics of other states. The United States has regularly embraced authoritarian leaders (and distanced itself from democratic regimes), while at other times it has helped to push these leaders out in the face of domestic mobilization. Advocates of the order tend to stress the latter and dismiss the former as aberrant, but both strategies contributed to the ultimate victory of the liberal order over the Soviet bloc.

The order’s history offers support for aggressively promoting democracy, accepting democratization when it emerges, and strongly supporting friendly dictators. This makes it unhelpful for grappling with the question of whether and how to promote democracy. The same is true of military interventions and covert operations abroad. U.S. leaders invested heavily in Cold War proxy wars and the overthrow of foreign regimes, while at other times and places they avoided such interventions.

This history carries important implications for addressing today’s policy challenges. Simply appealing to the order does not, for instance, tell us much about how to deal with a rising China: Since the liberal order included highly institutionalized alliances, loose “hub-and-spoke” arrangements, and coalitions of the willing, and was characterized by both preventive wars and containment, it is extremely unclear what the order suggests for America’s China strategy. While “rules-based” order is a term in vogue, it doesn’t tell us what the rules should actually be, or how they should be decided.

Nor does appealing to the liberal order help us understand whether the United States needs to be deeply involved or largely absent from the Middle East, or somewhere in between. Under the order, democracy promotion and assertive liberal intervention sometimes occurred, but so too did restraint and an acceptance of autocracy. There are no answers in the liberal international order for navigating the enormously difficult terrain of the contemporary Middle East.

### 2NC---AT: Inequality

#### Diversionary wars are small and don’t escalate

Dominic **Tierney 17**, associate professor of political science at Swarthmore College and contributing editor at The Atlantic, latest book is The Right Way to Lose a War: America in an Age of Unwinnable Conflicts, “The Risks of Foreign Policy as Political Distraction,” The Atlantic, 6/15/2017, https://www.theatlantic.com/international/archive/2017/06/trump-diversionary-foreign-policy/530079/

But what about military force? To be clear, there is little cause to speculate that Trump plans to launch a full-scale war solely to distract attention. For one thing, as president, the worst possible time to start a major military campaign is when you’re deeply unpopular. And the political upside is shaky at best. Recent big wars in Afghanistan and Iraq were politically damaging to George W. Bush. Even victory doesn’t guarantee a pay-off, as George H. W. Bush discovered when he won the 1991 Gulf War and then lost his bid for reelection in 1992. A crisis may arise where there are real national-security rationales for fighting, along with potential domestic gains. Here, the payoff at home would likely enter Trump’s calculus, and even push him over the edge to fight, with the legitimate casus belli providing a shield of plausible deniability. The most tempting use of force may be a seemingly manageable, but still dazzling, kinetic operation, like a missile strike or a raid to kill terrorist leaders. Another option would be to escalate a crisis where an easy win seems available: The key is to find the right enemy, one that’s both widely hated and too weak to fight back. After all, there’s a well-established “rally ‘round the flag” effect, where almost any military crisis temporarily juices the president’s approval ratings. In the wake of Clinton’s airstrikes in 1998, one poll found that 68 percent of Americans approved of his foreign policy. Republican House Speaker Newt Gingrich said, “it was the right thing to do at the right time.”

## Adv---FTC

### 2NC---AT: FTC Solvency

#### FTC structurally fails at regulations

Kades ‘7-28 [Michael; Director of Markets and Competition Policy, former attorney at the Federal Trade Commission; Equitable Growth Foundation, “Competitive Edge: Congress needs to restore the Federal Trade Commission’s authority to seek monetary remedies when companies break the law,” <https://equitablegrowth.org/competitive-edge-congress-needs-to-restore-the-federal-trade-commissions-authority-to-seek-monetary-remedies-when-companies-break-the-law/>]

As the report explains, “Rather than deter anticompetitive behavior, current legal standards do the opposite: They encourage it because such conduct is likely to escape condemnation, and the benefits of violating the law far exceed the potential penalties.” In the face of such warnings, it is a particularly bad time for the Supreme Court to unanimously reject 40 years of lower court rulings and conclude that the Federal Trade Commission can neither force companies to give up the profits they earned by violating the law nor compensate the victims of those violations. (The first remedy is called disgorgement, and the second remedy is called restitution.)

Whether the Supreme Court in April correctly interpreted the statute at issue in the case, AMG Capital Management LLC v. Federal Trade Commission, is less important than its implications. Professor [Andy Gavil discusses a potential silver lining](https://equitablegrowth.org/competitive-edge-the-silver-lining-for-antitrust-enforcement-in-the-supreme-courts-embrace-of-textualism/) in the Supreme Court’s decision—the glass-half-full approach. He argues that if the Supreme Court faithfully applies its approach to statutory interpretation, then it could open the door to broader application of the antitrust laws.

I look at the direct impact of the decision—the glass-half-empty approach. I argue that the decision deprives the antitrust agency of a critical, albeit imperfect, weapon that has deterred anticompetitive conduct particularly in the pharmaceutical industry. Although it has used disgorgement in competition cases sparingly, those awards have deterred the entire industry from engaging in the challenged conduct.

Before the recent Supreme Court decision, the disgorgement awards in competition cases went far beyond the impact in a single case. The savings include benefits from the conduct that did not occur. If the commission cannot seek monetary remedies, then companies will keep the rewards of their illegal conduct. Perversely, the companies causing the greatest harm will benefit the most from April’s decision.

The impact reaches even further. Without the threat of a disgorgement award, companies are more likely to drag out litigation and tax the FTC’s limited resources. Because the commission will spend more resources on egregious cases to reach weaker results, it will have fewer resources to challenge anticompetitive conduct in other areas and, for example, could affect enforcement in merger cases or in the high-tech industry.

#### Even if they did it would be political and ineffective

Lande and Davis ‘17 [Robert; Joshua; 2017; Venable Professor of Law, University of Baltimore School of Law, and a Director of the American Antitrust Institute; Associate Dean for Faculty Scholarship, Professor of Law, and Director, Center for Law and Ethics, University of San Francisco School of Law, and member of the Advisory Board of the American Antitrust Institute; A Report to the 45th President of the United States; “Restoring the Legitimacy of Private Enforcement,” ch. 6]

As has been observed, “government cannot be expected to do all or even most of the necessary enforcement” for numerous reasons – in addition to budgetary constraints – including “undue fear of losing cases; lack of awareness of industry conditions; overly suspicious views about complaints by ‘losers’ that they were in fact victims of anticompetitive behavior; higher turnover among government attorneys; and the unfortunate, but undeniable, reality that government enforcement (or nonenforcement) decisions are, at times, politically motivated.”7

### 2NC---AT: AI

#### No AI regulation

Horowitz 18 Michael C. Horowitz, Professor of political science and the author of The Diffusion of Military Power: Causes and Consequences for International Politics, "World War AI," Foreign Policy, September 12, 2018. https://foreignpolicy.com/2018/09/12/will-the-united-states-lose-the-artificial-intelligence-arms-race/

The fundamental dilemma facing most attempts at arms control is that the more useful a technology is at providing armies with an edge, the harder it is to effectively regulate. There is, after all, no arms control agreement that meaningfully restricts countries from developing tanks, submarines, or fighter jets. Effective agreements tend to restrict the use of less important weapons that don’t decide wars—such as landmines and blinding lasers—or ones that have rarely been used, such as nuclear weapons. Military history suggests that those applications of AI with the greatest relevance for fighting and winning wars will also be the hardest to regulate, since states will have an interest in investing in them.

### 2NC---AT: Terror

#### Takes decades and boatloads of money

Greg Allen 17, Adjunct Fellow at the Center for a New American Security, 3-4-2017, "Thank Goodness Nukes Are So Expensive and Complicated," WIRED, https://www.wired.com/2017/03/thank-goodness-nukes-expensive-complicated/

What about nuclear weapons? Here costs shoot upward. Saddam Hussein spent billions to develop nukes and failed. North Korea succeeded, but it took decades; the country also spent billions even with low wages and conscripted labor. Even if you could scrape together a billion dollars to buy a bomb, North Korea probably wouldn't sell you one. Every nuclear detonation releases a traceable radioactive signature, and Kim Jong-un worries he'll take the blame if you use his nukes. Unless you can steal a bomb or steal some weapons-grade nuclear fuel to construct a crude nuclear device, you're probably not going to acquire nuclear weapons. The technology for making nuclear fuel is too expensive and complicated, and if you try, the amount of labor, expertise, and financing you would need make it likely your efforts would be uncovered and stopped. Thank goodness. The massive expense and technological complexity associated with developing nuclear weapons is one of the great strokes of luck in human history. Imagine an alternate universe where nukes were like IEDs: cheap, simple, and constructible using widely available commercial parts and materials. Would humanity have survived the discovery of nuclear technology? Certainly not. We barely survived as it is. In this sense, the mass destruction cost curve is protective. The diplomats, scientists, spies, and soldiers of the global non-proliferation regime do incredible work in preventing terrorists and greater numbers of countries from acquiring nuclear weapons. However, their extremely difficult mission would be utterly impossible if uranium was just a little easier and cheaper to weaponize. Perhaps it would be better if nuclear weapons never existed, but, given that they do, we are lucky that they reside at the very top of the mass destruction cost curve.

# 1NR

## chevron

### at: democracy

#### No democratic peace - best studies

Michael Mousseau 18. Professor of International Relations Theory at the University of Central Florida. 2018, "Grasping the scientific evidence: The contractualist peace supersedes the democratic peace," SAGE Journals, https://journals-sagepub-com.libproxy2.usc.edu/doi/abs/10.1177/0738894215616408, accessed 3-4-2019//JDi

No one has challenged the multiple reports that contractualist economy is the strongest nontrivial predictor of peace both within (Mousseau, 2012b) and between nations (Mousseau, 2013; see also Nieman, 2015). The only matter in controversy is whether democracy has any impact on peace after consideration of contractualist economy. I investigated all five reasons offered in the literature (excluding already-refuted arguments) to think democracy causes peace, and found no support for any of them. The correlation of democracy with peace is zero regardless of how contractualist economy or interstate conflict is measured; the disaggregation of the data yields no support for a causal interaction of democracy with contractualist economy, and the state of knowledge offers no evidence of causation from democracy to contractualist economy and peace. While some correlation of democracy with peace appears in analyses of all disputes (at the 0.10 level), this appears to be a statistical artifact, since democracy is near zero in analyses of wars, fatal-only disputes (Mousseau, 2009, 2012a, 2013 and above), and militarized crises (Mousseau et al., 2013a, b). Analyses of all-disputes are less accurate than those of fatal disputes and crises because they are more likely to include events that are not state-to-state confrontations, and more likely to under-report events occurring in clientelist dyads. We saw that clientelist democracies tend to be geographically dispersed, and this may account for the non-fatal peace, which does not exist in bordering dyads where everyone has an equal chance to fight. The non-fatal correlation of democracy with peace is also marginal, as we saw in Table 4 that it includes only 27% of dyads and only 50% of joint-democratic dyads. This study largely investigated unsupported assertions of fact and showed them to lack support: neither DOR nor Ray (2013) properly supported their claims that multiple imputation, the treatment of ongoing dispute years, an interaction, the adoption of an alternative measure for contractualist economy, or reverse causality actually restore the evidence for the democratic peace. In this way this study merely corroborated what was already the state of knowledge, and it would be a mistake to think there are continuing factual differences in this controversy. I cannot promise that the analyses herein are error free, and I fully expect defenders of the democratic peace to carefully scrutinize them for errors, but no claim of error should be perceived as resurrecting the correlation of democracy with peace unless it is also shown to change results. Nor has anyone disputed the overturning of the democratic peace as reported in two studies (Mousseau, 2009, 2012a). While DOR (205) assert that the analyses in Mousseau (2009) are based on a misinterpreted interaction term, there is no such interaction term in Mousseau (2009). The only evidence-based defense of the democratic peace that exists today comes from DOR’s 120 regressions, 101 of which are invalid. Of the 19 valid ones, only 15 are of fatal disputes that count, and every one of these 15 regressions is mired by one of two questionable practices: five include control for the DemocracyH term that is said to artificially inflate the democracy coefficient; 10 are irrelevant because they include the inconsequential interaction term additionally calculated at the misleading 75th percentile of contractualist economy. If there is a correlation of democracy with peace, why cannot this be shown in a clear-cut regression? Beyond the facts, scientific assessment calls for acknowledgment of the imbalance of theory in this controversy. Economic norms theory does not deny the correlation of democracy with peace, and thus all prior evidence for it; rather, it offers a specific and falsifiable explanation for the correlation that identifies it as spurious. Defenders of the democratic peace are not putting forth a competing explanation for the correlation; rather, they simply oppose the idea that democracy does not independently cause peace, with no reason given for this opposition. However, democracy is not a random variable, so there are no scientific grounds that prohibit us from seeking to explain it, and there are no scientific grounds that preclude that whatever explains democracy cannot also explain the peace. Causality, not statistics, lies at the core of this controversy, and causality cannot be directly seen: it can only be theorized and corroborated. Yet defenders of the democratic peace have not addressed any of the extensive corroborations of economic norms theory accrued in studies of civil conflict and insurgency (Mousseau, 2012b), terrorism (Meierrieks 2012; Boehmer and Daube, 2013; Krieger and Meierrieks, 2015), democratization (Aytacx et al., 2016), and human rights (Mousseau and Mousseau, 2008). The weight of evidence for economic norms theory overwhelms any theory of democracy causing peace (Ungerer, 2012), yet defenders of the proposition have sought only to report some statistically significant correlation of democracy with peace, as if correlation equals causation (Dafoe, 2011; Dafoe and Russett, 2013; DOR; Ray, 2013; Russett, 2010). Nor is there any scientific basis for concluding that this controversy is ultimately unresolvable because the factors are closely related, as is frequently asserted without support (e.g. DOR: 203). The relevant factors are not closely related: contractualist economy is only moderately correlated with trade interdependence (0.31), income (0.71/0.56), and democracy (0.47) (Mousseau, 2013: 191–193). That contractualist nations are almost always democratic does not mean that democratic nations are almost always contractualist, and the majority 57% of democracies had clientelist economies from 1950 to 2010. The notion that democracy, market development, and trade are synonymous is rooted in ignorance, and ignorance cannot justify discarding, after the fact, our carefully constructed measures and datasets.13 The implications of this study are far from trivial: the democratic peace, defined as democracy causing peace, lacks the evidentiary core on which it is based; the observation of democratic peace is best explained by contract norms. If our field is to abide by scientific rules of evidence, then our scholars must stop describing democracy as a ‘‘known’’ cause, or correlate, of peace, and we must stop tossing in a variable for democracy, willy-nilly, in quantitative analyses of international conflict. The variable to replace it is contractualist economy, which not only subsumes democracy but is now the most powerful non-trivial factor in the study of international conflict, whose impact is more than 10 times that which we once thought democracy had. No historical study is immune to criticism, but the progress of knowledge will not be furthered with another (third) round of ardently asserted claims of error that are not shown to change results. I understand the prior view of democratic peace is known and intuitive and the contractualist peace is less so, and unsupported assertions are enough for many to believe in already-known claims. However, the purpose of science is to promote rather than stifle innovation, and to differentiate good ideas from bad ones. Better yet are new ideas that can help make the world a better place, and economic norms theory is clear on that: if the wealthy market-oriented nations wish to advance democracy and peace around the world, the way to do that is to promote economic opportunity.

#### Democracy causes nuke war – backsliding solves

Muller, director of the Peace Research Institute in Frankfurt, professor of International Relations at Goethe University, 15

(Harald, Democracy, Peace, and Security, Lexington Books pp. 44-49)

My own proposal for solving the problem. developed together with my colleague Jonas Wolff (Müllcr 2004. Muller/Wolff 2006). turns the issue upside down: We do not start with explaining mutual democratic peacefulness, but its opposite. the proven capability of democracies to act aggressively against non-democracies. We note that—apart from self-defense where there is no difference between democracies and non-democracies——democratic states go to war—in contrast to non-democracies—to uphold international law (or their own interpretation thereof), to prevent anarchy through state failure, to “save strangers” when dictatorships massacre their own people, and to promote democracy. None of these acts is likely to find its target in a democracy. Since the use of force by democracies is hardly possible without public justification, even the rhetorical use of the said reasons will not stand public scrutiny when uttered against a democracy—people will not believe it, War other than for self-defense thus can only be fought by democracies against non-democracies because against a fellow democracy justification would fail. Because whether this is the case or not to a degree that justifies war as the ‘ultimate means” must rely on practical judgments. and practical judgments can differ among even reasonable people. democracies might disagree whether or not the judgment applies in specific cases. Democracies also show variance in that regard due (o a systematic. political-culturally rooted different propensity to judge situations as justifing war or not, and to participate in such wars (Gels et al, 2013). It should also be noted that, given the continuum between autocracy, anocracy and democracy, whether a given state is a democracy or not can be subject to interpretation. and this interpretation may even change over time (Oren 1995, Hayes 2013). The fact is that there are a couple of fairly warlike democracies, and that the democracies participating most frequently in military disputes (apart from the special case of Israel) are, by and large. major powers such as the United States, the United Kingdom. France. or India. This pattern is important to keep in mind when the question of the utility of democratic peace for today ‘s world problems is to be answered. Transnational terrorism, failed states, civil wars and the like dominate the international agenda on war and peace. At the classical level of international relations, in the relationships among major powers. developments arc undcr way which potentially pose an even greater threat than this diverse collection of non-interstate problems presently does. We are living in an era of rather rapid and disturbing power change (Tammcn et al. 2000). The United States are still the leading power of the world with unprecedented militany and economic poer. But others are coming closer: China. India. Braiil and Indonesia, China is at the top of this cohort, All major power changes chal lenge existing structures and thus contain the potential for great disturbance. The leading power may start to fear for its dominant position and take measures to ensure its position at the lop. These actions may frustrate emerging powers and even lead to the perception that their security is endangered. which would motivate counter-measures that further propel a political escala tion spiral. An increasingly focused competition in which a true power change appears increasingly possible. that is. a change of position at the top of the international hierarchy, has an even greater risk potential. If the inherent dangers are not contained—which remains always a possibility major power war may ensue defying all propositions that major war has become obsolete or that nuclear deterrence will prevent this calamity once and for all. Of course, states can grow peacefully into roles of higher responsibility. status and influence on the world stage. There arc no natural laws saving that changes in the world’s power structure must end in war, despite all distur bances and ensuing risks (Rauch 2014). The less conflict an emerging power experiences with established ones, and with peer challengers that emerge simultaneously, the better the chances that the rise will travel a peaceful trajectory. Looking through this lens. thc relations of only one emerging power with the present hegemon appear to be partially conflict-pronc. and seriously so: it concerns the pair China/United States. The Iwo great powers are rivals for preponderance in East and South East Asia and eventually for being the number one at the global level. There is also Chinese resentment stemming from the US role in China’s past as a victim of Western imperialism. On the other hand. China’s authoritarian system of rule and ensuing violations of human and political rights trigger the liberal resentment discussed in the first part of this chapter. which is rooted particularly strongly in US political culture. The Chinese—US relationship is thus thc key to a peaceful. tense or even violent future at the world stage. A small group of major powers. Including the United States and China, is interconnected today by a complex conflict system. China has territorial claims against Japan, South Korea, Vietnam. the Philippines. Brunci. and India which it pursues by a variety of means, not shying away from the limited, small scale usc of militan force in some cases, notably against obviously weaker counterparts (Ellcman ci al. 2012). China’s relation (o wards Japan is the one most burdened by China’s past as a victim of Japanese oppression and related cruelties, and the propcnsit of the conservative part of Japan’s elite to display cavalier attitudes towards this past or even sort of celebrate it (as through visits to the notorious Yasukuni shrine hosting the remnants of war criminals) only adds to anti-Japanese feelings in China (Russia. another great power. also openly pursues a revisionist agenda. as vividly shown in the recent Crimean move, but these territorial ambitions are not part of the most virulent conflict complex in Asia). Territorial claims are always emotionalized and dangerous. Territorial claims by a major power bear particular risks, because threatened countries look for protective allies which are, by necessity, major powers with the capability to project power into the region of concern. The great power claimant and the great power protector then position themselves on the opposite sides of the conflict. A classical constellation of great power conflict results that looks far more traditional than all the talk about post-modern global relations in which state power struggles fade into oblivion would suggest. In the Asian conflict complex that structures the shape of the US—Chinese contest (Foot/Walter 201 1). Japan. South Korea and the Philippines arc for mall allied ith the United Slates. India and Vietnam today entertain rda (ions ith the United States that can be depicted as cordial entente, already include military cooperation, and might move further towards an alliance. depending on deelopmens in Asia. The United States is also a protector of Taiwan. officially a Chinese province, factualh an independent political entity. and the main object of Chinese interest because of the unfinished agenda of national re-unification. Given the enormous asymmetries between China and Taiwan. the latter’s independence depends fully and unambiguously on the US guarantee. Russia and China have a fairly ambivalent relation with each other that is officially called a strategic partnership. Ambiguous as this relationship is, it is predictable that the more the West and Russia are at loggerheads, the closer the Russian—Chinese relations might become. On the other hand. Chi na is the stronger partner and harbors not completely friendly feelings to wards Moscow. as Russia took part in China’s humiliation during the imperi alist period no less than the United States did. Russian fears concerning covert immigration into Eastern Siberia and demographic repercussions and political consequences that might result therefrom add to the uneasiness. China and India arc natural rivals for regional preponderance in Asia (Gilbov/Hcginbotham 2012). Both arc developing rapidly. with China still ahead. Territorial disputes. India’s liospitalit Lo TibeLan exiles including the Dalai Lama. China’s close relation to Pakistan and a growing naval rivalry spanning the Indian Ocean from the Strait of Malacca to Iranian shores (Garofano/Dew 2013) run parallel to rapidly growing economic relations and ostensible efforts lo present the relationship if not as amiable then at least as partner-like. The United States, China, Russia and India even today conduct a multi- pronged nuclear arms race (Fingar 2011: Gangul /Thompson 2011: O’Neill 2013. Müllcr 2014). In this race, conventional components like missile de fense. Intercontinental strike options, space-based assets and the specter of cbcr war play their role, as does the issue of extended dcterrcncc The general US militar’ superiority induces Russia and China to improve their nuclear arsenals, while India tries not to be left too far behind the Chinese in terms of nuclear capability. Pakistan and North Korea ork as potential spoilers at the fringe of this arms race. They are not powerful but thc arc capable of stirring up trouble, whenever they move. In tems of the military constellation, the most disquieting development is the drafting of pre-emptive strategies of a first (most likely conventional) strike by the United States and China, on either side motivated by the per ceived need to keep the upper hand early in a potential clash close to Chinese shores (such as in the context of a Taiwan conflict). China is building up middle-range ballistic capabilities to pre-empt US aircraft carrier groups from coming into striking distance and to desiroy US Air Force assets in Okinawa. while the United States is developing means to neutralize exactly these Chinese capabilities. They are steering towards a hair-trigger security dilemma in which the mutual postures cry out for being used first before the enemy might destroy them (Goldstein 2013: Le Miôre 2012). It cannot be excluded that this whole conflict system might collapse into two opposing blocks one da the spark for a major violent cataclysm could even be lighted by uncontrolled non-state actors inside some of the powers. or—in analogy to the role of Serbia in 1914— a ‘spoiler” state with a particularly idios ncralic agenda. Pakistan. North Korea or Tai an arc con ceivable in this role. Even Japan might be considered, if nationalism in Nippon grows further and seeks confrontation with the old rival China. If anything. this constellation does not look much better than the one which drove Europe into World War I a century ago. and it contains a nuclear component. To trust in the infallibility of nuclear deterrence in this mufti- pronged constellation needs quite a lot of optimism Can democratic peace be helpful in this constellation? Our conflict system includes democracies—the United States, India, Japan. Indonesia and non- democracies such as China. Russia, and Vietnam, but not necessarily on the same side. Should the European theater become connected to the Asian one through continuous US—Russian disputes and a Russian—Chinese entente. defective democracies like Ukraine and Georgia may feature rather importantly as potential triggers for a worsening of relationships. While democracy is useful in excluding certain conflict dyads in the whole complex, such as India and the United States. Japan and the United States. Japan and India. from the risk that they might escalate into a violent conflict, and as democratic peace is pacifying parts of the world. such as South America or Europe. it helps little in disputes between democracies and non-democracies. To the contrary: as discussed above, democracies have a more or less moral-emotional inclination to demonize non-democracies once they dis agree, and to feel a missionary drive to turn them democratic. This might exacerbate the existing, more interest-based conflicts between democracies and non-democracies, and it creates fears in the hearts of autocratic leaders that they might be up for democratization sooner or later. The close inter- democratic relations which democratic peace tends to produce, in turn, only exacerbate these fears as democracies tend to be rich, well organized, and powerful and dispose together of much more potent military capabilities than their potential non-dcnwcratic counterparts. Rather than helping with peace. the inter-democratic consequences of the democratic peace tend to exacerbate the security dilemma which exists between democracies and non-democracics an way. This non-peaceful dark side of democratic peace has escaped the attention of most academic writings on this subject and certainly all political utterances about democratic peace in our political systems. But democratic militancy is the Siamese twin of democratic peace as the Bush Administration unambiguously taught us (Gels et al. 2013: Müllcr 2014b).

## futarchy

### 2nc- futarchy

#### Current governance structures emphasize bunk decision making processes that make resolving complex long-term problems impossible

Boston 14 [Jonathan Boston, Professor of Public Policy, School of Government, Victoria University of Wellington, Fulbright Fellow, American University. Governing for the Future: How to bring the long-term into short-term political focus. November 5, 2014. https://www.american.edu/spa/cep/upload/jonathan-boston-lecture-american-university.pdf]

Similarly, particular kinds of policy problems pose especially serious challenges for prudent long-term governance. The most difficult problems are those exhibiting one or more of the following characteristics: high complexity; low predictability and causal certainty; spatially dispersed effects; impacts that are mostly experienced in the future and/or are largely invisible and intangible (thus reducing the apparent urgency to respond); impacts that fall predominantly on politically weak or marginalized groups; and, as noted earlier, problems which require investment-type solutions (i.e. up-front costs are required in order to secure long-term benefits). Human-induced climate change exhibits most, if not all, of these features, which helps account for the difficulty of securing prudent policy responses. But many policy problems also exhibit investment-type payoff structures, thus creating a temptation for inter-generational buckpassing. Such temptations will be all the greater when the short-term costs are direct, specific, certain, tangible and visible while the long-term benefits are more generalized, less certain and more intangible.

#### Empirics proves futarchy works better and incorporates all relevant info, including the 1ac’s info

**Hanson 13** Shall We Vote on Values, But Bet on Beliefs?\* ROBIN HANSON Economics, George Mason University http://mason.gmu.edu/~rhanson/futarchy2013.pdf

II. Info Successes of Speculative Markets While government policy may often suffer info failures, speculative markets show striking info successes. Most markets for stocks, bonds, currency, and commodities futures are called speculative markets because they let people speculate on future prices by buying or selling today in the hope of reversing their trades later for a profit. Such opportunities to “buy low, sell high” occur when identical durable items are traded frequently in a market with low transaction costs. Given such opportunities, everyone is essentially invited to be paid to correct the current market price, by pushing that current price closer to the future price. Such invitations are accepted by those sure enough of their beliefs to put their money where their mouth is, and wise enough not to have lost their money in previous bets. Betting markets are speculative markets trading assets designed let people speculate on particular matters of fact, such as which horse will win a race. Final bet asset values are defined in terms of later official judgments about the facts in question. By construction, such assets are durable, identical, and can be created in unlimited supply. Betting and other speculative markets have been around for centuries, and for decades academics have studied their info properties. The main robust and consistent finding is that it is usually quite hard, though not impossible, to find info not yet incorporated in speculative market prices.xvi In laboratory experiments, speculative markets usually aggregate info well, even with four ignorant traders trading $4 over four minutes.xvii There are, however, noteworthy exceptions. For example, betting markets typically overestimate low probability, or “long shot,” events, though with low transaction costs specialists usually eliminate this bias. Also, with complex trader info, “info traps” can arise where traders lack info revelation incentives.xviii Such traps can often be avoided by trading in more kinds of related assets. Financial markets also seem to have excess long-term aggregate price variation, such as financial market bubbles, xix though bubbles can be hard to distinguish from rational info responses.xx Risk and delay discourage specialists from correcting such errors, and irrationally risky traders can actually get better returns, if not utility, and so are not selected out.xxi Even if speculative markets are distorted by irrational bubbles, however, no known info institution does better. For example, what other info institution consistently and clearly predicted that we were over-investing during the dotcom or housing bubbles? Yes individual academics or reporters so predicted, but so did individual stock investors. The key issue is not absolute accuracy, but accuracy relative to other institutions, on the same topics, given similar resources. We have some data on this. In addition to lab studies, a few studies directly compare real speculative markets with other real info institutions. For example, racetrack market odds improve on the prediction of racetrack expertsxxii; orange juice commodity futures improve on government weather forecastsxxiii; stocks fingered the guilty firm in the Challenger crash long before the official NASA panelxxiv; Oscar markets beat columnist forecastsxxv; gas demand markets beat gas demand expertsxxvi; betting markets beat Hewlett Packard official printer sale forecastsxxvii; and betting markets beat Eli Lily official drug trial forecasts.xxviii The largest known tests compare bet prices to major opinion polls on US presidential elections. For example, in 709 out of 964 comparisons, bet prices were closer to the final result.xxix This gain comes in part from prices being disproportionately influenced by active traders, who suffer less from cognitive biases.xxx Some have noted that statistical models built from poll data predict past elections better that did betting prices, and could have been used to win bets.xxxi However, if we compare apples to apples, statistical models built from bet prices predict better than statistical models build from polls.xxxii More important, one group’s statistical model on one topic in not a general institution, to which we could return time and again for answers on many disputed policy topics. My claim is not that betting prices are always more accurate than other sources, but that they are a robustly accurate public institution estimating policy-relevant topics. When supported by similar resources and compared on the same topic, they are often substantially better, and only rarely substantially worse, than other info institutions with publicly visible estimates. Speculators provide a valuable service even when they just evaluate other public info institutions, and echo the most accurate of them. My claim also has little to do with any “wisdom of crowds.”xxxiii Speculators tend to rely more on crowds when crowds know more, and on experts when experts know more. Yes, the best track bettors have no higher IQ, xxxiv but speculative markets if anything still over-emphasize experts, both public and private.xxxv Instead, the main reasons for superior speculative market accuracy seem to be incentive and selection effects: stronger accuracy incentives tend to reduce cognitive biases, xxxvi those who think they know more tend to trade more, and specialists are paid to eliminate any biases they can find. These attempted explanations, however, are not the main reason to believe in speculative market accuracy. The main reason is the robust and consistent empirical track record. We want policy-related info institutions to resist manipulation, that is, to resist attempts to influence policy via distorted participation. Speculative markets do well here because they deal well with “noise trading,” that is, trading for reasons other than info about common asset values. When other traders can’t predict noise trading exactly, they compensate for its expected average by an opposite average trade, and compensate for its expected variation by trading more, and by working harder to find relevant info. Theory says that if trader risk-aversion is mild, and if more effort gives more info, then increased noise trading increases price accuracy. And in fact, the most accurate real speculative markets tend to be those with the most noise trading. What do noise traders have to do with manipulators? Manipulators, who trade hoping to distort prices, are noise traders, since they trade for reasons other than asset value info. Thus adding manipulators to speculative markets doesn’t reduce average price accuracy. This has been verified in theory, xxxvii in laboratory experiments, xxxviii and in the field.xxxix

#### Futarchic implementation is best, the aff gets circumvented

Graham 19 Andrew Graham, 2-13-2019, "Why governments are so bad at implementing public projects," Conversation, Professor, Queen's University, Ontario <https://theconversation.com/why-governments-are-so-bad-at-implementing-public-projects-111223>

* Empirics prove
* Focus is put on initial announcement rather than the end product
* Officials appear and disappear

As Canada’s federal government starts looking for a replacement for [its failed payroll system](https://www.cbc.ca/news/canada/ottawa/ibm-not-bid-phoenix-replacement-1.5006682) and the Ontario provincial government launches yet another [major shake-up of its health-care system](https://www.theglobeandmail.com/canada/article-ontario-government-employee-fired-after-leak-of-fords-health-plan/), it’s useful to remind decision-makers of a long history of failures in major public sector implementations. Research from around the world shows a consistent pattern of failures in public sector policy and project implementation. Yet we continue to embark upon implementation built on bias and faulty logic. So maybe it’s time to better understand the architecture of failure and what can be done to overcome it. Recent publications from Australia, Canada, the United Kingdom and the United States deliver some consistent messages. [The Blunders of Government](https://onlinelibrary.wiley.com/doi/abs/10.1111/1478-9302.12100_82) delves into the many restarts of the UK National Health Service. The [Learning from Failure report](https://www.apsc.gov.au/sites/g/files/net4441/f/learningfromfailure.docx) details major project failures in Australia. In the U.S., [A Cascade of Failures: Why Government Fails, and How to Stop It,](https://www.brookings.edu/research/a-cascade-of-failures-why-government-fails-and-how-to-stop-it/) reports similar themes. In Canada, the [auditor general’s latest reports on the Phoenix pay system](http://www.oag-bvg.gc.ca/internet/English/att__e_43045.html?wbdisable=true) echo the common basis for implementation failure. It’s not often an auditor uses [the phrase “incomprehensible,”](https://www.cbc.ca/news/canada/new-brunswick/phoenix-pay-system-alarms-1.4683030) but there it is. When distilling all this research and all these investigations, certain themes are common to them all. First and foremost in the public sector, announcement was equated with accomplishment. This is the equivalent of thinking that just cutting the ribbon is enough. A corollary of this is that most projects get lots of attention by both political and bureaucratic leaders at first, but that attention fades as the boring, detail-oriented work begins and the next issue, crisis or bright shiny object comes along. **‘We design it. You make it work.’** In many cases, there is a cultural disconnect in the project design that prevents bad news from making it to those at the top of the chain of command, minimizes problems that are often warning signs and deliberately downplays operational issues as minor. What can be called the “handover mentality” often takes over between a project’s designers and the people who have to actually implement it and get it up and running. It’s best characterized by the phrase: “We design it. You make it work.” The next element is that when things go wrong, those who speak up about the problems are dismissed, discounted or just plain punished. [This leads to groupthink,](https://www.psychologytoday.com/ca/basics/groupthink) a failure to challenge assumptions and to just go along, even when danger signs are in full sight. Policy designers and those who must implement government projects or infrastructure are often guilty of what’s known as [optimism bias](https://www.behavioraleconomics.com/resources/mini-encyclopedia-of-be/optimism-bias/) (“What could possibly go wrong?”) when, in fact, they should be looking at the end goal. They should be working backwards to identify not only what could go wrong, but how the whole process will roll out. Instead, they focus on the beginning — the announcement, the first stages. We hear the word *complexity* a lot when examining government project failures. Indeed, most of the problems examined in the aforementioned research pointed to the increasing complexity in failed implementations that went well beyond IT, and the failure to map those complexities out. But that complexity increases the risks of some moving part of a government project malfunctioning and shutting down the entire system. **Gears start slipping** People get busy and distracted. If a policy is just the flavour of the week and something else becomes popular next week, the project starts to lose momentum, needed attention, reaction and adaptation to inevitable challenges. The gears start to slip. Then there is the churn of officials. At both the political and bureaucratic level, this is a consistent theme in projects failing or in governments responding poorly to crises as they arise. The champions for a policy simply move on, and their successors are left to decide how much energy to put into someone else’s pet project. Similarly, the rapid turnover of senior managers in government often leaves well-intentioned people to respond to emergencies in areas where they have little experience. An interesting element in all of this research is the confirmation that [cognitive biases](https://www.verywellmind.com/what-is-a-cognitive-bias-2794963) play a significant role in assessing risks in policy implementation in a number of ways, often in the face of a mountain of contrary evidence. Cognitive biases tend to confirm beliefs we already have. Biases block new information. While we need biases to short-hand our interpretation of events, they often filter and discount new information. Our experiences are our greatest asset and greatest liability in this process. The bottom line on the causes of major implementation failure really rests with a culture focused on blame avoidance and getting along. We now know enough to avoid failure, backed by ample evidence that confirms common sense about how to better structure policy, its implementation and our major projects.

### A2 perm do both

#### 2 The perm is intrinsic

Cohen 4 Copyright © 2004, S. Marc Cohen https://faculty.washington.edu/smcohen/320/theseus.html

Plato is probably the source of this “paradoxical” interpretation of Herclitus. According to Plato, Heraclitus maintains that nothing retains its identity for any time at all: “Heraclitus, you know, says that everything moves on and that nothing is at rest; and, comparing existing things to the flow of a river, he says that you could not step into the same river twice” (*Cratylus* 402A). But what Heraclitus actually said was more likely to have been this: “On those who enter the same rivers, ever different waters flow.” (fr. 12) On Plato’s interpretation, it’s not the same river, since the waters are different. On a less paradoxical interpretation, it **is** the same river, in spite of the fact that the waters are different. On both interpretations of Heraclitus, he holds the **Flux Doctrine**: Everything is constantly altering; no object retains all of its component parts from one moment to the next. The issue is: what does Flux entail about identity and persistence? Plato’s interpretation requires that Heraclitus held what might be called the **Mereological Theory of Identity** (**MTI**), i.e., the view that the identity of an object depends on the identity of its component parts. This view can be formulated more precisely as follows: For any compound objects, *x* and *y*, *x* = *y* only if every part of *x* is a part of *y*, and every part of *y* is a part of *x*. I.e., an object continues to exist (from time *t*1 to time *t*2) only if it is composed of all the same components at *t*2 as it was composed of at *t*1. Sameness of parts is a necessary condition of identity.

### A2 perm do counterplan

#### Betting markets do the plan, rather than the USFG.

Hogan, 10 [Thomas, Director of the Administrative Office of the U.S. Courts, THE FEDERAL COURT SYSTEM IN THE UNITED STATES, http://www.uscourts.gov/uscourts/FederalCourts/Publications/English.pdf] /Bingham-MB

The United States Constitution and the Federal Government The United States Constitution, adopted in ¶ 1789 and amended only rarely since then, is the ¶ ¶ supreme law of the United States. It established ¶ ¶ a republic under which the individual states ¶ ¶ retain considerable sovereignty and authority. ¶ ¶ Each state, for example, has its own elected ¶ ¶ executive (governor), legislature, and court ¶ ¶ system. The federal, or national, government ¶ ¶ is one of strong, but limited, powers. It may ¶ ¶ exercise only the powers specified in the ¶ ¶ Constitution itself. All other powers are reserved ¶ ¶ by the Constitution to the states and the people. ¶ ¶ This system of divided powers between the ¶ ¶ national and state governments is known as ¶ ¶ “federalism.” ¶ ¶ The Bill of Rights is set forth as the first ten ¶ ¶ amendments to the Constitution. It guarantees ¶ ¶ fundamental rights to the people and protects ¶ ¶ them against improper acts by the government. ¶ ¶ The rights protected include such matters as free ¶ ¶ speech, freedom of assembly, freedom to seek ¶ ¶ redress of grievances, freedom from unreasonable ¶ ¶ searches and seizures, due process of law, ¶ ¶ protection against compelled self-incrimination, ¶ ¶ protection against seizure of property without ¶ ¶ just compensation, a speedy and public trial in ¶ ¶ criminal cases, trial by jury in both criminal and ¶ ¶ civil cases, and assistance of counsel in criminal ¶ ¶ prosecutions. ¶ ¶ The Constitution established three separate ¶ ¶ branches of government—Legislative (Article I), ¶ ¶ Executive (Article II), and Judicial (Article III). ¶ ¶ The three branches of the federal government ¶ ¶ operate within a constitutional system known as ¶ ¶ “checks and balances.” Each branch is formally ¶ ¶ separate from the other two, and each has certain ¶ ¶ constitutional authority to check the actions of ¶ ¶ the others.

### at: cant solve case

#### Most policies fail, the aff will too

Muhlhausen 14 David Muhlhausen, 3-19-2014, "Do Federal Social Programs Work?," Heritage Foundation, https://www.heritage.org/budget-and-spending/report/do-federal-social-programs-work

**Conclusion**

Do federal social programs work? Based on the scientifically rigorous multisite experimental evaluations published since 1990, the answer certainly cannot be in the affirmative. Despite the best social engineering efforts, overwhelming evidence points to the conclusion that federal social programs are ineffective.

#### Even data backed policies fail

Todd 17 Benjamin Todd, July 2017, "Is it fair to say that most social programmes don’t work?," 80,000 Hours, https://80000hours.org/articles/effective-social-program/

The vast majority of social programs and services have not yet been rigorously evaluated, and…of those that have been rigorously evaluated, most (perhaps 75% or more), including those backed by expert opinion and less-rigorous studies, turn out to produce small or no effects, and, in some cases negative effects.

#### Most research is false

Ioannidis 5 Why Most Published Research Findings Are False John P. A. Ioannidis August 2005 https://web.archive.org/web/20170619231725/http://faculty.dbmi.pitt.edu/day/Bioinf2118/Bioinf-2118-2013/Ioannidis-journal.pmed.0020124.pdf

Published research findings are sometimes refuted by subsequent evidence, with ensuing confusion and disappointment. Refutation and controversy is seen across the range of research designs, from clinical trials and traditional epidemiological studies [1–3] to the most modern molecular research [4,5]. There is increasing concern that in modern research, false findings may be the majority or even the vast majority of published research claims [6–8]. However, this should not be surprising. It can be proven that most claimed research findings are false. Here I will examine the key factors that influence this problem and some corollaries thereof. Modeling the Framework for False Positive Findings Several methodologists have pointed out [9–11] that the high rate of nonreplication (lack of confirmation) of research discoveries is a consequence of the convenient, yet ill-founded strategy of claiming conclusive research findings solely on the basis of a single study assessed by formal statistical significance, typically for a p-value less than 0.05. Research is not most appropriately represented and summarized by p-values, but, unfortunately, there is a widespread notion that medical research articles should be interpreted based only on p-values. Research findings are defined here as any relationship reaching formal statistical significance, e.g., effective interventions, informative predictors, risk factors, or associations. “Negative” research is also very useful. “Negative” is actually a misnomer, and the misinterpretation is widespread. However, here we will target relationships that investigators claim exist, rather than null findings.

#### Aff evidence is no more reliable than dart throwing monkeys

Menand 5 – Louis Menand has contributed to The New Yorker since 1991 and has been a staff writer since 2001. His book “The Metaphysical Club” was awarded the 2002 Pulitzer Prize for history and the Francis Parkman Prize from the Society of American Historians. He was an associate editor at The New Republic from 1986 to 1987, an editor at The New Yorker from 1992 to 1993, and a contributing editor at The New York Review of Books from 1994 to 2001. He is the Lee Simpkins Family Professor of Arts and Sciences and the Anne T. and Robert M. Bass Professor of English at Harvard University. In 2016, he was awarded the National Humanities Medal by President Obama, November 28th ("Everybody’S an Expert", New Yorker, Available online at https://www.newyorker.com/magazine/2005/12/05/everybodys-an-expert, Accessed 11-10-2020)

It is the somewhat gratifying lesson of Philip Tetlock’s new book, “Expert Political Judgment: How Good Is It? How Can We Know?” (Princeton; $35), that people who make prediction their business—people who appear as experts on television, get quoted in newspaper articles, advise governments and businesses, and participate in punditry roundtables—are no better than the rest of us. When they’re wrong, they’re rarely held accountable, and they rarely admit it, either. They insist that they were just off on timing, or blindsided by an improbable event, or almost right, or wrong for the right reasons. They have the same repertoire of self-justifications that everyone has, and are no more inclined than anyone else to revise their beliefs about the way the world works, or ought to work, just because they made a mistake. No one is paying you for your gratuitous opinions about other people, but the experts are being paid, and Tetlock claims that the better known and more frequently quoted they are, the less reliable their guesses about the future are likely to be. The accuracy of an expert’s predictions actually has an inverse relationship to his or her self-confidence, renown, and, beyond a certain point, depth of knowledge. People who follow current events by reading the papers and newsmagazines regularly can guess what is likely to happen about as accurately as the specialists whom the papers quote. Our system of expertise is completely inside out: it rewards bad judgments over good ones. “Expert Political Judgment” is not a work of media criticism. Tetlock is a psychologist—he teaches at Berkeley—and his conclusions are based on a long-term study that he began twenty years ago. He picked two hundred and eighty-four people who made their living “commenting or offering advice on political and economic trends,” and he started asking them to assess the probability that various things would or would not come to pass, both in the areas of the world in which they specialized and in areas about which they were not expert. Would there be a nonviolent end to apartheid in South Africa? Would Gorbachev be ousted in a coup? Would the United States go to war in the Persian Gulf? Would Canada disintegrate? (Many experts believed that it would, on the ground that Quebec would succeed in seceding.) And so on. By the end of the study, in 2003, the experts had made 82,361 forecasts. Tetlock also asked questions designed to determine how they reached their judgments, how they reacted when their predictions proved to be wrong, how they evaluated new information that did not support their views, and how they assessed the probability that rival theories and predictions were accurate. Tetlock got a statistical handle on his task by putting most of the forecasting questions into a “three possible futures” form. The respondents were asked to rate the probability of three alternative outcomes: the persistence of the status quo, more of something (political freedom, economic growth), or less of something (repression, recession). And he measured his experts on two dimensions: how good they were at guessing probabilities (did all the things they said had an x per cent chance of happening happen x per cent of the time?), and how accurate they were at predicting specific outcomes. The results were unimpressive. On the first scale, the experts performed worse than they would have if they had simply assigned an equal probability to all three outcomes—if they had given each possible future a thirty-three-per-cent chance of occurring. Human beings who spend their lives studying the state of the world, in other words, are poorer forecasters than dart-throwing monkeys, who would have distributed their picks evenly over the three choices. Tetlock also found that specialists are not significantly more reliable than non-specialists in guessing what is going to happen in the region they study. Knowing a little might make someone a more reliable forecaster, but Tetlock found that knowing a lot can actually make a person less reliable. “We reach the point of diminishing marginal predictive returns for knowledge disconcertingly quickly,” he reports. “In this age of academic hyperspecialization, there is no reason for supposing that contributors to top journals—distinguished political scientists, area study specialists, economists, and so on—are any better than journalists or attentive readers of the New York Times in ‘reading’ emerging situations.” And the more famous the forecaster the more overblown the forecasts. “Experts in demand,” Tetlock says, “were more overconfident than their colleagues who eked out existences far from the limelight.” People who are not experts in the psychology of expertise are likely (I predict) to find Tetlock’s results a surprise and a matter for concern. For psychologists, though, nothing could be less surprising. “Expert Political Judgment” is just one of more than a hundred studies that have pitted experts against statistical or actuarial formulas, and in almost all of those studies the people either do no better than the formulas or do worse. In one study, college counsellors were given information about a group of high-school students and asked to predict their freshman grades in college. The counsellors had access to test scores, grades, the results of personality and vocational tests, and personal statements from the students, whom they were also permitted to interview. Predictions that were produced by a formula using just test scores and grades were more accurate. There are also many studies showing that expertise and experience do not make someone a better reader of the evidence. In one, data from a test used to diagnose brain damage were given to a group of clinical psychologists and their secretaries. The psychologists’ diagnoses were no better than the secretaries’. The experts’ trouble in Tetlock’s study is exactly the trouble that all human beings have: we fall in love with our hunches, and we really, really hate to be wrong. Tetlock describes an experiment that he witnessed thirty years ago in a Yale classroom. A rat was put in a T-shaped maze. Food was placed in either the right or the left transept of the T in a random sequence such that, over the long run, the food was on the left sixty per cent of the time and on the right forty per cent. Neither the students nor (needless to say) the rat was told these frequencies. The students were asked to predict on which side of the T the food would appear each time. The rat eventually figured out that the food was on the left side more often than the right, and it therefore nearly always went to the left, scoring roughly sixty per cent—D, but a passing grade. The students looked for patterns of left-right placement, and ended up scoring only fifty-two per cent, an F. The rat, having no reputation to begin with, was not embarrassed about being wrong two out of every five tries. But Yale students, who do have reputations, searched for a hidden order in the sequence. They couldn’t deal with forty-per-cent error, so they ended up with almost fifty-per-cent error. The expert-prediction game is not much different. When television pundits make predictions, the more ingenious their forecasts the greater their cachet. An arresting new prediction means that the expert has discovered a set of interlocking causes that no one else has spotted, and that could lead to an outcome that the conventional wisdom is ignoring. On shows like “The McLaughlin Group,” these experts never lose their reputations, or their jobs, because long shots are their business. More serious commentators differ from the pundits only in the degree of showmanship. These serious experts—the think tankers and area-studies professors—are not entirely out to entertain, but they are a little out to entertain, and both their status as experts and their appeal as performers require them to predict futures that are not obvious to the viewer. The producer of the show does not want you and me to sit there listening to an expert and thinking, I could have said that. The expert also suffers from knowing too much: the more facts an expert has, the more information is available to be enlisted in support of his or her pet theories, and the more chains of causation he or she can find beguiling. This helps explain why specialists fail to outguess non-specialists. The odds tend to be with the obvious. Tetlock’s experts were also no different from the rest of us when it came to learning from their mistakes. Most people tend to dismiss new information that doesn’t fit with what they already believe. Tetlock found that his experts used a double standard: they were much tougher in assessing the validity of information that undercut their theory than they were in crediting information that supported it. The same deficiency leads liberals to read only The Nation and conservatives to read only National Review. We are not natural falsificationists: we would rather find more reasons for believing what we already believe than look for reasons that we might be wrong. In the terms of Karl Popper’s famous example, to verify our intuition that all swans are white we look for lots more white swans, when what we should really be looking for is one black swan. Also, people tend to see the future as indeterminate and the past as inevitable. If you look backward, the dots that lead up to Hitler or the fall of the Soviet Union or the attacks on September 11th all connect. If you look forward, it’s just a random scatter of dots, many potential chains of causation leading to many possible outcomes. We have no idea today how tomorrow’s invasion of a foreign land is going to go; after the invasion, we can actually persuade ourselves that we knew all along. The result seems inevitable, and therefore predictable. Tetlock found that, consistent with this asymmetry, experts routinely misremembered the degree of probability they had assigned to an event after it came to pass. They claimed to have predicted what happened with a higher degree of certainty than, according to the record, they really did. When this was pointed out to them, by Tetlock’s researchers, they sometimes became defensive. And, like most of us, experts violate a fundamental rule of probabilities by tending to find scenarios with more variables more likely. If a prediction needs two independent things to happen in order for it to be true, its probability is the product of the probability of each of the things it depends on. If there is a one-in-three chance of x and a one-in-four chance of y, the probability of both x and y occurring is one in twelve. But we often feel instinctively that if the two events “fit together” in some scenario the chance of both is greater, not less. The classic “Linda problem” is an analogous case. In this experiment, subjects are told, “Linda is thirty-one years old, single, outspoken, and very bright. She majored in philosophy. As a student, she was deeply concerned with issues of discrimination and social justice and also participated in antinuclear demonstrations.” They are then asked to rank the probability of several possible descriptions of Linda today. Two of them are “bank teller” and “bank teller and active in the feminist movement.” People rank the second description higher than the first, even though, logically, its likelihood is smaller, because it requires two things to be true—that Linda is a bank teller and that Linda is an active feminist—rather than one. Plausible detail makes us believers. When subjects were given a choice between an insurance policy that covered hospitalization for any reason and a policy that covered hospitalization for all accidents and diseases, they were willing to pay a higher premium for the second policy, because the added detail gave them a more vivid picture of the circumstances in which it might be needed. In 1982, an experiment was done with professional forecasters and planners. One group was asked to assess the probability of “a complete suspension of diplomatic relations between the U.S. and the Soviet Union, sometime in 1983,” and another group was asked to assess the probability of “a Russian invasion of Poland, and a complete suspension of diplomatic relations between the U.S. and the Soviet Union, sometime in 1983.” The experts judged the second scenario more likely than the first, even though it required two separate events to occur. They were seduced by the detail. It was no news to Tetlock, therefore, that experts got beaten by formulas. But he does believe that he discovered something about why some people make better forecasters than other people. It has to do not with what the experts believe but with the way they think. Tetlock uses Isaiah Berlin’s metaphor from Archilochus, from his essay on Tolstoy, “The Hedgehog and the Fox,” to illustrate the difference. He says: Low scorers look like hedgehogs: thinkers who “know one big thing,” aggressively extend the explanatory reach of that one big thing into new domains, display bristly impatience with those who “do not get it,” and express considerable confidence that they are already pretty proficient forecasters, at least in the long term. High scorers look like foxes: thinkers who know many small things (tricks of their trade), are skeptical of grand schemes, see explanation and prediction not as deductive exercises but rather as exercises in flexible “ad hocery” that require stitching together diverse sources of information, and are rather diffident about their own forecasting prowess. A hedgehog is a person who sees international affairs to be ultimately determined by a single bottom-line force: balance-of-power considerations, or the clash of civilizations, or globalization and the spread of free markets. A hedgehog is the kind of person who holds a great-man theory of history, according to which the Cold War does not end if there is no Ronald Reagan. Or he or she might adhere to the “actor-dispensability thesis,” according to which Soviet Communism was doomed no matter what. Whatever it is, the big idea, and that idea alone, dictates the probable outcome of events. For the hedgehog, therefore, predictions that fail are only “off on timing,” or are “almost right,” derailed by an unforeseeable accident. There are always little swerves in the short run, but the long run irons them out. Foxes, on the other hand, don’t see a single determining explanation in history. They tend, Tetlock says, “to see the world as a shifting mixture of self-fulfilling and self-negating prophecies: self-fulfilling ones in which success breeds success, and failure, failure but only up to a point, and then self-negating prophecies kick in as people recognize that things have gone too far.”

#### A meta analysis proves water policies costs outweigh benefits

Shapiro 18 The low but uncertain measured benefits of US water quality policy David A. Keisera,b,1, Catherine L. Klingc , and Joseph S. Shapirod,e a Department of Economics, Iowa State University, Ames, IA 50011; b Center for Agricultural and Rural Development, Iowa State University, Ames, IA 50011; c Charles H. Dyson School of Applied Economics and Management, Cornell University, Ithaca, NY 14853; d Department of Agricultural and Resource Economics, University of California, Berkeley, CA 94720; and e National Bureau of Economic Research, Cambridge, MA 02138 Edited by Stephen Polasky, University of Minnesota, St. Paul, MN, and approved September 6, 2018 (received for review March 30, 2018) https://www.pnas.org/content/pnas/116/12/5262.full.pdf

In addition to these challenges in measuring costs, it is important to highlight that current water quality policies are not cost-effective (2). Water pollution regulation relies largely on “command and control” policies like effluent and technology standards. By contrast, air pollution regulation relies much more on market-based instruments like cap-and-trade systems. Such systems generally equate the marginal cost of abating pollution across sources, and hence cost less to achieve a given level of abatement. Moreover, while most sources of air pollution face stringent regulation, nonpoint sources of water pollution face little or no binding regulation. Failure to regulate a large polluting sector increases the cost to achieve a given level of abatement. If US policy moves toward more cost-effective solutions, abatement costs could correspondingly decrease (8, 20). Discussion Expenditures to clean up rivers, lakes, and other surface waters have exceeded the cost of investments to clean up air pollution and also have exceeded the costs of most other US environmental initiatives. Research has found that many of these expenditures have decreased water pollution and has suggested ways to make these investments more effective. A majority of analyses, however, find that these investments’ benefits are less than their costs. This includes studies by the EPA, private consultants, and academics; using revealed or stated preference methods; applying IAMs or econometric methods; and from papers covering an over 20-y period. This is not the case for most environmental goods, such as air and climate pollution. Are the benefits of these investments truly less than their costs, or are available estimates of costs and benefits biased?

#### Current policy is net harmful according to nobel prize winners

Friedman 12 SUNDAY, MARCH 18, 2012 Nordhaus on Global Warming David Friedman http://daviddfriedman.blogspot.com/2012/03/nordhaus-on-global-warming.html

A correspondent points me at the work of Nordhaus and Boyer, attempting to estimate the externality from CO2 production and the appropriate response. I have not read the printed version, but there is a [webbed version](http://www.econ.yale.edu/~nordhaus/homepage/web%20table%20of%20contents%20102599.htm) available. A number of things strike me:

1. Their conclusion is that

"current approaches, such as the Kyoto Protocol, are highly inefficient, with abatement costs approximately ten times their benefits in reduced damages."

#### Unknown risks and AI outweigh

Dickens 20 The Importance of Unknown Existential Risks by [**MichaelDickens**](https://forum.effectivealtruism.org/users/michaeldickens)23rd Jul 2020 https://forum.effectivealtruism.org/posts/CRofnyTEqL4uSNBSi/the-importance-of-unknown-existential-risks#Unknown\_existential\_risks

An interesting pattern emerges: the naturally-caused existential catastrophes have the lowest probability, anthropogenic causes appear riskier, and future causes look riskier still. We can also see that the more recently-discovered risks tend to pose a greater threat:

Imagine if the scientific establishment of 1930 had been asked to compile a list of the existential risks humanity would face over the following hundred years. They would have missed most of the risks covered in this book—especially the anthropogenic risks. [Footnote:] Nuclear weapons would not have made the list, as fission was only discovered in 1938. Nor would engineered pandemics, as genetic engineering was first demonstrated in the 1960s. The computer hadn’t yet been invented, and it wasn’t until the 1950s that the idea of artificial intelligence, and its associated risks, received serious discussion from scientists. The possibility of anthropogenic global warming can be traced back to 1896, but the hypothesis only began to receive support in the 1960s, and was only widely recognized as a risk in the 1980s.[[1]](https://forum.effectivealtruism.org/posts/CRofnyTEqL4uSNBSi/the-importance-of-unknown-existential-risks#fn-daMvw6S73yWjqvGXM-1)

In other words:

* Natural risks that have been present for all of civilization's history do not pose much threat.
* Risks that only emerged in the 20th century appear more likely.
* The likeliest risks are those that cannot occur with present-day technology, but might occur within the next century.

As technology improves, the probability of an existential catastrophe increases. If we extrapolate this trend, we can expect to discover even more dangerous risks that as-yet-unknown future technologies will enable. As Ord wrote, 100 years ago, the scientific community had not conceived of most of the risks that we would now consider the most significant. Perhaps in 100 years' time, technological advances will enable much more significant risks that we cannot think of today.

Or perhaps there exist existential risks that are possible today, but that we haven't yet considered. We developed nuclear weapons in 1945, but it was not until almost 40 years later that we realized their use could lead to a nuclear winter.[[2]](https://forum.effectivealtruism.org/posts/CRofnyTEqL4uSNBSi/the-importance-of-unknown-existential-risks#fn-daMvw6S73yWjqvGXM-2) We might already have the power to cause an existential catastrophe via some mechanism not on Toby Ord's list; and that mechanism might be easier to trigger, or more likely to occur, than any of the ones we know about.

If we accept this line of reasoning, then looking only at known risks might lead us to substantially underestimate the probability of an existential catastrophe.

Even more worryingly, existential risk might continue increasing indefinitely until an existential catastrophe occurs. If technological growth enables greater risk, and technology continues improving, existential risk will continue increasing as well.[[3]](https://forum.effectivealtruism.org/posts/CRofnyTEqL4uSNBSi/the-importance-of-unknown-existential-risks#fn-daMvw6S73yWjqvGXM-3) Improved technology can also help us *reduce* risk, and we can hope that the development of beneficial technologies will outpace that of harmful ones. But a naive extrapolation from history does not present an optimistic outlook.

Types of unknown risk

We can make a distinction between two types of unknown risk:

1. Currently-possible risks that we haven't thought of
2. Not-yet-possible risks that will become possible with future technology

The existence of the first type of risk leads us to conclude that we face a higher probability of imminent existential catastrophe than we might otherwise think. The second type doesn't affect our beliefs about existential risk in the near term, but it does suggest that we should be more concerned about x-risks over the next century or longer.

We shouldn't necessarily respond to these two types of unknown risks in the same way. For example: To deal with currently-possible unknown risks, we could spend more effort thinking about possible sources of risk, but this strategy probably wouldn't help us predict x-risks that depend on future technology.

Why unknown risks might not matter so much

In this section, I will present a few arguments that unknown risks don't matter as much as the previous reasoning might suggest (in no particular order). Of these new arguments, the only one I find compelling is the "AI matters most" argument, although this one involves sufficiently complex considerations that I do not feel confident about it.

Argument 1: AI matters most

We have some reason to expect superintelligent AI in particular to pose a greater risk than any unknown future technology. If we do develop superintelligent AI, humans will no longer be the most intelligent creatures on the planet. Intelligence has been the driving factor allowing humans to achieve dominance over the world's resources, so we can reasonably expect that a sufficiently intelligent AI would be able to gain control over humanity. If we no longer control our destiny, then on priors, we should not expect a particularly high probability that we realize a positive future[[4]](https://forum.effectivealtruism.org/posts/CRofnyTEqL4uSNBSi/the-importance-of-unknown-existential-risks#fn-daMvw6S73yWjqvGXM-4).

Arguably, unknown risks cannot pose the same level of threat because they will not change who controls the future.

(On the other hand, there could conceivably exist some unknown but even more important consideration than who controls the future, and that if we thought of this consideration, we would realize that it matters more than superintelligent AI.)

A sufficiently powerful friendly AI might be able to fix all anthropogenic existential risks and maybe even some natural ones, reducing the probability of existential catastrophe to near zero—thus rendering unknown risks irrelevant. On the other hand, perhaps future technology will introduce some existential risks that not even a superintelligent AI can foresee or mitigate.

### add on

#### 1 Utilitronium production outweighs by orders of magnitude. Independently, this proves the aff is a bad idea, it would legally prohibit spreading utilitronium, by protecting water from it

Tomasik 13 Brian Tomasik, First written: 6 Apr 2013. Last nontrivial update: 17 Oct 2013., "Values Spreading is Often More Important than Extinction Risk," No Publication, <https://reducing-suffering.org/values-spreading-often-important-extinction-risk/>

* FYI Utilitronium is relatively homogeneous matter optimized for maximum [utility](https://www.lesswrong.com/tag/utility-functions) (like computronium is optimized for maximum computing power).

**General argument** Bob is a consequentialist who wants to maximize Z. He thinks that in the glorious future, people will be able to simulate vast amounts of Z by colonizing space and converting solar systems to Matrioshka brains. Therefore, he reasons, the most important thing I can do is make sure humans survive and colonize space. This is similar to what Eliezer Yudkowsky calls "[the giant cheesecake fallacy](http://wiki.lesswrong.com/wiki/Giant_cheesecake_fallacy)": "When technology advances far enough, we'll be able to build minds far surpassing human intelligence. Now it's clear, that if you're baking a cheesecake, how large a cheesecake you can bake depends on your intelligence. A superintelligence could build enormous cheesecakes - cheesecakes the size of cities. And Moore's Law keeps dropping the cost of computing power. By golly, the future will be full of giant cheesecakes!" The problem is that the thing Z that you value may, depending on how parochial your intuitions are, be more narrow than the [thousands of intuitions](http://lesswrong.com/lw/l3/thou_art_godshatter/) that people across the globe have. Consider positive-leaning utilitarians (i.e., those who care more about pleasure than [negative-leaning utilitarians](http://felicifia.org/viewtopic.php?p=7801) do). Their dream is to [fill the universe with utilitronium](http://felicifia.org/viewtopic.php?f=29&t=534). Unfortunately, most people don't support this dream and may even see it as a dystopic outcome. Most of the world thinks utilitronium would be boring, pointless wireheading that has no value at all. **Verbal intuition for the claim** Most people want to prevent extinction. They don't want to die, and they don't want their kids, neighbors, projects, writings, and society to die. Their incentives to prevent extinction are not calibrated to the full extent of astronomical waste that positive-leaning utilitarians fear, but they do care, and governments will invest billions and billions into safeguards against extinction risk. So almost everyone wants to prevent extinction, but doing so is pretty hard. In contrast, you may have particular things that you value that aren't widely shared. These things might be easy to create, and the intuition that they matter is probably not too hard to spread. Thus, it seems likely that you would have higher leverage in spreading your own values than in working on safety measures against extinction. **Mathematical intuition for the claim** Say there are N people competing to decide how the future looks. There are only U positive-leaning utilitarians pushing for utilitronium, where U << N. (I would guess that U/N even among rational post-humans would be <10%.) Say the probability that humans colonize space is P. I would guess that P > 10%, maybe > 40%. Utilitronium would be orders of magnitude more efficient than the other kinds of simulations we might expect typical post-humans to run. Relative to the value of a future with utilitronium, a future without utilitronium would be basically negligible. To fix a scale, say the value to the positive-leaning utilitarian of a utilitronium-rich universe is 1, and an empty universe is 0. Then the value of a universe that contains minimal utilitronium and is instead filled with the other things that most people would want is roughly 0. If Bob the positive-leaning utilitarian works on combating extinction risk, say he reduces it by X%. The absolute reduction in risk is X% ⋅ P. But conditional on survival, there's only a ~U/N chance that humans create utilitronium, assuming that each of the people competing to shape the future has an equal shot at deciding the outcome. Alternatively, if computing resources are divided up proportionally to the number of people trying to shape the future, then U/N of the resources of the future will go toward utilitronium. The expected value of Bob work, relative to Bob's values, is then X% ⋅ P ⋅ U/N. Suppose that instead Bob tries to make more people support a utilitronium-filled future, by spreading the meme that utilitronium would be wonderful. Say he increases the number of supporters U by Y%. Then his expected impact is (Y% ⋅ U)/N ⋅ P = Y% ⋅ P ⋅ U/N, which parallels the expression in the previous paragraph.[a](https://reducing-suffering.org/values-spreading-often-important-extinction-risk/#link_ajs-fn-id_1-12042) But here's the thing: If U/N is small, it's waaay easier to have a big Y than a big X. An entire multi-million-dollar extinction-risk organization would be lucky to reduce the probability of extinction by X = 0.1%. In contrast, it seems quite plausible that a multi-million-dollar pro-utilitronium organization could counterfactually increase the number of utilitronium supporters by Y = 1%, 5%, 10%, or something in that ballpark. To a large extent, people's support for ideas is constrained by evolutionary and cultural pressures outside of our control, but there is also wiggle room, and it seems likely there's ample opportunity still to push on utilitronium.[b](https://reducing-suffering.org/values-spreading-often-important-extinction-risk/#link_ajs-fn-id_2-12042) If U starts to become big, this is less true. For example, say there were already U = 50 million utilitronium supporters out of N = 500 million people seriously competing to shape the future. A multi-million-dollar utilitronium organization might be able to create, say, 50,000 new supporters, but this would only be a fractional increase of Y = 0.1%.

#### 2Alliance commitments are extremely complex and risk a slew of scenarios for escalation---credibility trap, socialization, security spirals, overconfidence, and moral hazard

Ashford ’17 [Emma; July 6; Research fellow in Defense and Foreign policy at the CATO Institute, Ph.D. in Foreign Affairs from the University of Virginia, term member of the Council on Foreign Relations; Canadian Foreign Policy Journal, “Hegemonic blackmail: entrapment in civil war intervention,” vol. 23; RP]

The strategic logic of civil war entanglement

Entrapment occurs largely when no national security interest is at stake; indeed, this is the key distinction between entrapment and the classic notion of “chain-ganging” (Christensen and Snyder 1990). The mechanisms by which entrapment can occur include: (1) a state’s choice to defend its ally for reasons of credibility; (2) socialization, which encourages the adoption of an ally’s interests (so-called “self-entrapment”); (3) provocation, as alliance formation creates a security spiral; (4) an alliance emboldens a small state to attack a competitor; or (5) a state, fearful of abandonment, initiates conflict in a last-ditch attempt to preserve the alliance (Snyder 1984, Betts 2011, Findley et al. 2012). Of these, both credibility and socialization pressures are plausible drivers of involvement in civil conflict.

In effect, each can be understood as a strategic interaction between State A (the potential intervener) and State B (A’s ally) over an intervention in a third-party state (State C). In the case of credibility, State A may fear that its refusal to back B’s intervention in C’s civil war may undermine its commitments to other allies.8 Alternately, the process of alliance socialization, with frequent meetings and joint military exercises over time, may encourage State A to absorb B’s interests, including those it is pursuing in its intervention. In both cases, alliance dynamics push A toward support of B’s ongoing intervention. In addition to these “natural” forms of civil war entanglement – i.e., pressures that are an inevitable result of strong security ties – it is also possible for State B to increase the odds of an intervention by State A. Indeed, B sometimes has a strong incentive to do so, particularly when A has substantially higher military capacity.

Put more simply, small states can benefit substantially from the intervention of a major power ally, particularly if they lack the capacity or manpower to carry out an effective campaign alone. African Union peacekeeping forces, for example, typically lack military assets required for their missions; training, logistical support and equipment are often provided by the United States to overcome this deficiency (Williams 2011). Such pressure is far less likely if A and B both have high military capacity, or if A is weaker, as State B wouldn’t need external support to achieve its objectives in these cases. Likewise, if both A and B have low military capacity, then A’s support is unlikely to be of help. In these three scenarios, there is also a high potential for free riding, particularly in cases of humanitarian crisis (Gent 2007). Thus, pressure from allies to join an intervention is likely to be highest when A is larger (i.e., relatively more capable in military terms) than B, and has the potential to tip the balance toward B’s intervention objectives.

There are two ways in which State B can seek to entangle A in its ongoing intervention. First, it can seek to manipulate public and policymaker opinion, purposefully using diplomatic pressure, as well as lobbying and media manipulation to shift public opinion on intervention. Prior studies show that media coverage is often a necessary, if not sufficient, condition for intervention, particularly in humanitarian crises (Jakobsen 1996, Gilboa 2005). Second, State B can seek to alter the strategic balance inside C’s civil war in ways that alter A’s incentives. Indeed, actors within a civil war can deter third-party intervention using methods like salami tactics to reduce threat perceptions (Werner 2000); State B can use similar tactics, seeking to empower rebel forces and increase the level of threat State A feels from the conflict. B can also take steps which increase the odds of victory or shorten the projected time horizon of the intervention.9 These two approaches form a rough type of strategic “blackmail,” allowing State B to entangle A in its ongoing intervention.

In order to better understand these dynamics, this article offers a preliminary analysis of two recent cases where the United States has faced substantial pressure to intervene in civil wars: Syria and Libya. In both cases, American allies have taken active military and covert actions, and have sought to induce the United States to join them. These case studies do not aim to test a specific hypothesis – or to prove that alliance pressure is the only factor which influences intervention decision-making – but rather aim to further explore and illustrate the process of civil war entrapment. The two cases are distinct: the United States chose to join a major North Atlantic Treaty Organization (NATO

#### Finding an appropriate balance is key---saying alliances are always good or always bad is a gross oversimplification---clear prioritization is necessary to create sustainable solutions to a myriad of existential risks

Walt 19 [STEPHEN M. WALT is Robert and Renee Belfer Professor of International Affairs at the Harvard Kennedy School and the author of The Hell of Good Intentions: America's Foreign Policy Elite and the Decline of U.S. Primacy. Foreign Affairs. May/June. “The End of Hubris And the New Age of American Restraint.” <https://www.foreignaffairs.com/articles/2019-04-16/end-hubris> My OCR sometimes turns E’s into C’s, I think I got them all, but please let me know if I missed one]

Today’s world presents a seemingly endless array of challenges: a more powerful and assertive China, novel threats from cyberspace, a rising tide of refugees, resurgent xenophobia, persistent strands of violent extremism, climate change, and many more. But the more complex the global environment, the more Washington needs clear thinking about its vital interests and foreign policy priorities. Above all, a successful U.S. grand strategy must identify where the United States should be prepared to wage war, and for what purposes.

For all the talk of how U.S. foreign policy and the country’s place in the world will never be the same after the presidency of Donald Trump, the best strategic road map for the United States is a familiar one. Realism—the hard-nosed approach to foreign policy that guided the country throughout most of the twentieth century and drove its rise to great power—remains the best option. A quarter century ago, after the Cold War ended, foreign policy elites abandoned realism in favor of an unrealistic grand strategy liberal hegemony —that has weakened the country and caused considerable harm at home and abroad. To get back on track, Washington should return to the realism and restraint that served it so well in the past.

If Washington rediscovered realism, the United States would seek to preserve the security and prosperity of the American people and to protect the core value of liberty in the United States. Policymakers would recognize the importance of military strength but also take into account the country’s favorable geographic position, and they would counsel restraint in the use of force. The United States would embrace a strategy of “offshore balancing” and abstain from crusades to remake the world in its image, concentrating instead on maintaining the balance of power in a few key regions. Where possible, Washington would encourage foreign powers to take on the primary burden for their own defense, and it would commit to defend only those areas where the United States has vital interests and where its power is still essential. Diplomacy would return to its rightful place, and Americans would promote their values abroad primarily by demonstrating democracy’s virtues at home.

IF IT AIN'T BROKE ... In the nineteenth century, when the United States was weak, leaders from George Washington to William McKinley mostly avoided foreign entanglements and concentrated on building power domestically, expanding the country’s reach across North America and eventually expelling the European great powers from the Western Hemisphere. In the first half of the twentieth century, U.S. presidents such as Wood-row Wilson and Franklin Roosevelt used the country’s newfound strength to restore the balance of power in strategically critical regions outside the Western Hemisphere. But they let other great powers do most of the heavy lifting, and thus the United States emerged relatively unscathed—and stronger than ever—from the world wars that devastated Asia and Europe. Letting other states shoulder the burden was not possible during the Cold War, so the United States stepped up and led the alliances that contained the Soviet Union. American leaders paid lip service to democracy promotion, human rights, and other idealistic concerns, but U.S. policy was realist at its core. Through the Bretton Woods system and its successors, the United States also helped foster a more open world economy, balancing economic growth against the need for financial stability, national autonomy, and domestic legitimacy. Put simply, for most of U.S. history, American leaders were acutely sensitive to the balance of power, passed the buck when they could, and took on difficult missions when necessary.

But when the Soviet Union collapsed and the United States found itself, as the former national security adviser Brent Scowcroft put it in 1998, “standing alone at the height of power . . . with the rarest opportunity to shape the world," U.S. leaders rejected the realism that had worked well for decades and tried to remake global politics in accordance with American values. A new strategy—liberal hegemony—sought to spread democracy and open markets across the globe. That goal is the common thread linking President Bill Clinton’s policy of “engagement and enlargement,” President George W. Bush's “freedom agenda," and President Barack Obamas embrace of the Arab revolts of 2010-11 and his declaration that “there is no right more fundamental than the ability to choose your leaders and determine your destiny.” Such thinking won broad support from both political parties, the federal bureaucracies that deal with international affairs, and most of the think tanks, lobbies, and media figures that constitute the foreign policy establishment.

At bottom, liberal hegemony is a highly revisionist strategy. Instead of working to maintain favorable balances of power in a few areas of vital interest, the United States sought to transform regimes all over the world and recruit new members into the economic and security institutions it dominated. The results were dismal: failed wars, financial crises, staggering inequality, frayed alliances, and emboldened adversaries.

HEGEMONIC HUBRIS When Clinton took office in 1993, the United States was on favorable terms with the world’s other major powers, including China and Russia. Democracy was spreading, Iraq was being disarmed, and Iran had no nuclear enrichment capacity. The Oslo Accords seemed to herald an end to the Israeli Palestinian conflict, and Washington seemed well positioned to guide that process. The European Union was adding new members and moving toward a common currency, and the U.S. economy was performing well. Americans saw terrorism as a minor problem, and the U.S. military seemed unstoppable. The wind was at the country’s back. Life was good. But those circumstances fueled a dangerous overconfidence among American elites. Convinced that the United States was “the indispensable nation,” as Secretary of State Madeleine Albright famously put it in 1998, they believed they had the right, the responsibility, and the wisdom to shape political arrange ments in every corner of the world. That vision turned out to be a hubris-tic fantasy. Repeated attempts to broker peace between the Israelis and the Palestinians all failed, and the two-state solution sought by three U.S. presidents is no longer a viable option. A1 Qaeda attacked the U.S. homeland on September 11, 2001, and Washington responded by launching a global war on terrorism, including invasions of Afghanistan and Iraq. Those campaigns were costly failures and shattered the U.S. military’s aura of invincibility. Much of the Middle East is now embroiled in conflict, and violent extremists operate from Africa to Central Asia and beyond. Meanwhile, India, Pakistan, and North Korea tested and deployed nuclear weapons, and Iran become a latent nuclear weapons state. The collapse of the U.S. housing market in 2008 exposed widespread corruption in the country’s financial institutions and triggered the worst economic crisis since the Great Depression—a calamity from which the global economy has yet to fully recover. In 2014, Russia seized Crimea, and it has interfered in a number of other countries since then and its relations with the West are now worse than at any time since the Cold War. Chinas power and ambitions have expanded, and cooperation between Beijing and Moscow has deepened. The eurozone crisis, the United Kingdom’s decision to withdraw from the eu, and energetic populist movements have raised doubts about the eu’s future. Democracy is in retreat worldwide; according to Freedom House, 2018 was the 13th consecutive year in which global freedom declined. Illiberal leaders govern in Hungary and Poland, and the Economist Intelligence Unit’s annual Democ-racy Index has downgraded the United States from a “full” to a "flawed” democracy. The United States was not solely responsible for all these adverse developments, but it played a major role in most of them. And the taproot of many of these failures was Washington's embrace of liberal hegemony. For starters, that strategy expanded U.S. security obligations without providing new resources with which to meet them. The policy of “dual containment,” aimed at Iran and Iraq, forced the United States to keep thousands of troops on the Arabian Peninsula, an additional burden that also helped convince Osama bin Laden to strike at the U.S. homeland. Nato expansion committed Washington to defend weak and vulnerable new members, even as France, Germany, and the United Kingdom let their military forces atrophy. Equally important, U.S. efforts to promote democracy, the open-ended expansion of NATO, and the extension of the alliances mission far beyond its original parameters poisoned relations with Russia. And fear of U.S. led regime change encouraged several states to pursue a nuclear deterrent—in the case of North Korea, successfully. When the United States did manage to topple a foreign foe, as it did in Afghanistan, Iraq, and Libya, the results were not thriving new democracies but costly occupations, failed states, and hundreds of thousands of dead civilians. It was delusional for U.S. leaders to expect otherwise: creating a functional democracy is a difficult process under the best of circumstances, but trying to do it in fractured societies one barely under stands is a fool’s errand.

Finally, globalization did not deliver as promised. Opening up markets to trade and investment brought great benefits to lower and middle classes in China, India, and other parts of the developing world.

It also further magnified the already staggering wealth of the worlds richest one percent. But lower- and middle-class incomes in the United States and Europe remained flat, jobs in some sectors there fled abroad, and the global financial system became much more fragile.

This sorry record is why, in 2016, when Trump called U.S. foreign policy “a complete and total disaster” and blamed out-of touch and unaccountable elites, many Americans nodded in agreement. They were not isolationists; they simply wanted their government to stop trying to run the world and pay more attention to problems at home. Trump’s predecessors seemed to have heard that message, at least when they were running for office. In 1992, Clinton’s mantra was “It’s the economy, stupid.” In 2000, Bush derided Clinton’s efforts at “nation building” and called for a foreign policy that was “strong but humble.” Obama pledged to end foreign wars and focus on “nation building at home.” These expressions of restraint were understandable, as surveys had repeatedly shown that a majority of Americans believed the country was playing the role of global policeman more than it should and doing more than its share to help others. According to the Pew Research Center, in 2013, 80 percent of Americans agreed that “we should not think so much in international terms but concentrate more on our own national problems and building up our strength and prosperity here at home,” and 83 percent wanted presidents to focus more on domestic issues than on foreign policy. Clinton, Bush, and Obama all understood what the American people wanted. But they failed to deliver it.

So has Trump. Although his Twitter feed and public statements often question familiar orthodoxies, the United States is still defending wealthy NATO allies, still fighting in Afghanistan, still chasing terrorists across Africa, still giving unconditional support to the same problematic Middle Eastern clients, and still hoping to topple a number of foreign regimes. Trumps style as president is radically different from those of his predecessors, but the substance of his policies is surprisingly similar. The result is the worst of both worlds: Washington is still pursuing a misguided grand strategy, but now with an incompetent vulgarian in the White House.

REALISM IN PRACTICE

Four presidents have now pursued a grand strategy built around the goal of American hegemony, and all four have fared poorly. As the political scientist John Mearsheimer and I have argued previously in these pages, it is time for the United States to return to its traditional approach of offshore balancing. This strategy begins by recognizing that the United States remains the most secure power in modern history.

It has thousands of nuclear weapons and powerful conventional forces, and it faces no serious rivals in the Western Hemisphere. The Atlantic and Pacific Oceans still insulate the country from many threats, giving U.S. leaders enormous latitude in choosing where and when to fight.

In addition to working to maintain U.S. hegemony in the Western Hemisphere, American policymakers have long sought to prevent other great powers from imitating the United States by dominating their own regions. A peer competitor with no serious rivals nearby would be free to project power around the world as Washington has for decades. From an American perspective, it is better if the major powers in Eurasia have to keep a wary eye on one another, making it harder for them to interfere near American shores. The United States intervened in the world wars to prevent Wilhelmine Germany, Nazi Germany, and imperial Japan from dominating Europe and Asia. This same principle inspired the Cold War strategy of containment, although in that case, the United States could not pass the buck and had to bear most of the costs itself. Today, there is no potential regional hegemon in Europe, whose states should gradually take full responsibility for their own defense. The countries of the European Union are home to more than 500 million people and boast a combined annual GDP exceeding $17 trillion, whereas Russia—the main external threat to eu states—has a population of just 144 million and an annual GDP of only $1.6 trillion. Moreover, nato's European members together annually spend more than three times what Russia does on defense. The idea that the eu (whose roster includes two nuclear-armed powers) lacks the wherewithal to defend itself against a neighbor whose economy is smaller than Italy’s is risible.

Nato still has ardent defenders on both sides of the Atlantic, but they are living in the past. The alliance played an invaluable role in containing the Soviet Union and preventing the return of an aggressive, expansionist Germany. But the Soviet Union is long gone, and Germany is now a liberal democracy firmly committed to the status quo. Nato’s leaders have worked overtime to devise new missions since the Berlin Wall came down, but the alliance’s attempts at nation building in the Balkans, Afghanistan, and Libya have not gone well. Unless NATO’s European members decide to back a U.S. led effort to balance against China (and it is not clear that they will or should), it is time for the United States to gradually disengage from nato and turn European security over to the Europeans by beginning a coordinated withdrawal of U.S. military forces from Europe, allowing a European officer to serve as NATOs supreme allied commander, and making it clear that the United States will no longer be Europe’s first line of defense. Washington should take these steps not with rancor or resentment but with a sense of accomplishment and a commitment to cooperate on issues on which American and European interests align, such as climate change, counterterrorism, and the management of the world economy.

Washington should also return to its traditional approach to the Middle East. To ensure access to the energy supplies on which the world economy depends, the United States has long sought to prevent any country from dominating the oil-rich Persian Gulf. But until the late 1960s, it did so by relying on the United Kingdom. After the British withdrew, Washington relied on regional clients, such as Iran, Israel, and Saudi Arabia. U.S. forces stayed offshore until January 1991, a few months after Saddam Hussein, the leader of Iraq, seized Kuwait. In response, the George H. W. Bush administration assembled a coalition of states that liberated Kuwait, decimated Iraq’s military, and restored balance to the region.

Today, Washingtons primary goal in the Middle East remains preventing any country from impeding the flow of oil to world markets. The region is now deeply divided along several dimensions, with no state in a position to dominate. Moreover, the oil-producing states depend on revenue from energy exports, which makes all of them eager to sell. Maintaining a regional balance of power should be relatively easy, therefore, especially once the United States ends its counterproductive efforts to remake local politics. U.S. forces in Iraq and Syria would be withdrawn, although the United States might still maintain intelligence-gathering facilities, prepositioned equipment, and basing arrangements in the region as a hedge against the need to return in the future. But as it did from 1945 to 1991, Washington would count on local powers to maintain a regional balance of power in accor dance with their own interests.

As an offshore balancer, the United States would establish normal relations with all countries in the region, instead of having “special relationships" with a few states and profoundly hostile relations with others. No country in the Middle East is so virtuous or vital that it deserves unconditional U.S. support, and no country there is so heinous that it must be treated as a pariah. The United States should act as China, India, Japan, Russia, and the eu do, maintain ing normal working relationships with all states in the region -including Iran. Among other things, this policy would encourage rival regional powers to compete for U.S. support, instead of taking it for granted. For the moment, Washington should also make it clear that it will reduce its support for local partners if they repeatedly act in ways that undermine U.S. interests or that run contrary to core U.S. values. Should any state threaten to dominate the region from within or without in the future, the United States would help the rest balance against it, calibrating its level of effort and local presence to the magnitude of the danger.

With its relationships with Europe and the Middle East right sized and rationalized, an offshore-balancing United States could focus primarily on the country that is its only potential peer competitor and the world's only other would-be regional hegemon: China. If Chinas power continues to grow, it is likely to press its neighbors to distance themselves from Washington and accept China as the dominant power in the Asia-Pacific. Were China to become a regional hegemon in Asia, it would be better positioned to project power around the world and extend its influence into the Western Hemisphere. To counter this possibility, the United States should maintain and deepen its current security tics with Australia, Japan, the Philippines, and South Korea and continue to nurture its strategic partnerships with India, Singapore, and Vietnam. Once the United States is no longer subsidizing its wealthy European allies or squandering trillions of dollars on costly quagmires in the greater Middle East, it can more readily afford the military capabilities needed to balance China.

Maintaining an effective Asian coalition will not be easy, however. Washingtons Asian allies are separated from one another by water and vast distances, and they are reluctant to jeopardize their commercial tics with China. The relationship between Japan and South Korea has a troubled history that makes close cooperation difficult. Local powers will be tempted to let Washington do most of the work, and sophisticated U.S. leadership will be necessary to hold this coalition together and ensure that each member contributes its fair share. Trump’s missteps—abandoning the Trans-Pacific Partnership, starting trade disputes with Japan and South Korea, and indulging in an amateurish flirtation with North Korea—have not helped.

OFFSHORE VENTURE

Defenders of the status quo will no doubt mischaractcrize this course of action as a return to isolationism. That is nonsense. As an offshore balancer, the United States would be deeply engaged diplomatically, economically, and, in some areas, militarily. It would still possess the worlds mightiest armed forces, even if it spent somewhat less money on them. The United States would continue to work with other countries to address major global issues such as climate change, terrorism, and cyberthreats. But Washington would no longer assume primary responsibility for defending wealthy allies that can defend themselves, no longer subsidize client states whose actions undermine U.S. interests, and no longer try to spread democracy via regime change, covert action, or economic pressure.

Instead, Washington would use its strength primarily to uphold the balance of power in Asia where a substantial U.S. presence is still needed—and would devote more time, attention, and resources to restoring the foundations of U.S. power at home. By setting an example that others would once again admire and seek to emulate, an offshore-balancing United States would also do a better job of promoting the political values that Americans espouse. This approach would also involve less reliance on force and coercion and a renewed emphasis on diplomacy. Military power would remain central to U.S. national security, but its use would be as a last resort rather than a first impulse. It is worth remembering that some of Washingtons greatest foreign policy achievements—the Marshall Plan, the Bretton Woods system, the Egyptian Israeli peace treaty, and the peaceful reunification of Germany—were diplomatic victories, not battlefield ones. In recent years, however, both Democratic and Republican administrations have tended to eschew genuine diplomacy and have relied instead on ultimatums and pressure. Convinced they hold all the high cards, too many U.S. officials have come to see even modest concessions to opponents as tantamount to surrender. So they have tried to dictate terms to others and have reached for sanctions or the sword when the target state has refused to comply. But even weak states are reluctant to submit to blackmail, and imposing one-sided agreements on others makes them more likely to cheat or renege as soon as they can. For diplomacy to work, both sides must get some of what they want. Moreover, offshore balancing requires a sophisticated understanding of regional politics, which only knowledgeable diplomats and area specialists can provide. In particular, creating an effective coalition to check China's ambitions in Asia will be as much a diplomatic task as a military mission, and success would depend on a deep bench of officials who are intimately familiar with the history, languages, cultures, and sensitivities of the region. A return to offshore balancing should also be accompanied by a major effort to rebuild and professionalize the U.S. diplomatic corps. Ambassadorships should be reserved for qualified diplomats rather than vips or campaign donors, and the State Department must develop, refine, and update its diplomatic doctrine—the ways the United States can use noncoercive means of influence—much as the armed services continually refine the military doctrines that guide their conduct in war. The ranks of the Foreign Service should be significantly increased, and as their careers advance, career diplomats should receive the same opportunities for professional education that senior military officers currently enjoy. OUT WITH THE OLD

Despite the disappointments of the past 25 years, the American foreign policy elite remains convinced that global leadership is their birthright and that Washington must continue trying to force other countries to conform to U.S. dictates. This perspective is an article of faith at almost every foreign policy think tank inside the Beltway and is repeatedly invoked in task force reports, policy briefs, and op-eds. A similar groupthink pervades the U.S. media, where unrepentant neoconservatives and unchastened liberal internationalists monopolize the ranks of full-time pundits; proponents of realism, restraint, and nonintervention appear sporadically at best.

The result is that foreign policy debates are heavily skewed in favor of endless intervention. Moving back to a more realist grand strategy will require broadening the parameters of debate and challenging the entrenched interests that have promoted and defended a failed foreign policy.

The clubbiness of the foreign policy establishment has also produced a disturbing lack of accountability. Although the community contains many dedicated, imaginative, and honorable individuals, it is dominated by a highly networked caste of insiders who are reluctant to judge one another lest they be judged themselves.

As a result, error prone officials routinely fail upward and receive new opportunities to repeat past mistakes. Consider the officials responsible for (and the commen tators who cheered on) the bungled Middle East peace process, the misguided expansion of nato, the botched wars in Afghanistan and Iraq, the cias torture of detainees in the war on terrorism, the National Security Agency’s warrantless surveillance of Americans, the disastrous nato intervention in Libya, and the American machinations in Ukraine that gave Russia a pretext to seize Crimea. None of those officials or commentators has suffered significant professional penalties for his or her mistakes or malfeasance. Indeed, nearly all of them still enjoy prominent positions in government, think tanks, the media, or academia. No one is infallible, of course, and a desire to hold people accountable could be taken too far. Policymakers often learn from past mistakes and become more effective over time. But when the same people keep making the same errors and neither recognize nor regret them, it is time to look for new people with better ideas.

Despite the stagnation within the foreign policy establishment, the prospects for a more realist, more restrained U.S. foreign policy are better today than they have been in many years. For all his flaws, 'Trump has made it easier to propose alternatives to liberal hegemony by expressing such disdain for the elite consensus. Younger Americans are more skeptical of their country’s imperial pretensions than are their elders, and some new members of Congress seem bent on clawing back some of the control over foreign policy that presidents have amassed over the past 70 years.