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### Adv---Inequality

#### Labor market monopsony collapses the economy---inequality and wage stagnation.

Eric A. Posner 8/13/21. Kirkland & Ellis Distinguished Service Professor at University of Chicago. How Antitrust Failed Workers. Oxford University Press, 2021.

In the United States, and much of the Western world, economic growth has slowed, inequality has risen, and wages have stagnated. Academic research has identified several possible causes, ranging from structural shifts in the economy to public policy failure. One possible cause that has received increasing attention from economists is labor market power, the ability of employers to set wages below workers’ marginal revenue product.1 New evidence suggests that many labor markets around the country are not competitive but instead exhibit considerable market power enjoyed by employers, who use their market power to suppress wages. This phenomenon—the power of employers to suppress wages below the competitive rate—is known among economists as labor monopsony, or simply labor market power. Wage suppression enhances income inequality because it creates a wedge between the incomes of people who work in concentrated and competitive labor markets. Wage suppression also reduces the incomes of workers relative to those of people who live off capital, and the latter are almost uniformly wealthier than the former. Wage suppression also interferes with economic growth since it results in underemployment of labor and, while it may seem to raise the return on capital, actually depresses it, as capital must lie idle to take advantage of monopsony power. With wages artificially suppressed, qualified workers decline to take jobs, and workers may underinvest in skills and schooling. Many workers exit the workforce and rely on government benefits, including disability benefits that have become a hidden welfare system.2 This in turn costs the government both in lost taxes and in greater expenditures. One estimate finds that monopsony power in the U.S. economy reduces overall output and employment by 13% and labor’s share of national output by 22%.3

The claim that labor market power raises inequality and reduces growth mirrors another claim that has received attention lately—that the product market power of firms has contributed to rising inequality and faltering growth.4 A product market is a collection of products defined by frequent consumer substitution. When a small number of sellers or one seller of these products exist, we say that each seller has product market power, which enables it to charge a price higher than marginal cost, or the price that would prevail in a competitive market. When a small number of employers hire from a pool of workers of a certain skill level within the geographic area in which workers commute, the employers have labor market power.

One major source of market power in both types of markets is thus concentration, where only a few firms operate in a given market. Imagine, for example, a small town with only a few gas stations. Each gas station sets the price of gas to compete with the prices of the other gas stations. When a gas station lowers its price, it may obtain greater market share from the other gas stations—which increases profits—but it also receives less revenue per sale. If only a single gas station exists, it will maximize profits by charging a high (“monopoly”) price because the gains from buyers willing to pay the price exceed the lost revenue from buyers who stay away. If only a few gas stations exist, they might illegally enter a cartel in which they charge an above-market price and divide the profits, or they might informally coordinate, which is generally not illegal, though the social harm is the same. In contrast, if many gas stations compete, prices will be bargained down to the efficient level—the marginal cost—resulting in low prices for consumers and high aggregate output of gasoline.

Labor market concentration creates monopsony (or, if more than one employer, oligopsony, but I use these terms interchangeably) where labor market power is exercised by the buyer rather than (as in the example of gas stations) the seller. Employers are buyers of labor who operate within a labor market. A labor market is a group of jobs (e.g., computer programmers, lawyers, or unskilled workers) within a geographic area where the holders of those jobs could with relative ease switch among the jobs. The geographic area is usually defined by the commuting distance of workers. A labor market is concentrated if only one or a few employers hire from this pool of workers. For example, imagine the gas stations employ specialist maintenance workers who monitor the gas-pumping equipment. If only a few gas stations exist in that area, and no other firms (e.g., oil refineries) hire from this pool of workers, then the labor market is concentrated, and the employers have market power in the labor market. To minimize labor costs, the employers will hold wages down below what the workers would be paid in a competitive labor market—their marginal revenue product. Faced with these low wages, some people qualified to work will refuse to. But the employers gain more from wage savings than they lose in lost output because of the small workforce they employ.

Antitrust law does not distinguish monopoly and monopsony (including labor monopsony): firms that achieve monopolies or monopsonies through anticompetitive behavior violate antitrust law. But product market concentration has received a huge amount of attention by courts, researchers, and regulators, while labor market concentration has received hardly any attention at all.5 The Department of Justice (DOJ) and Federal Trade Commission’s (FTC) Horizontal Merger Guidelines, which are used to screen potential mergers for antitrust violations, provide an elaborate analytic framework for evaluating the product market effects of mergers. Yet, while the Merger Guidelines state that there is no distinction between seller and buyer power,6 they say nothing about the possible adverse labor market effects of mergers. Similarly, while there are thousands of reported cases involving allegations that firms have illegally cartelized product markets, there are few cases involving allegations of illegally cartelized labor markets.7

This historic imbalance between what I will call product market antitrust and labor market antitrust has no basis in economic theory. From an economic standpoint, the dangers to public welfare posed by product market power and labor market power are the same. As Adam Smith recognized, businesses gain in the same way by exploiting product market power and labor market power—enabling them to increase profits by raising prices (in the first case) or by lowering costs (in the second case).8 For that reason, businesses have the same incentive to obtain product market power and labor market power. Hence the need—in both cases—for an antitrust regime to prevent businesses from obtaining product and labor market power except when there are offsetting social gains.

#### Antitrust law permits labor market concentration---that fuels inequality

Sandeep Vaheesan 18. Legal director at the Open Markets Institute. “How Contemporary Antitrust Robs Workers of Power” LPE Project. 07-19-18. <https://lpeproject.org/blog/how-contemporary-antitrust-robs-workers-of-power/>

The political economist Albert Hirschman developed the idea that members of an organization can exercise power in two ways—through exit and voice. Market activity is associated with exit: consumers unhappy with the price or quality of service of their current wireless carrier can switch to a rival carrier offering lower rates or better service. Elections exemplify voice: voters can replace a corrupt or ineffective incumbent officeholder with a challenger promising to make the government work for ordinary people. For workers, both exit (joining a new employer) and voice (making demands of a current employer) are important. Despite the pro-worker aims of the framers of the Sherman and Clayton Acts, antitrust law today is an enemy of both exit and voice for workers. For more than a generation, antitrust enforcers have permitted labor markets to become highly concentrated and have also interfered with the efforts of a large segment of workers to build collective power. Through their labor market actions, the Department of Justice (DOJ) and Federal Trade Commission (FTC) reinforce, rather than tame, corporate power. To create a progressive, pro-worker antitrust, legislators and policymakers must adopt a radically different vision for the field. Tens of millions of American workers wield little or no power in their place of work. In many parts of the country, workers lack meaningful exit. They face concentrated local labor markets in which only a handful of employers compete (at least theoretically) for their services. In some labor markets, employees have only one actual or prospective employer. In other words, many Americans, at least in their capacity as workers, may experience what we often think of as a relic of a bygone era—the company town. As recent studies have shown, employer-side concentration is associated with significantly lower wages. And other research has found that concentration at one level of a supply chain can depress wages further upstream. In addition to concentrated markets, approximately 30 million workers are subject to non-compete clauses, which prevent them from accepting a new job or starting a business in the same line of work. Non-compete clauses, regardless of whether they are enforced, can signal to workers that their choice is either stay at their current job or suffer extended unemployment. Along with possessing few exit options, most workers cannot assert effective voice in the workplace. Big business’s legal and political war on labor’s power has severely weakened unions. In contrast to the 1950s when roughly a third of wage and salary workers were unionized, only a small percentage of workers are members of labor unions today—around one in ten among all workers, and one in sixteen among workers in the private sector. This decline in union density explains a significant fraction of the forty-year stagnation in wages and increase in income inequality. Moreover, even if wage gains had kept pace with productivity, the collapse of organized labor means that workers lost say over numerous workplace issues. While employees can speak up as individuals, this type of voice is no substitute for the collective voice that comes from a democratic union. Given that most individual workers are dispensable and replaceable for their employers, a lone voicing of grievance often can easily be ignored or even invite retaliation from an employer. And, beyond the site of employment, unorganized workers are less able to exercise voice in electoral politics and check the dominant influence of corporations. Antitrust enforcers have allowed labor markets to grow more concentrated across the country. Just as labor law has been rewritten to cripple labor organizing, the executive branch and courts have remade antitrust to be much friendlier to capital over the past four decades. Influenced by the writings of Robert Bork, the Supreme Court has held that the antitrust laws are a “consumer welfare prescription.” Although the Supreme Court and the antitrust agencies counterintuitively state that consumer welfare accounts for harms to workers and other sellers of services, the DOJ and the FTC focus their enforcement on mergers and practices harmful to consumers. In developing enforcement priorities, the federal antitrust agencies have relied on simplistic economic theory. Instead of directing their economists to study the structure of labor markets, the DOJ and the FTC have adopted an Econ 101 view of the world and assumed that labor markets are generally competitive on the employer side. Embracing this fiction, the agencies have never stopped a merger on labor market grounds. Due to antitrust inaction (and other factors), labor market concentration has increased since the late 1970s.

#### Inequality undermines US soft power

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Much has been written about the domestic consequences of growing income inequality in the United States — how inequality depresses growth, puts downward pressure on the middle class, accentuates wage stagnation and creates added difficulty paying for a college education and buying a home — but much less has been said about how inequality will affect America’s role in the world. How will the social science experiment of allowing wealth to settle so unequally between the top 1 percent and rest of the United States impact the foundations and contours of U.S. foreign policy? In fact, there are likely to be subtle and direct consequences of growing inequality both for the United States’ international standing and its activism. In most critical respects, the United States has helped to create and underwrite the global operating system since the end of World War II. This required a citizen’s sense of external responsibility and belief that the United States had something unique and valuable to confer to the world. Americans over these generations have regularly demonstrated in word and deed that they were prepared to bear burdens and advance ideas. Coinciding with this era was a general sense of overarching optimism that reinforced a post-World War II period of unprecedented American activism on the global scene. It is likely that as a growing segment of the population strains just to get by, it will increasingly view foreign policy — foreign assistance and military spending alike — as a kind of luxury ripe for cuts and a reduction in ambition. It is possible to see early indicators of these sentiments on the right and left, in the form of both tea party isolationism and Occupy Wall Street suspicion that corporate interests drive America’s foreign entanglements. It is also the case that other countries have long emulated aspects of the American Way in designing their own development models. Having access to higher education, creating conditions that support innovation and allowing for greater upward mobility have all been deeply attractive qualities to many nations. But it is the construction of a durable U.S. middle class that has been perhaps most compelling to highly stratified societies across Latin America, Asia and Africa. Now, however, the United States is moving in the other direction, toward an unstable society divided between astronomically rich elites and everyone else. This undermines a critical component of U.S. soft power and is a model for societal engineering that few would choose to emulate. It is also the case that the most recent era of U.S. exertion on the global stage has involved nearly 15 years of conflict in the Middle East and South Asia. The most important features of these largely military engagements have involved refinements in counterinsurgency technique and adaptations in military technology. A different 1 percent of the U.S. population has been primarily involved in this struggle: the U.S. military and others associated with the defense establishment. Aside from clapping when a uniformed military member greets an emotional family at an airport homecoming, the vast majority of the population has been largely unaffected by these conflicts. They neither paid for nor fought these wars. The next phase of intense global engagement is likely to demand much more from a larger share of the population. The lion’s share of 21st-century history will play out in Asia, with its thriving and acquisitive middle classes driving innovation, nationalist competitions, military ambitions, struggles over history and identity, and simple pursuit of power. The United States is in the midst of a major reorientation of its foreign policy and commercial priorities that will draw it more closely to Asia in the decades ahead. The competition for power and prestige there rests on comprehensive aspects of national power — as much to our product and service offerings, the strength of our educational system and the health and vitality of our national infrastructure as to the quality of U.S. military capabilities. Each of these efforts require substantial and sustained longer-term investments; all face funding shortfalls due to myriad challenges. A corresponding consequence of growing inequality has been a reduction in support for these building blocks for comprehensive and sustained international engagement. The worrisome dimensions of income inequality on the quality of domestic American life should be enough to cause us to consider enacting remedies. However, the potential negative implications on U.S. performance internationally can only add to the case. Ultimately, a sustained and purposeful American internationalism is inextricably linked to the health of our domestic life, to which gaping inequality is the biggest threat.

#### And causes neo-isolationist nativism---undermines global coop

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U.S. President Joe Biden has declared that under his leadership, “America is back” and once again “ready to lead the world.” Biden wants to return the country to its traditional role of catalyzing international cooperation and staunchly defending liberal values abroad. His challenge, however, is primarily one of politics, not policy. Despite Biden’s victory in last year’s presidential election, his internationalist vision faces a deeply skeptical American public. The political foundations of U.S. internationalism have collapsed. The domestic consensus that long supported U.S. engagement abroad has come apart in the face of mounting partisan discord and a deepening rift between urban and rural Americans. An inward turn has accompanied these growing divides. President Donald Trump’s unilateralism, neo-isolationism, protectionism, and nativism were anathema to most of the U.S. foreign policy establishment. But Trump’s approach to statecraft tapped into public misgivings about American overreach, contributing to his victory in 2016 and helping him win the backing of 74 million voters in 2020. An “America first” approach to the world sells well when many Americans experience economic insecurity and feel that they have been on the losing end of globalization. A recent survey by the Pew Research Center revealed that roughly half the U.S. public believes that the country should pay less attention to problems overseas and concentrate more on fixing problems at home. Redressing the hardships facing many working Americans is essential to inoculating the country against “America first” and Trump’s illiberal politics of grievance. That task begins with economic renewal. Restoring popular support for the country’s internationalist calling will entail sustained investment in pandemic recovery, health care, infrastructure, green technology and jobs, and other domestic programs. Those steps will require structural political reforms to ease gridlock and ensure that U.S. foreign policy serves the interests of working Americans. What Biden needs is an “inside out” approach that will link imperatives at home to objectives abroad. Much will depend on his willingness and ability to take bold action to rebuild broad popular support for internationalism from the ground up. Success would significantly reduce the chances that the president who follows Biden, even if he or she is a Republican, would return to Trump’s self-defeating foreign policy. Such future-proofing is critical to restoring international confidence in the United States. In light of the dysfunction and polarization plaguing U.S. politics, leaders and people around the world are justifiably questioning whether Biden represents a new normal or just a fleeting reprieve from “America first.”

#### Multilat solves extinction---it’s the pivotal moment to avert breakdown.

Edith M. Lederer 9/11/2021. Associated Press. "UN chief: World is at `pivotal moment' and must avert crises". Washington Post. 6-24-2021. https://www.washingtonpost.com/world/un-chief-world-is-at-pivotal-moment-and-must-avert-crises/2021/09/11/ff58806c-1323-11ec-baca-86b144fc8a2d\_story.html

UNITED NATIONS — U.N. Secretary-General Antonio Guterres issued a dire warning that the world is moving in the wrong direction and faces “a pivotal moment” where continuing business as usual could lead to a breakdown of global order and a future of perpetual crisis. Changing course could signal a breakthrough to a greener and safer future, he said.

The U.N. chief said the world’s nations and people must reverse today’s dangerous trends and choose “the breakthrough scenario.”

The world is under “enormous stress” on almost every front, he said, and the COVID-19 pandemic was a wake-up call demonstrating the failure of nations to come together and take joint decisions to help all people in the face of a global life-threatening emergency.

Guterres said this “paralysis” extends far beyond COVID-19 to the failures to tackle the climate crisis and “our suicidal war on nature and the collapse of biodiversity,” the “unchecked inequality” undermining the cohesion of societies, and technology’s advances “without guard rails to protect us from its unforeseen consequences.”

In other signs of a more chaotic and insecure world, he pointed to rising poverty, hunger and gender inequality after decades of decline, the extreme risk to human life and the planet from nuclear war and a climate breakdown, and the inequality, discrimination and injustice bringing people into the streets to protest “while conspiracy theories and lies fuel deep divisions within societies.”

In a horizon-scanning report presented to the General Assembly and at a press conference Friday, Guterres said his vision for the “breakthrough scenario” to a greener and safer world is driven by “the principle of working together, recognizing that we are bound to each other and that no community or country, however powerful, can solve its challenges alone.”

The report -- “Our Common Agenda” -- is a response to last year’s declaration by world leaders on the 75th anniversary of the United Nations and the request from the assembly’s 193 member nations for the U.N. chief to make recommendations to address the challenges for global governance.

In today’s world, Guterres said, “Global decision-making is fixed on immediate gain, ignoring the long-term consequences of decisions -- or indecision.”

He said multilateral institutions have proven to be “too weak and fragmented for today’s global challenges and risks.”

What’s needed, Guterres said, is not new multilateral bureaucracies but more effective multilateral institutions including a United Nations “2.0” more relevant to the 21st century.

“And we need multilateralism with teeth,” he said.

In the report outlining his vision “to fix” the world, Guterres said immediate action is needed to protect the planet’s “most precious” assets from oceans to outer space, to ensure it is livable, and to deliver on the aspirations of people everywhere for peace and good health.

He called for an immediate global vaccination plan implemented by an emergency task force, saying “investing $50 billion in vaccinations now could add an estimated $9 trillion to the global economy in the next four years.”

The report proposes that a global Summit of the Future take place in 2023 that would not only look at all these issues but go beyond traditional security threats “to strengthen global governance of digital technology and outer space, and to manage future risks and crises,” he said.

It would also consider a New Agenda for Peace including measures to reduce strategic risks from nuclear weapons, cyber warfare and lethal autonomous weapons, which Guterres called one of humanity’s most destabilizing inventions.

#### Soft power and international coop solve extinction.

Joseph S. Nye Jr. 20. Harvard University Distinguished Service Professor, Emeritus. "COVID-19’s Painful Lesson About Strategy and Power". War on the Rocks. 3-26-2020. https://warontherocks.com/2020/03/covid-19s-painful-lesson-about-strategy-and-power/

In 2017, President Donald Trump announced a new National Security Strategy that focused on great-power competition with China and Russia. While the plans also note the role of alliances and cooperation, the implementation has not. Today, COVID-19 shows that the strategy is inadequate. Competition and an “America First” approach is not enough to protect the United States. Close cooperation with both allies and adversaries is also essential for American security.

Under the influence of the information revolution and globalization, world politics is changing dramatically. Even if the United States prevails in the traditional great-power competition, it cannot protect its security acting alone. COVID-19 is not the only example. Global financial stability is vital to U.S. prosperity, but Americans need the cooperation of others to ensure it. And while trade wars have set back economic globalization, there is no stopping the environmental globalization represented by pandemics and climate change. In a world where borders are becoming more porous to everything from drugs to infectious diseases to cyber terrorism, the United States must use its soft power of attraction to develop networks and institutions that address these new threats. For example, this administration proposed halving the U.S. contribution to the World Health Organization’s budget — now we need it more than ever.

A successful national security strategy should start with the fact that “America First” means America has to lead efforts at cooperation. A classic problem with public goods (like clean air, which all can share and from which none can be excluded) is that if the largest consumer does not take the lead, others will free-ride and the public goods will not be produced. As the technology expert Richard Danzig summarizes the problem:

Twenty-first century technologies are global not just in their distribution, but also in their consequences. Pathogens, AI systems, computer viruses, and radiation that others may accidentally release could become as much our problem as theirs. Agreed reporting systems, shared controls, common contingency plans, norms and treaties must be pursued as a means of moderating our numerous mutual risks.

Tariffs and border walls cannot solve these problems. While American leadership is essential because of the country’s global influence, success will require the cooperation of others.

On transnational issues like COVID-19 and climate change, power becomes a positive-sum game. It is not enough to think of American power over others. We must also think in terms of power to accomplish joint goals, which involves power with others. On many transnational issues, empowering others helps us to accomplish our own goals. The United States benefits if China improves its energy efficiency and emits less carbon dioxide, or improves its public health systems. In this world, institutional networks and connectedness are an important source of information and of national power, and the most connected states are the most powerful. Washington has some sixty treaty allies while China has few. Unfortunately, as Mira Rapp-Hooper recently argued, the United States is squandering that power resource.

In the past, the openness of the United States enhanced its capacity to build networks, maintain institutions, and sustain alliances. But will that openness and willingness to engage with the rest of the world prove sustainable in the current populist mood of American domestic politics? Even if the United States possesses more hard military and economic power than any other country, it may fail to convert those resources into effective influence on the global scene. Between the two world wars, America did not and the result was disastrous.

#### Prioritizing worker welfare solves inequality

Eugene K. Kim 20. J.D. 2020; Yale College, B.A. 2016. “Labor’s Antitrust Problem: A Case for Worker Welfare” The Yale Law Journal. 2020. https://www.yalelawjournal.org/pdf/130.2Kim\_q1s8bt8t.pdf

In this Note, I show that the union exemption should be read to encompass a broader concern for the welfare of workers. In other words, antitrust law should be seen not merely as protecting consumers from producers, but also labor from capital. My primary justification is drawn from welfare economics and the “theory of the second best,” which suggests that when a certain market distortion cannot be removed, it may be economically optimal (i.e., the next best option) to introduce a countervailing distortion.21 An ideal competitive labor market would have no market power on either the supply side or demand side, but some degree of rent-extracting market power on the demand side (i.e., firms) is inevitable due to the limited resources of enforcement agencies and labor-market frictions. If concentration is inevitable among employers, permitting concentration among workers is the next best way to (1) counteract abuse and rent-extractive behavior from employers and (2) move income from capitalists to workers, who by virtue of their relatively low income may receive higher marginal utility from income.22 Further justification can be found in the legislative history of the major antitrust statutes. During congressional debate over the antitrust laws, key legislators expressed their intent not only to preserve the organizing power of labor, but also to support affirmatively the accumulation of labor power to contest concentrations of capital.23 Thus, legislative intent provides justification for worker welfare beyond a strictly economic reading of the antitrust laws. Even when labor organizing may not be the most “efficient” economic choice,24 it may still comport with the drafters’ goal of protecting individuals from the economic power of corporations.

### Adv---Modeling

#### Global competition standards use consumer welfare

Marianela Lopez-Galdos 17. “Antitrust in 60 Seconds: Is the Consumer Welfare Standard Appropriate?” Disruptive Competition Project. 11-17-17. https://www.project-disco.org/competition/111717-antitrust-in-60-seconds-is-the-consumer-welfare-standard-appropriate/

In the rest of the world, including the European Union, most competition systems were put in place in the post-war periods. As such, the pursuit of pluralistic goals guided by public interest concerns through the competition system was a method by which these toddling democracies sought to boost and defend their nascent democratic process. That being said, competition systems have evolved, and mature ones have narrowed the antitrust analysis to focus on consumer welfare. In this context, it is noteworthy that the UN and OECD have separately concluded that many competition systems pursue consumer welfare as the primary competition goal. In 1995, UNCTAD concluded that “There has in fact been an increasing convergence in the provisions or the application of competition laws over the laws two decades. Competition systems in many countries are now placing relatively greater emphasis upon the protection of competition, as well as upon efficiency and competitiveness criteria, rather than upon other public interest goals”.

#### Replacing the federal consumer welfare standard prevents global fascism.

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After World War II, the United States engaged in a historic effort to rebuild Europe and Japan through the Marshall Plan. While the story of the Marshall Plan is well known, what is less commonly understood is that the United States exported aggressive antitrust laws to Europe during those post-war years. The Marshall Plan antitrust advisors believed that the massive consolidation in the German economy facilitated and sustained fascism, and they argued that a democratic society required a democratic economy.26 Today, in the context of increasing concentration, rising authoritarianism, and foreign governments commingling state and markets through state-owned enterprises and state capitalism, promoting economic democracy abroad should be an essential foreign policy objective. And yet, the text of the Trans-Pacific Partnership, a trade agreement designed by the Obama Administration, established the objectives of competition policy as “economic efficiency and consumer welfare,” a narrowly drawn and ideological conception of the purposes of antitrust law that has no basis in U.S. statutory law.27 Presidents and their administrations should abandon these cramped views of antitrust and instead encourage the adoption of more aggressive antitrust laws abroad.

#### Global consumer welfare standard fuels populism

Frederic Jenny 19. ESSEC Business School and OECD Competition Committee. “POPULISM, FAIRNESS AND COMPETITION: SHOULD WE CARE AND WHAT COULD WE DO?” The Japanese Economic Review. Vol. 70, No. 3, September 2019. https://onlinelibrary.wiley.com/doi/full/10.1111/jere.12232

Other competition legal scholars have called attention to the fact the socioeconomic social contract is breaking down. For example, Gal (2019) argues that: A growing number of citizens believe that the promises of the competition based market system, which form an important part of the implicit social contract, are not fulfilled and that capitalistic markets are no longer working in their favour. Indeed, statistics indicate that social mobility is low; that wealth is aggregated disproportionately in the hands of the already well-off; that wealth inequality keeps rising; that several large firms dominate the digital economy, thereby blocking at least some of the promises that technological changes were thought to bring about; that technological changes such as robotics create significant disruption effects and have negative implications on the labor market; or that education and social security do not create viable solutions for workers in order to ensure that wide geographic areas or demographic groups are not significantly and irreparably harmed. If one recognises the fact that the unfairness of the result of competition may be one of the sources of populism and that a rebalancing of the benefits of the competitive process is in order to make economic competition tolerable, the question is how to achieve it. Because the redistributive tools we have do not seem to be adequate, some of the hotly debated issues are whether we should be more cautious about entering into trade agreements with countries having widely different social and economic environments or rules and, at the domestic level, whether antitrust or competition law enforcement should concern itself with the fairness of the competitive process. Concerning antitrust or competition law enforcement three main arguments have been put forward against the inclusion of fairness considerations in the enforcement of anti- trust and competition law. First, the concept of fairness is vague; second, taking into consideration fairness would entail a social cost in terms of efficiency; and third, competition authorities are not equipped to trade fairness against efficiency considerations. Trebilcock and Ducci (2017) consider the vagueness of the notion of fairness and the necessity to specify the notions of fairness which could be relevant for competition. They usefully distinguish different notions of fairness that are pertinent to domestic markets: vertical fairness (between producers and consumers); horizontal fairness on the demand side (between consumers); horizontal fairness on the supply side (between producers); and procedural fairness (due process and private enforcement). One can easily show that antitrust is congruent with fairness with respect to horizontal fairness among suppliers in the sense that competition or antitrust law enforcement aims at eliminating the barriers to entry or to development, which prevent competitors from entering new markets or competing on the merits with established firms. This dimension of competition does not seem particularly problematic from the standpoint of fairness. One can also mention the fact that competition law, to the extent that it aims at eliminating discriminatory practices (as in the European competition law where article 102 prohibits firms with market power from directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions, or from applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage), goes some way toward meeting the horizontal fairness condition for consumers. The question of whether the way in which competition laws are implemented meet vertical fairness criteria is more complex. Some, like Trebilcock and Ducci, argue that the goal of protecting consumer welfare assigned in most countries to competition law is a somewhat clumsy attempt to bring into competition law fairness issues which are alien to what which competition law should be concerned with. For example, they write: Despite being usually justified by a distributive justice rationale, we believe that the consumer welfare standard does not vindicate distributional equity concerns for consumers vis-a-vis producers, and we believe that such choice of welfare standard does not represent an optimal tool for redistributive goals. On the contrary, we view the consumer welfare standard as resulting from a mix of poorly defined distributive concerns and more political economy-oriented explanations. Under the latter perspective, the ascendance of the consumer welfare standard may be interpreted as a political bargain between self-interested groups of producers (primarily large firms defending the efficiency benefits of economies of scale) and consumers (including final consumers, small buyers, farmers), where the concept of ‘consumer welfare’ can be seen as a more acceptable form of welfare standard for non-specialist audiences, which would politically allow the advancement of economic goals in the competition policy domain.

#### Extinction

Alex de Waal 16. Executive Director of the World Peace Foundation at the Fletcher School at Tufts University. 12-5-2016. “Garrison America and the Threat of Global War.” http://bostonreview.net/war-security-politics-global-justice/alex-de-waal-garrison-america-and-threat-global-war

Trump’s promises have been so vague that it will be hard for him to disappoint. Nonetheless, many of his supporters will wake up to the fact that they have been duped, or realize the futility of voting for a wrecker out of a sense of alienated desperation. The progressives’ silver lining to the 2016 election is that, had Clinton won, the Trump constituency would have been back in four years’ time, probably with a more ruthless and ideological candidate. Better for plutocratic populism to fail early. But the damage inflicted in the interim could be terrible—even irredeemable if it were to include swinging a wrecking ball at the Paris Climate Agreement out of simple ignorant malice.

Polanyi recounts how economic and financial crisis led to global calamity. Something similar could happen today. In fact we are already in a steady unpicking of the liberal peace that glowed at the turn of the millennium. Since approximately 2008, the historic decline in the number and lethality of wars appears to have been reversed. Today’s wars are not like World War I, with formal declarations of war, clear war zones, rules of engagement, and definite endings. But they are wars nonetheless.

What does a world in global, generalized war look like? We have an unwinnable “war on terror” that is metastasizing with every escalation, and which has blurred the boundaries between war and everything else. We have deep states—built on a new oligarchy of generals, spies, and private-sector suppliers—that are strangling liberalism. We have emboldened middle powers (such as Saudi Arabia) and revanchist powers (such as Russia) rearming and taking unilateral military action across borders (Ukraine and Syria). We have massive profiteering from conflicts by the arms industry, as well as through the corruption and organized crime that follow in their wake (Afghanistan). We have impoverishment and starvation through economic warfare, the worst case being Yemen. We have “peacekeeping” forces fighting wars (Somalia). We have regional rivals threatening one another, some with nuclear weapons (India and Pakistan) and others with possibilities of acquiring them (Saudi Arabia and Iran).

Above all, today’s generalized war is a conflict of destabilization, with big powers intervening in the domestic politics of others, buying influence in their security establishments, bribing their way to big commercial contracts and thereby corroding respect for government, and manipulating public opinion through the media. Washington, D.C., and Moscow each does this in its own way. Put the pieces together and a global political market of rival plutocracies comes into view. Add virulent reactionary populism to the mix and it resembles a war on democracy.

What more might we see? Economic liberalism is a creed of optimism and abundance; reactionary protectionism feeds on pessimistic scarcity. If we see punitive trade wars and national leaders taking preemptive action to secure strategic resources within the walls of their garrison states, then old-fashioned territorial disputes along with accelerated state-commercial grabbing of land and minerals are in prospect. We could see mobilization against immigrants and minorities as a way of enflaming and rewarding a constituency that can police borders, enforce the new political rightness, and even become electoral vigilantes.

Liberal multilateralism is a system of seeking common wins through peaceful negotiation; case-by-case power dealing is a zero-sum calculus. We may see regional arms races, nuclear proliferation, and opportunistic power coalitions to exploit the weak. In such a global political marketplace, we would see middle-ranking and junior states rewarded for the toughness of their bargaining, and foreign policy and security strategy delegated to the CEOs of oil companies, defense contractors, bankers, and real estate magnates.

The United Nations system appeals to leaders to live up to the highest standards. The fact that they so often conceal their transgressions is the tribute that vice pays to virtue. A cabal of plutocratic populists would revel in the opposite: applauding one another’s readiness to tear up cosmopolitan liberalism and pursue a latter-day mercantilist naked self-interest. Garrison America could opportunistically collude with similarly constituted political-military business regimes in Russia, China, Turkey, and elsewhere for a new realpolitik global concert, redolent of the early nineteenth-century era of the Congress of Vienna, bringing a façade of stability for as long as they collude—and war when they fall out.

And there is a danger that, in response to a terrorist outrage or an international political crisis, President Trump will do something stupid, just as Europe’s leaders so unthinkingly strolled into World War I. The multilateral security system is in poor health and may not be able to cope.

Underpinning this is a simple truth: the plutocratic populist order is a future that does not work. If illustration were needed of the logic of hiding under the blanket rather than facing difficult realities, look no further than Trump’s readiness to deny climate change.

We have been here before, more or less, and from history we can gather important lessons about what we must do now. The importance of defending civility with democratic deliberation, respecting human rights and values, and maintaining a commitment to public goods and the global commons—including the future of the planet—remain evergreen. We need to find our way to a new 1945—and the global political settlement for a tamed and humane capitalism—without having to suffer the catastrophic traumas of trying everything else first.

#### Specifically, the Philippines mirrors the US consumer welfare standard

Jose Maria L. Marella 18. J.D., University of the Philippines (UP) College of Law. “ADMINISTRATIVE WILL TO POWER: ARTICULATING THE GOALS OF ANTITRUST AND PROPOSING THEREFOR A REGULATORY FRAMEWORK” Philippine Law Journal. Vol. 91. 2018.

The complexities of modern government have often led Congress- whether by actual or perceived necessity-to legislate broad policy goals and general statutory standards, leaving the specific policy options to the discretion of an administrative body. 2 In this regard, the Philippine Competition Commission ("PCC")-the administrative body mandated to implement the Philippine Competition Act -has taken great strides in advancing the policy objectives of economic efficiency and consumer welfare. That the two policy objectives figure greatly in the exercise of the PCC's mandate is evident from its regulatory issuances and participation in relevant proceedings. A. Regulatory Issuances In its Implementing Rules and Regulations ("IRR"), the PCC adopts the "substantial lessening of competition" ("SLC") test,4 a Jurisprudential standard crafted and developed by foreign jurisdictions to weigh the anticompetitive effects of certain transactions. By assessing market indicators such as firm rivalry, prices, quality, and availability of goods and services, the SLC test filters out agreements that reduce competitive pressure among firms and disincentivize them from becoming more efficient and innovative.5 The IRR also allows the PCC to forbear-or desist from applying the provisions of the PCA-when, among other considerations, forbearance is consistent with the benefit and welfare of the consumers. 6 Economic efficiency and consumer welfare also take center stage in the PCC's Rules on Enforcement Procedure ("Enforcement Rules"), the rules and regulations governing hearings, investigation, and other proceedings on anti-competitive agreements, abuse of dominant market position, and other violations of the PCA.7 Preliminary inquiries-the PCC proceedings that parallel the prosecutor's preliminary investigation in criminal cases-are to be conducted with due regard to consumer welfare.8 Interim measures may be issued against entities when their acts would result in a material and adverse effect on consumers or competition in the market.9 Upon termination of enforcement proceedings, the PCC will determine the propriety of imposing conclusive remedies with the aim of maintaining, enhancing, or restoring competition in the market.10 Similar to the IRR, the PCC's Rules on Merger Procedure ("Merger Rules") employs the SLC test in determining whether a proposed merger or acquisition will, post-transaction, reduce economic efficiency or impair consumer welfare; in determining the appropriateness of imposing interim measures; 12 or in considering whether, before clearing a merger or acquisition, the parties must abide by certain conditions to remedy, prevent, or mitigate competitive harm. 13 In addition, pursuant to its market surveillance function, the PCC is empowered to motu proprio conduct a review of mergers that are reasonably foreseen to breach the SLC test. 14 Intervening by way of an amicus curiae brief, the PCC apprised the Supreme Court of the competition issue intertwined with the legal question in a pending case that assailed, as an ultra vires expansion of statutory language, the regulation issued by the Philippine Contractors Accreditation Board that created a nationality restriction that was unsupported by the governing statutory text.15 The PCC supported striking down the regulation, arguing that, on the basis of economic literature and empirical data, the nationality restriction constituted a regulatory barrier to entry that unduly favored domestic contractors to the detriment of foreign contractors. In its argument that the regulation inordinately restricts market competition, the PCC enunciated the following principles: Consumer welfare, which in this case refers to the welfare of both households and other businesses, is maximized when competition allows consumers to access and choose the most efficient producers, regardless of the service provider's nationality. Indeed, it is a settled principle in economics that if there are many players in the market, healthy competition will ensue. The competitors will try to outdo each other in terms of quality and price in order to survive and profit. Competition therefore results in better quality products and competitive prices, which redound to the benefit of the public.16 In its recent bid to take its legal scuffle with Globe and PLDT17 to the Supreme Court,18 the PCC donned its mantle "to level the playing field across all markets; to review the competitive implications of large transactions; and to actively investigate, prosecute, and sanction cases of cartelistic behaviors that prevent, restrict, or lessen market competition." 19 These mandates would be carried out to "[encourage] innovation among market players, [reward] their efficient and productive use of resources, and ultimately [redound] to the benefit of consumers by lowering prices and enhancing their right of choice over goods and services offered in the market. 20 Significantly, the general public has acquiesced to the perception that the PCC champions economic efficiency and consumer welfare. News reports have consistently adverted to the PCA as a landmark piece of legislation that will enhance and promote these two policy objectives. Even lawmakers have acknowledged the PCC's critical role in improving market competition. Senator Juan Miguel Zubiri, addressing PCC's representative, Commissioner Johannes Bernabe, in a legislative hearing concerning the telecommunications sector, stated: "I'm really one with you [...] So you guys have to help us out [...] We are fighting giants. But as I said, the least that can happen is [that they] shape up and give us better service[,] or the best is that more players can come in and give us the best service[.]"21 But are such policy objectives all there is to the PCA? Or does the statutory text, alone or in conjunction with related legal materials, admit of other governing principles? Addressing such questions is crucial as the PCA may also cover other goals that have not been explicitly recognized. The law, after all, admits of different interpretations. 22 This then requires stakeholders and other government bodies to defer to the "sound discretion of the government agency entrusted with the regulation of activities coming under [its] special and technical training and knowledge[.]" 23 In such case, the PCC might be undercutting its own potential to make even greater strides in other aspects of national development. Recognizing these other objectives will greatly influence the PCC's exercise of its mandate and, more importantly, could translate to better gains in national development. By no means does this Note claim that the PCC is severely limiting the exercise of its functions-whether consciously or subconsciously. Rather, it simply articulates other equally important antitrust considerations which can be construed from the statutory text-considerations which the PCC must also devote attention to, and which the public, considering the incipient but technical field of competition law, 24 must appreciate.

#### Antitrust is key to combat weakened growth and rising income inequality

Jose Maria L. Marella 18. J.D., University of the Philippines (UP) College of Law. “ADMINISTRATIVE WILL TO POWER: ARTICULATING THE GOALS OF ANTITRUST AND PROPOSING THEREFOR A REGULATORY FRAMEWORK” Philippine Law Journal. Vol. 91. 2018.

2. Income Inequality in the Philjopines Philippine economic literature establishes that market concentration, and conversely, weak market competition, **lead to limited growth and productivity.** The interplay of behavioral, regulatory, and structural constraints fosters within numerous industries the rise of an exclusive circle of dominant players.1 47 Antitrust analysis relies on economic indicators such as the price- cost margin ("PCM") and the Herfindahl-Hirschman Index ("HHI), a ratio used to determine industrial concentration, to compare the monopolistic price markup and competitive prices. "In the presence of market power, the firms will be able to set prices above those prevailing under competitive conditions, leading to excessive economic profits or 'rents'." 148 These measures **directly affect the distribution of wealth**. A high HHI means that the industry is concentrated; only a few firms deliver the bulk of industry output and reap the profits therein. On the other hand, a high PCM means that firms are effectively denying to consumers what they could have enjoyed under competitive conditions. Using such economic tools in conjunction with industry analysis, one study found that: (i) deliberate government coddling led to concentration in telecommunications, power, manufacturing, textiles, and cement; (ii) cartel-like behavior persists in flour milling, cement, and inter-island shipping; (iii) entry barriers led to comparatively high domestic prices when compared to border prices; and (iv) entry barriers **sustained the operation of inefficient firms and allowed them to generate monopoly rents.** 149 The flipside of the issue is that more inclusive industries lead to lower figures of the HHI and PCM. One of the Philippines' best chronicled "success stories" on the matter relates to the airline industry. Owing to the various trade liberalization measures implemented during the 1990s-among them the deregulation of aviation-PCMs declined from 67% to 48%. The entry of new firms served to depress monopolistic prices and disperse the 150 profits enjoyed by a previous monopoly. The income inequality concern becomes **even more alarming** when one considers the interests of those within the poorest income strata in the Philippines. Latest statistics indicate that poverty incidence 51 **is at 21.6%.** This figure expresses that, as a fraction of the total number of individuals in the Philippines, around one-fifth live below the poverty threshold. The hardest-hit sectors are the farmers, fisher folk, and children, with poverty incidences at 3 4 .3 %, 3 4 .0%, and 3 1. 4 %, respectively. 152 Moreover, total family expenditure is broken down into food at 42.8%; housing, water, 945 electricity, and other fuels at 1 .1%; and education at . %. Such **figures spell destitution, especially considering that basic commodities are prone to cartelization** while electricity and fuels industries are lorded over by oligopolies. Thus, the stage is **set for antitrust and competition policy to step in.** In order to include redistributive justice as among its "final causes," 154 the law's advocates must identify the specific mechanisms through which economic wealth can be equitably distributed.

**That’s key to prevent terrorism**

**Reuters 17**. “Uneven growth could spark extremism, instability in Southeast Asia – Malaysian PM.” Asian Correspondent. April 28. <https://asiancorrespondent.com/2017/04/uneven-growth-spark-extremism-instability-southeast-asia-malaysian-pm/#XXlMKJU7B9ixeQdP.97>

MALAYSIAN Prime Minister Najib Razak on Friday warned that Southeast Asian countries needed to ensure their economic growth was inclusive, or risk marginalised populations turning to violent extremism or even overturning political systems. Speaking at an event for entrepreneurs during the Association of South East Asian Nations (Asean) summit in Manila, Najib said the region was posting strong growth that could see Asean become the world’s fourth-largest economy, but that growth needed to be equitable. “We do not want our citizens to be marginalised in the age of extremism and radicalisation,” he said. “We know that those who see no hope in their own societies are more prone to the siren calls of terrorists who can and exploit their vulnerability and fill them with their lies.” Islamist extremism is expected to be high on the agenda during this week’s meetings, with fears for Indonesia, Malaysia and the Philippines about piracy and the rising threat of Islamic State. Of particular concern is the ease in which militants can acquire weapons, seek refuge with existing rebel groups and move between the many islands between the three countries.

#### Goes nuclear---terrorist-piracy nexus guarantees escalation

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The terrorism-piracy nexus and port security

In assessing the nature of maritime terrorist activity in Asia, it is important to study the terrorism-piracy nexus – not least because pirates have in the past financed terrorist activity.[59]Evidence of a linkage between the terrorists and pirates first emerged in May 2003, when the M/V Pen rider, a Malaysian-registered oil tanker, was attacked off the coast of Malaysia, and three crew members were taken hostage.[60] After ship owners paid $100,000 to free the crew, it emerged that the attackers were associated with the Free Aceh Movement, an insurgent group operating in Indonesia. The receipt of a ransom of $1.2 million by the Somali pirates to free a Spanish fishing vessel and 26 hostages in 2008 provided more proof of a possible link between terrorists and pirates; reportedly, the Al-Shabaab had received a five-percent cut. A year later, when the terror group hired pirates to smuggle in members of Al Qaeda to Somalia, the terror-piracy linkage seemed virtually certain.[61]

In recent years, terrorists and pirates have appeared to draw closer, even if the exact nature of their collaboration is not clear. Somali pirates and terrorists are said to have worked together in arms trafficking, and Al-Shabaab is said to have even have trained pirates for ‘duties’ at sea.[62]An investigation by the United Nations (UN) in 2017 found evidence of collusion between pirates and the Al Shabaab, including the possibility that pirates helped the latter smuggle weapons and ammunition into Somalia.[63] As discussed earlier, in Southeast Asia, the Abu Sayaff’s turn to piracy has resulted in millions earned via ransom payments.[64] Its cadres have used the revenue earned for pirate activity to expand the radical organisation’s presence in Southeast Asia.

The terror-piracy linkage is important because it highlights the causal mechanism behind rising violence at sea. The task of maritime security agencies becomes harder, however, when the lines between terrorism and piracy begin blurring, particularly in Southeast Asia, where the Abu Sayyaf has alternated between piracy and terrorism. Today’s pirates are trained fighters onboard speedboats, armed not only with automatic weapons, hand-held missiles and grenades but also and global positioning systems; professional mercenaries that loop effortlessly between rent-seeking and violent acts. Their objectives are as much ideological, as they are material.

ISPS code and littoral security

While most discussions around maritime terrorism presume a threat to sea-borne assets, port security constitutes the bigger challenge. Terrorists have long had seaports on their crosshairs, because of the latter’s role in trade and economic development. In recent years, there has been a significant increase in freight traffic, with key ports in Asia transformed into global trading hubs. In keeping with the growing importance of port-enabled trade, regional governments have taken better measures to protect ships and onshore facilities. In many ports, authorities have increased guards, gates, and security cameras, even introducing identification card programs to screen those with access to critical port infrastructure. The installation of radiation detectors has been particularly helpful in screening critical cargo and identifying suspicious shipments.

Yet, not even the best ports in Asia are able to track and monitor large containers comprehensively. With a rising quantum of cargo to be handled every day, port authorities find it impractical to scan each and every container being offloaded from cargo ships.[65]Container scanning in many ports is in fact a largely random exercise, with authorities insisting that shippers provide manifests of what is contained in cargo bins.[66]

The lack of effective checks on ports brings up the possibility of the use of containers as weapons to smuggle in arms, explosive materials or the terrorists themselves. While terrorists would not possibly target cargo ships directly, the latter could be used to transport weapons or to sabotage commercial operations. A dirty-bomb in an illicit cargo container of a cargo ship could cause a port shutdown and huge commercial disruption.[67] Even a failed attempt to smuggle a device into a major transshipment hub would significantly impact port operations.

After the 9/11 incident in the United States, the International Maritime Organization (IMO) had established the International Ship and Port Facility Security (ISPS) Code—a set of maritime regulations designed to help detect and deter threats to international shipping. The code subjects ships to a system of survey, verification, certification and control to ensure that the security measures prescribed by the IMO are implemented by member countries. It also provides a standardised, consistent framework for evaluating risk and gauging vulnerabilities of ships and ports facilities, laying down principles and guidelines for governments, port authorities and shipping companies, making compliance mandatory.[68]

The code, however, has not been effective in a way originally intended.[69]Firstly, the code is based on the experience of 9/11 and early piracy activity off Somalia. No amendments or revisions have been made with regard to new types of security threats encountered in recent years. The exclusion of vessels less than 500 tonnes, and all fishing vessels regardless of their size, is a further impediment in the code’s implementation, as terrorists have sought to use smaller boats to smuggle weapons and ammunition rarely subject to regulation.[70]

Another shortcoming is that the code does not include official monitoring procedures for security matters. Unlike the International Safety Management Code (ISM) that prescribes office audits by internal and external sources, the ISPS enumerates general guidelines and precautions—a standardised template for evaluating risks on many different types, sizes and categories of vessels and facilities.[71] The code also does not specify ways to strengthen capability to protect against new forms of terrorism, such as drone attacks.[72] With no legal obligation to implement regulations, port authorities are unwilling to make necessary investments in security measures.

The lack of national legislation/guidelines is another hurdle in the code’s implementation. Regional governments have neither enacted necessary domestic legislation to fight terrorists nor allotted resources to implement security measures.[73] In India, for instance, there is no comprehensive maritime security policy for protection of the commercial maritime infrastructure and supply chains.[74]A new Merchant Shipping Bill[75] in 2016 improved transparency and effective delivery of services, but has failed to address security concerns.

Given the complicated mix of variables contributing to port security, a study of security measures adopted by the civil aviation industry might offer some useful pointers. The latter’s efforts to prevent hijackings of commercial aircraft over the past four decades has been widely hailed as a success. Developed in the late 1960s, the international legal regime governing civilian flight operations was significantly upgraded after the attacks of 11 September 2001. The United States’ efforts to bring in legislation to regulate foreign airlines and flights from foreign airports have been particularly helpful. In concert with other international conventions drafted by the UN International Civil Aviation Organization (ICAO), the regulatory regime has deterred terrorists and criminals from targeting aircraft.[76]

This may hold important lessons for port security; in particular, approaches used in the international legal regime governing civil aviation to eliminate safe havens for pirates and terrorists by ensuring legal accountability. A study of security in the aviation sector could offer important tips on how port security systems could be mobilised to encourage best management practices; the importance of freezing assets of those who fund piracy enterprises; and the utility of enhancing communication and coordination among the various stakeholders relevant to the fight against piracy and terrorism.[77]

A next terrorist attack: Gauging the odds

To design policies that help combat maritime terrorism it is important to assess the likely nature of future attacks and their probable targets. Future terrorist attacks could be directed against four kinds of targets: warships, supertankers, passenger ships and port facilities. The most vulnerable and attractive targets remain tankers out at sea. The recent attacks on tankers in the Persian Gulf revealed that the threat is evolving and could now include unmanned vehicles.[78] More damaging would be the seizure and sinking of an oil-carrying tanker in a congested space, crippling the flow of maritime traffic. To get a sense of the extent of damage such an attack would cause, the Limburg incident in 2002 caused a massive spillage of oil (almost 90,000 tonnes) that took many weeks to clear.[79]

Another kind of attack could be on cruise ships out at sea. Big cruise ships are a lucrative target since they are lightly defended and relatively easily accessible.[80]An enquiry into the Achille Lauro incident in October 1984 highlighted fundamental deficiencies in safety procedures. Apparently, checks on passengers in the run-up to that fateful incident had not been foolproof. Despite acting nervously and even displaying anti-social behaviour, the Palestinian hijackers did not arouse the suspicions of passengers and crew.[81] While safety procedures have since improved, security procedures at ports and aboard cruise ships (with certain exceptions) are far from immaculate. During the Super Ferry incident in the Philippines in 2004, Abu Sayyaf operatives disguised as tourists smuggled 20 sticks of explosives that were stored inside an emptied out TV set.[82] There is some evidence that cruise shipping companies in Asia and Africa continue with the same lax approach that enabled that devastating attack.

The most likely venue of a future terrorist strike, however, might be inside a port facility, and it could possibly involve a ‘lone wolf’ with a loose affiliation to a bigger terrorist group. Ports are an attractive target because many of the tactical problems that terrorists face in orchestrating attacks on ships in the high seas do not apply to harbors, ports, or shore-based maritime facilities. Terrorists realise that the containerised supply chain is complex, and creates many opportunities for isolated acts of terrorism. An ineffective point of check, for instance, could allow a jihadi inside a container to detonate a vast quantity of explosives or a low-grade nuclear device; inadequate surveillance in a vessel could lead a jihadi diver to plant an explosives improvised explosive device (IED). While many ports have installed radiation detectors to combat the threat of IED, the pace of installation has been slow, and smaller ports remain vulnerable.

#### Extinction.

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The escalating threats between North Korea and the United States make it easy to forget the “nuclear nightmare,” as former US Secretary of Defense William J. Perry put it, that could result even from the use of just a single terrorist nuclear bomb in the heart of a major city. At the risk of repeating the vast literature on the tragedies of Hiroshima and Nagasaki—and the substantial literature surrounding nuclear tests and simulations since then—we attempt to spell out here the likely consequences of the explosion of a single terrorist nuclear bomb on a major city, and its subsequent ripple effects on the rest of the planet. Depending on where and when it was detonated, the blast, fire, initial radiation, and long-term radioactive fallout from such a bomb could leave the heart of a major city a smoldering radioactive ruin, killing tens or hundreds of thousands of people and wounding hundreds of thousands more. Vast areas would have to be evacuated and might be uninhabitable for years. Economic, political, and social aftershocks would ripple throughout the world. A single terrorist nuclear bomb would change history. The country attacked—and the world—would never be the same. The idea of terrorists accomplishing such a thing is, unfortunately, not out of the question; it is far easier to make a crude, unsafe, unreliable nuclear explosive that might fit in the back of a truck than it is to make a safe, reliable weapon of known yield that can be delivered by missile or combat aircraft. Numerous government studies have concluded that it is plausible that a sophisticated terrorist group could make a crude bomb if they got the needed nuclear material. And in the last quarter century, there have been some 20 seizures of stolen, weapons-usable nuclear material, and at least two terrorist groups have made significant efforts to acquire nuclear bombs. Terrorist use of an actual nuclear bomb is a low-probability event—but the immensity of the consequences means that even a small chance is enough to justify an intensive effort to reduce the risk. Fortunately, since the early 1990s, countries around the world have significantly reduced the danger—but it remains very real, and there is more to do to ensure this nightmare never becomes reality. Brighter than a thousand suns. Imagine a crude terrorist nuclear bomb—containing a chunk of highly enriched uranium just under the size of a regulation bowling ball, or a much smaller chunk of plutonium—suddenly detonating inside a delivery van parked in the heart of a major city. Such a terrorist bomb would release as much as 10 kilotons of explosive energy, or the equivalent of 10,000 tons of conventional explosives, a volume of explosives large enough to fill all the cars of a mile-long train. In a millionth of a second, all of that energy would be released inside that small ball of nuclear material, creating temperatures and pressures as high as those at the center of the sun. That furious energy would explode outward, releasing its energy in three main ways: a powerful blast wave; intense heat; and deadly radiation. The ball would expand almost instantly into a fireball the width of four football fields, incinerating essentially everything and everyone within. The heated fireball would rise, sucking in air from below and expanding above, creating the mushroom cloud that has become the symbol of the terror of the nuclear age. The ionized plasma in the fireball would create a localized electromagnetic pulse more powerful than lightning, shorting out communications and electronics nearby—though most would be destroyed by the bomb’s other effects in any case. (Estimates of heat, blast, and radiation effects in this article are drawn primarily from Alex Wellerstein’s “Nukemap,” which itself comes from declassified US government data, such as the 660-page government textbook The Effects of Nuclear Weapons.) At the instant of its detonation, the bomb would also release an intense burst of gamma and neutron radiation which would be lethal for nearly everyone directly exposed within about two-thirds of a mile from the center of the blast. (Those who happened to be shielded by being inside, or having buildings between them and the bomb, would be partly protected—in some cases, reducing their doses by ten times or more.) The nuclear flash from the heat of the fireball would radiate in both visible light and the infrared; it would be “brighter than a thousand suns,” in the words of the title of a book describing the development of nuclear weapons—adapting a phrase from the Hindu epic the Bhagavad-Gita. Anyone who looked directly at the blast would be blinded. The heat from the fireball would ignite fires and horribly burn everyone exposed outside at distances of nearly a mile away. (In the Nagasaki Atomic Bomb Museum, visitors gaze in horror at the bones of a human hand embedded in glass melted by the bomb.) No one has burned a city on that scale in the decades since World War II, so it is difficult to predict the full extent of the fire damage that would occur from the explosion of a nuclear bomb in one of today’s cities. Modern glass, steel, and concrete buildings would presumably be less flammable than the wood-and-rice-paper housing of Hiroshima or Nagasaki in the 1940s—but many questions remain, including exactly how thousands of broken gas lines might contribute to fire damage (as they did in Dresden during World War II). On 9/11, the buildings of the World Trade Center proved to be much more vulnerable to fire damage than had been expected. Ultimately, even a crude terrorist nuclear bomb would carry the possibility that the countless fires touched off by the explosion would coalesce into a devastating firestorm, as occurred at Hiroshima. In a firestorm, the rising column of hot air from the massive fire sucks in the air from all around, creating hurricane-force winds; everything flammable and everything alive within the firestorm would be consumed. The fires and the dust from the blast would make it extremely difficult for either rescuers or survivors to see. The explosion would create a powerful blast wave rushing out in every direction. For more than a quarter-mile all around the blast, the pulse of pressure would be over 20 pounds per square inch above atmospheric pressure (known as “overpressure”), destroying or severely damaging even sturdy buildings. The combination of blast, heat, and radiation would kill virtually everyone in this zone. The blast would be accompanied by winds of many hundreds of miles per hour. The damage from the explosion would extend far beyond this inner zone of almost total death. Out to more than half a mile, the blast would be strong enough to collapse most residential buildings and create a serious danger that office buildings would topple over, killing those inside and those in the path of the rubble. (On the other hand, the office towers of a modern city would tend to block the blast wave in some areas, providing partial protection from the blast, as well as from the heat and radiation.) In that zone, almost anything made of wood would be destroyed: Roofs would cave in, windows would shatter, gas lines would rupture. Telephone poles, street lamps, and utility lines would be severely damaged. Many roads would be blocked by mountains of wreckage. In this zone, many people would be killed or injured in building collapses, or trapped under the rubble; many more would be burned, blinded, or injured by flying debris. In many cases, their charred skin would become ragged and fall off in sheets. The effects of the detonation would act in deadly synergy. The smashed materials of buildings broken by the blast would be far easier for the fires to ignite than intact structures. The effects of radiation would make it far more difficult for burned and injured people to recover. The combination of burns, radiation, and physical injuries would cause far more death and suffering than any one of them would alone. The silent killer. The bomb’s immediate effects would be followed by a slow, lingering killer: radioactive fallout. A bomb detonated at ground level would dig a huge crater, hurling tons of earth and debris thousands of feet into the sky. Sucked into the rising fireball, these particles would mix with the radioactive remainders of the bomb, and over the next few hours or days, the debris would rain down for miles downwind. Depending on weather and wind patterns, the fallout could actually be deadlier and make a far larger area unusable than the blast itself. Acute radiation sickness from the initial radiation pulse and the fallout would likely affect tens of thousands of people. Depending on the dose, they might suffer from vomiting, watery diarrhea, fever, sores, loss of hair, and bone marrow depletion. Some would survive; some would die within days; some would take months to die. Cancer rates among the survivors would rise. Women would be more vulnerable than men—children and infants especially so. Much of the radiation from a nuclear blast is short-lived; radiation levels even a few days after the blast would be far below those in the first hours. For those not killed or terribly wounded by the initial explosion, the best advice would be to take shelter in a basement for at least several days. But many would be too terrified to stay. Thousands of panic-stricken people might receive deadly doses of radiation as they fled from their homes. Some of the radiation will be longer-lived; areas most severely affected would have to be abandoned for many years after the attack. The combination of radioactive fallout and the devastation of nearly all life-sustaining infrastructure over a vast area would mean that hundreds of thousands of people would have to evacuate. Ambulances to nowhere. The explosion would also destroy much of the city’s ability to respond. Hospitals would be leveled, doctors and nurses killed and wounded, ambulances destroyed. (In Hiroshima, 42 of 45 hospitals were destroyed or severely damaged, and 270 of 300 doctors were killed.) Resources that survived outside the zone of destruction would be utterly overwhelmed. Hospitals have no ability to cope with tens or hundreds of thousands of terribly burned and injured people all at once; the United States, for example, has 1,760 burn beds in hospitals nationwide, of which a third are available on any given day. And the problem would not be limited to hospitals; firefighters, for example, would have little ability to cope with thousands of fires raging out of control at once. Fire stations and equipment would be destroyed in the affected area, and firemen killed, along with police and other emergency responders. Some of the first responders may become casualties themselves, from radioactive fallout, fire, and collapsing buildings. Over much of the affected area, communications would be destroyed, by both the physical effects and the electromagnetic pulse from the explosion. Better preparation for such a disaster could save thousands of lives—but ultimately, there is no way any city can genuinely be prepared for a catastrophe on such a historic scale, occurring in a flash, with zero warning. Rescue and recovery attempts would be impeded by the destruction of most of the needed personnel and equipment, and by fire, debris, radiation, fear, lack of communications, and the immense scale of the disaster. The US military and the national guard could provide critically important capabilities—but federal plans assume that “no significant federal response” would be available for 24-to-72 hours. Many of those burned and injured would wait in vain for help, food, or water, perhaps for days. The scale of death and suffering. How many would die in such an event, and how many would be terribly wounded, would depend on where and when the bomb was detonated, what the weather conditions were at the time, how successful the response was in helping the wounded survivors, and more. Many estimates of casualties are based on census data, which reflect where people sleep at night; if the attack occurred in the middle of a workday, the numbers of people crowded into the office towers at the heart of many modern cities would be far higher. The daytime population of Manhattan, for example, is roughly twice its nighttime population; in Midtown on a typical workday, there are an estimated 980,000 people per square mile. A 10-kiloton weapon detonated there might well kill half a million people—not counting those who might die of radiation sickness from the fallout. (These effects were analyzed in great detail in the Rand Corporation’s Considering the Effects of a Catastrophic Terrorist Attack and the British Medical Journal’s “Nuclear terrorism.”) On a typical day, the wind would blow the fallout north, seriously contaminating virtually all of Manhattan above Gramercy Park; people living as far away as Stamford, Connecticut would likely have to evacuate. Seriously injured survivors would greatly outnumber the dead, their suffering magnified by the complete inadequacy of available help. The psychological and social effects—overwhelming sadness, depression, post-traumatic stress disorder, myriad forms of anxiety—would be profound and long-lasting. The scenario we have been describing is a groundburst. An airburst—such as might occur, for example, if terrorists put their bomb in a small aircraft they had purchased or rented—would extend the blast and fire effects over a wider area, killing and injuring even larger numbers of people immediately. But an airburst would not have the same lingering effects from fallout as a groundburst, because the rock and dirt would not be sucked up into the fireball and contaminated. The 10-kiloton blast we have been discussing is likely toward the high end of what terrorists could plausibly achieve with a crude, improvised bomb, but even a 1-kiloton blast would be a catastrophic event, having a deadly radius between one-third and one-half that of a 10-kiloton blast. These hundreds of thousands of people would not be mere statistics, but countless individual stories of loss—parents, children, entire families; all religions; rich and poor alike—killed or horribly mutilated. Human suffering and tragedy on this scale does not have to be imagined; it can be remembered through the stories of the survivors of the US atomic bombings of Hiroshima and Nagasaki, the only times in history when nuclear weapons have been used intentionally against human beings. The pain and suffering caused by those bombings are almost beyond human comprehension; the eloquent testimony of the Hibakusha—the survivors who passed through the atomic fire—should stand as an eternal reminder of the need to prevent nuclear weapons from ever being used in anger again. Global economic disaster. The economic impact of such an attack would be enormous. The effects would reverberate for so far and so long that they are difficult to estimate in all their complexity. Hundreds of thousands of people would be too injured or sick to work for weeks or months. Hundreds of thousands more would evacuate to locations far from their jobs. Many places of employment would have to be abandoned because of the radioactive fallout. Insurance companies would reel under the losses; but at the same time, many insurance policies exclude the effects of nuclear attacks—an item insurers considered beyond their ability to cover—so the owners of thousands of buildings would not have the insurance payments needed to cover the cost of fixing them, thousands of companies would go bankrupt, and banks would be left holding an immense number of mortgages that would never be repaid. Consumer and investor confidence would likely be dramatically affected, as worried people slowed their spending. Enormous new homeland security and military investments would be very likely. If the bomb had come in a shipping container, the targeted country—and possibly others—might stop all containers from entering until it could devise a system for ensuring they could never again be used for such a purpose, throwing a wrench into the gears of global trade for an extended period. (And this might well occur even if a shipping container had not been the means of delivery.) Even the far smaller 9/11 attacks are estimated to have caused economic aftershocks costing almost $1 trillion even excluding the multi-trillion-dollar costs of the wars that ensued. The cost of a terrorist nuclear attack in a major city would likely be many times higher. The most severe effects would be local, but the effects of trade disruptions, reduced economic activity, and more would reverberate around the world. Consequently, while some countries may feel that nuclear terrorism is only a concern for the countries most likely to be targeted—such as the United States—in reality it is a threat to everyone, everywhere. In 2005, then-UN Secretary-General Kofi Annan warned that these global effects would push “tens of millions of people into dire poverty,” creating “a second death toll throughout the developing world.” One recent estimate suggested that a nuclear attack in an urban area would cause a global recession, cutting global Gross Domestic Product by some two percent, and pushing an additional 30 million people in the developing world into extreme poverty. Desperate dilemmas. In short, an act of nuclear terrorism could rip the heart out of a major city, and cause ripple effects throughout the world. The government of the country attacked would face desperate decisions: How to help the city attacked? How to prevent further attacks? How to respond or retaliate? Terrorists—either those who committed the attack or others—would probably claim they had more bombs already hidden in other cities (whether they did or not), and threaten to detonate them unless their demands were met. The fear that this might be true could lead people to flee major cities in a large-scale, uncontrolled evacuation. There is very little ability to support the population of major cities in the surrounding countryside. The potential for widespread havoc and economic chaos is very real. If the detonation took place in the capital of the nation attacked, much of the government might be destroyed. A bomb in Washington, D.C., for example, might kill the President, the Vice President, and many of the members of Congress and the Supreme Court. (Having some plausible national leader survive is a key reason why one cabinet member is always elsewhere on the night of the State of the Union address.) Elaborate, classified plans for “continuity of government” have already been drawn up in a number of countries, but the potential for chaos and confusion—if almost all of a country’s top leaders were killed—would still be enormous. Who, for example, could address the public on what the government would do, and what the public should do, to respond? Could anyone honestly assure the public there would be no further attacks? If they did, who would believe them? In the United States, given the practical impossibility of passing major legislation with Congress in ruins and most of its members dead or seriously injured, some have argued for passing legislation in advance giving the government emergency powers to act—and creating procedures, for example, for legitimately replacing most of the House of Representatives. But to date, no such legislative preparations have been made. In what would inevitably be a desperate effort to prevent further attacks, traditional standards of civil liberties might be jettisoned, at least for a time—particularly when people realized that the fuel for the bomb that had done such damage would easily have fit in a suitcase. Old rules limiting search and surveillance could be among the first to go. The government might well impose martial law as it sought to control the situation, hunt for the perpetrators, and find any additional weapons or nuclear materials they might have. Even the far smaller attacks of 9/11 saw the US government authorizing torture of prisoners and mass electronic surveillance. And what standards of international order and law would still hold sway? The country attacked might well lash out militarily at whatever countries it thought might bear a portion of responsibility. (A terrifying description of the kinds of discussions that might occur appeared in Brian Jenkins’ book, Will Terrorists Go Nuclear?) With the nuclear threshold already crossed in this scenario—at least by terrorists—it is conceivable that some of the resulting conflicts might escalate to nuclear use. International politics could become more brutish and violent, with powerful states taking unilateral action, by force if necessary, in an effort to ensure their security. After 9/11, the United States led the invasions of two sovereign nations, in wars that have since cost hundreds of thousands of lives and trillions of dollars, while plunging a region into chaos. Would the reaction after a far more devastating nuclear attack be any less?

#### The plan solves---US antitrust law is modeled

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The “shot in the dark” that was the U.S. antitrust law system is today no longer solely a domestic field of law. It is now also a critically important component of global economic policy! The system that U.S. judges had evolved to deal with purely domestic problems and that relied on little more than confidence in the capacity of courts to develop reasonable responses to conflicts has been transformed into the central player in efforts to respond effectively to economic and other forms of globalization. It is now a U.S. export product, and the stakes are enormous. What directions and forms will the rules of competition take? Treatment of these issues will be a factor in the future of many countries, including the U.S., and for more than two decades Chicago-Kent has brought transnational competition law to our students, and Chicago-Kent faculty have contributed to the international discussion of these issues. A. Foreign Interactions and Perceptions U.S. antitrust now plays on a global stage, and much will depend on how foreign experts, lawyers, government officials and business leaders see U.S. antitrust. They will make decisions about what to do in their own countries and on the international level. This means that their perspectives on the U.S. system are critical to its roles both at home and abroad, and foreign images of U.S. antitrust have changed radically. Prior to the Second World War, those in Europe who knew anything about U.S. antitrust law (and they were few) generally considered it a mistake. They tended to see it as a failure that actually created more harm than good by forcing companies to merge rather than cooperate. This view predominated in large measure until after the Second World War. The Europeans were developing a different concept of competition law that emphasized administrative control of dominant firms. This conception of competition was spreading rapidly in Europe in the 1920s, but depression and war led to its virtual abandonment. After that war ended, however, U.S. antitrust law became associated with U.S. economic dominance in the “free world.” The real and imagined connections between economic concentration and military expansion in both Germany and Japan convinced many that U.S.-style antitrust law should be used to combat such concentrations. U.S. occupation forces in Germany and Japan imposed U.S. antitrust ideas during the occupation period, and the U.S. insisted that both countries either enact or maintain competition law after the occupation. This increased awareness of these ideas abroad. Perhaps more important, however, was the perception that antitrust was a source of strength for the U.S. economy and thus a potential spur to growth that other countries could employ. U.S.-style antitrust did not, however, always fit well with European legal traditions and institutions, and in most European countries skepticism toward the U.S. model limited progress in protecting competition. In Germany, however, a separate set of ideas about how to protect competition developed in the 1930s and 1940s in the underground, and after the war it became the basis for German antitrust law. From here it spread to the European level and became part of the process of Euro- pean integration. The basic idea of U.S. antitrust law—i.e., protecting the competitive process from restraints—was part of this model of competition law, but the model itself was conceptually and institutionally quite distinct. European scholars and officials in these areas often looked to U.S. antitrust for comparisons and insights into problems, but there was relatively little interaction between U.S. and European forms of competition law until the 1990s. In the 1990s these relationships became far closer and more important for both the U.S. and Europeans. Moreover, the fall of the Soviet Union precipitated widespread interest in market-based approaches around the world and revived the messianic tenor of the U.S. antitrust law community. Many countries that had socialist or other command-based approaches to the organization of economic activity now introduced antitrust laws or significantly increased their investment in the enforcement of such laws. Often they looked to U.S. antitrust officials, lawyers and scholars for help in implementing or evaluating their new activities.

### Adv---Democracy

#### Congressional inaction in antitrust shifts power to less democratic institutions

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It is disappointing that the U.S. Congress has more often focused on the minutiae of competition law and policy or conducted hearings on high profile mergers that, by design, cannot affect the eventual enforcement actions of the agencies. 160 There have been no major amendments of the antitrust laws since the 1970s. 16 1 Criminal penalties have been increased, but the private treble damage remedies as a whole have been largely left unchanged. 162 Exemptions and immunities have been expanded and contracted at the margins. 16 3 Budgets have been increased and lowered depending on the era and the overall political zeitgeist.

Unfortunately, much of Congressional attention to competition law has involved minor issues and outright petty matters. For example, Congress effectively killed a proposal that would have rationalized cooperation between the Antitrust Division and the FTC because it affected which Congressional committee had "jurisdiction" over the work of these agencies. 164 Even more petty was the unsuccessful effort of one Congressman to force the FTC to vacate its headquarters for an expansion of the national art museum.165

The opportunity costs for each hearing on such marginal issues, for example, whether professional baseball should continue to enjoy a partial exemption from the antitrust laws or grandstanding for constituents over the fate of a particular merger with a pronounced local effect, is high. Congress sacrifices time, money, and attention better used to study more important, broader issues of competition law and policy. Stated enforcement policy over unilateral conduct and merger policy have changed substantially between administrations and over time. Important guidelines and stated enforcement priorities have changed as well with little substantive Congressional involvement. 16 6 Critical decisions by the United States Supreme Court have changed the law in dramatic and subtle ways without significant Congressional input either before or after the decisions. 167

Perhaps Congress simply does not care about, or actually approves of, the continued evolution of United States antitrust law and policy in all its complexity. However, this silence or indifference has important consequences. It shifts power from the most democratic elected institutions to the more distant, less democratic institutions of agencies and courts to craft fundamental economic policy free from all but the most macro-level interventions or corrections.

#### That collapses court legitimacy and constitutional SOP

David P. Ramsey 10. Associate Professor of Government at the University of West Florida. “The Role of the Supreme Court in Antitrust Enforcement”. May 2010. https://baylor-ir.tdl.org/bitstream/handle/2104/7960/david\_ramsey\_phd.pdf?sequence=3

White’s announcement of the rule of reason was not without its critics on the Court. Justice John Marshall Harlan, author of the Court’s opinion in the Northern Securities case, delivered a passionate dissent which, in the period immediately following announcement of the Court’s ruling in the Standard Oil case, was more widely covered in the press than White’s majority opinion. For Harlan, the real issue of the case was whether or not the Court would resist the temptation to amend the Sherman Act by a process of judicial legislation.28 Harlan places the decision in the context of the failed arguments of defendants in the Trans-Missouri and Joint Traffic arguments, who twice attempted to persuade the Court to amend or interpret the text of Sherman §1 prohibition of all agreements in restraint of trade to read all agreements ‘in unreasonable restraint of trade,’ and twice failed to do so.29 Given such precedents, Harlan found White’s decision now to incorporate the standard of reasonableness into the Court’s interpretation of the statute troubling not only because this would seem to raise constitutional concerns about judicial legislation, but also because it seemed to show such blatant disregard for stare decisis, and would thus help to weaken an important source of institutional power for the judiciary over time. 30 Finally, Harlan explained that he was worried that White’s adoption of a rule of reason would have profound constitutional implications in future generations, particularly the danger of judicial encroachment on the legislative power, and the danger that the Court, by something so small as inserting the word ‘reasonable’ into the Sherman Act’s prohibition of restraints of trade, might eventually come to erect itself into a superlegislature, just as Brutus and the Anti-Federalists had feared. Emphasizing the three “separate, equal and coordinate departments” erected by the Constitution, Harlan stresses the danger posed to our institutions should any one branch of the federal government begin to usurp the powers of another, and that this danger was all the more prevalent and pernicious in cases involving attempts to transcend constitutional powers in the name of the common good. Harlan closes with a passionate exhortation to resist this temptation to pursue the public good or further the legislative intent of Congress by surpassing the powers granted the Court in Article III. After many years of public service at the National Capital, and after a somewhat close observation of the conduct of public affairs, I am impelled to say that there is abroad in our land a most harmful tendency to bring about the amending of constitutions and legislative enactments by means alone of judicial construction. As a public policy has been declared by the legislative department in respect of interstate commerce, over which Congress has entire control, under the Constitution, all concerned must patiently submit to what has been lawfully done until the People of the United States—the source of all National power—shall, in their own time, upon reflection and through the legislative department of the Government, require a change of that policy.31 Though Harlan’s warning tends to be lightly dismissed by later critics, it must be remembered that at the time, federal involvement in regulation of the economy was minimal, and therefore the Court tended to defer to the political branches. Harlan’s reluctance to accept a court-made rule of reason was in part, then, an attempt to protect the Court from the political backlash that would likely result from being positioned at the vanguard of Progressive reforms. The Sherman Act was controversial enough as a statement of national economic policy without the Court adding to it an additional layer of discretionary power for the judiciary.

#### Judicial activism collapses democracy.

James Muffett 14. Founder & President of Student Statesmanship Institute and President of Citizens for Traditional Values. “The Danger Of Judicial Activism”. Michigan All Rise. 9-8-14. <https://michiganallrise.org/resources/the-danger-of-judicial-activism/>

There is a battle in our nation between those who believe that judges should follow the law as intended by the legislature, and those who think judges have latitude to interpret the law according to their view of what the law ought to be. The latter are referred to as, “activist judges.” When judges insert their own personal bias, they usurp the role of the legislators whom the citizens elect to represent them in deciding disputed, difficult policy issues. Thus, judicial activism undermines the very basis of our representative democracy. It can be argued that activist judges have done more damage to traditional, Judeo-Christian values than the other branches of government combined. The areas of greatest damage include free enterprise, human life, marriage, personal freedoms, property rights and religious liberty. Judges who usurp the authority of the people are not merely incorrect; they are themselves unconstitutional. And they are unjust. In fact, Justice White in his Roe v. Wade dissent opinion, wrote that the court had acted “not in constitutional interpretation, but in the unrestrained imposition of its own, extra-constitutional value preferences.” In addition to short-circuiting the democratic process, this judicial approach creates an environment of unpredictability which ultimately leads to destabilization and more litigation. When judges exercising the power of judicial review are guided by the text, logic, structure, and original understanding of the Constitution and the law, they deserve our respect and gratitude. By operating with this type of judicial oversight, they are playing their part to make constitutional republican government a reality. But where judges usurp democratic legislative authority by imposing on the people their moral and political preferences, under the guise of fairness or empathy, they should be severely criticized and resolutely opposed. It is time for all citizens to wake up to this crisis and work to elect “Rule of Law” judges who exercise constitutional authority only to enforce the law as written and ensure that laws apply to everyone equally.

#### Antitrust is key to democratic legitimacy---sets a precedent.

Daniel A. Crane 21. Frederick Paul Furth, Sr. Professor of Law, University of Michigan. "Antitrust Antitextualism " Notre Dame Law Review. 1-28-2021. https://scholarship.law.nd.edu/cgi/viewcontent.cgi?article=4952&context=ndlr

3. Implications for Interpretation

The phenomenon of antitrust antitextualism is important for understanding the U.S. antitrust system, its history, and the possibilities for its reform, but it also has significance for more general understandings of how statutes are written and how their interpretation functions or should function. Scholars have argued that Congress sometimes means statutory language to be purely expressive, indeed that it means for the courts not to give that language legal effect.262 But the story of antitrust antitextualism goes far beyond judicial excision of stray words or phrases from the antitrust statutes. In important instances, particularly with respect to the FTC and Robinson-Patman Acts, the courts have entirely rewritten the textual meaning and legislative purpose of the statute.263 Through a chronic cycle of legislative enactment, judicial disregard, and implicit legislative acquiescence, Congress and the courts have constituted the common-law system that judges and scholars across the political spectrum now consider normalized and perhaps even inevitable.

This pattern of judicial/legislative engagement (with the executive playing an enabling role) raises both analytical and normative questions for the jurisprudence of statutory interpretation. Analytically and descriptively, is antitrust law sui generis, or do other statutory domains exhibit a similar, but perhaps unrecognized, dynamic? Do the antitrust laws idiosyncratically operate in a space of equipoise between Jeffersonian idealism and Hamiltonian pragmatism, with Congress implicitly assigning itself the role of idealist orator while acquiescing as the courts provide pragmatic counterbalance? Or is this yin and yang phenomenon, disguised in the interpretive rhetoric of broad delegations and common-law method, a more general one, in maybe unappreciated ways? Once a pattern is observed in one legal domain, it tends to be observed soon in others as well. Finding a recurrence of the antitrust pattern elsewhere could provide new insights on statutory interpretation, separation of powers, and the de facto institutional roles of the legislative and judicial branches.

Normatively, there is much to question about the democratic legitimacy of the implicit system of legislative declaration and judicial reformation described in this Article. There seems little in it that either a committed textualist or a committed purposivist could defend, since the system entails the courts honoring neither what Congress wrote nor what it meant. To rehabilitate the system’s democratic legitimacy, a subtle purposivist might say that what Congress actually meant—in a deep sense—must be gathered from the norms of the system itself rather than from conventional evidence such as floor statements by members of Congress, committee reports, or other contemporaneous sources of public meaning. Perhaps members of Congress legislate against a backdrop of expectation that the courts will continue to read down new statutes to accommodate pragmatic efficiency interests, and consenting to this implicit system, the members feel liberated to express more in the statute than they actually mean as prescriptive. But if that is wholesome democratic practice, that case is yet to be made.

#### Congressional action key to democracy---alternative cedes power.

Harry First and Spencer Weber Waller 13. Harry First, New York University School of Law. Spencer Weber Waller, Loyola University Chicago School of Law. “Antitrust’s Democracy Deficit”. Fordham Law Review, Volume 81 Issue 5 Article 13. https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=4890&context=flr

The recommendation that Congress shift its focus to major issues is particularly critical to reinvigorating Congress’s role in antitrust policy. It is simply more important to probe whether merger enforcement has now been virtually limited to mergers to monopoly than to hold hearings into whether a particular merger in a particular industry is a good idea. Similarly, reasonable people can differ over whether a particular antitrust provision should be enforced more vigorously, less vigorously, or simply repealed, but we doubt any Congress since the passage of the Sherman Act would simply say, “We don’t care, do whatever you want.” We may not like the results of what Congress says on any particular issue, but it remains the only directly democratically accountable branch of government and the one most clearly charged with setting the broad parameters of fundamental public policy. It should speak, as it does in most other areas of our complex economy, and not have its silence used as an excuse for self-interested actors to shift power in their favor when the legislature chooses to turn to other pressing issues of the day

#### Democratic backsliding in the US spills over.

Larry Diamond 21. Senior Fellow at the Hoover Institution and the Freeman Spogli Institute for International Studies at Stanford University. "A World Without American Democracy?". Foreign Affairs. 7-2-2021. https://www.foreignaffairs.com/articles/americas/2021-07-02/world-without-american-democracy?utm\_medium=referral&utm\_source=www-foreignaffairs-com.cdn.ampproject.org&utm\_campaign=amp\_kickers

Aprolonged global democratic recession has, in recent years, morphed into something even more troubling: the “third reverse wave” of democratic breakdowns that the political scientist Samuel Huntington warned could follow the remarkable burst of “third wave” democratic progress in the 1980s and the 1990s. Every year for the past 15 years, according to Freedom House, significantly more countries have seen declines in political rights and civil liberties than have seen gains. But since 2015, that already ominous trend has turned sharply worse: 2015–19 was the first five-year period since the beginning of the third wave in 1974 when more countries abandoned democracy—twelve—than transitioned to it—seven. And the trend continues. Illiberal populist leaders are degrading democracy in countries including Brazil, India, Mexico, and Poland, and creeping authoritarianism has already moved Hungary, the Philippines, Turkey, and Venezuela out of the category of democracies altogether. In Georgia, the dominance of the Georgian Dream Party has led to the steady decline of electoral processes and a breakdown in the rule of law. In Myanmar, the military overthrew the elected government of Aung San Suu Kyi, ending an experiment in partial democracy. In El Salvador, president Nayib Bukele staged an executive coup by removing the attorney general and Supreme Court justices who were obstacles to his consolidation of power. In Peru, democracy hangs from a thread as the right-wing autocrat Keiko Fujimori advances vague claims of election fraud in a bid to overturn her narrow electoral defeat to left-wing opponent Pedro Castillo. What is especially striking about this last case is that Fujimori’s gambit bears a grim resemblance to the lie perpetuated by former U.S. President Donald Trump and his followers about the 2020 presidential election. This is no coincidence. As the journalist and historian Anne Applebaum has observed, fictitious claims of fraud and “stop the steal” tactics are becoming a common means by which autocratic populists try to obstruct democracy. Such tactics have long been a source of instability in countries struggling to develop democracy. But the fact that the most recent iteration of the antidemocrat’s playbook draws heavily on precedents in the world’s most important and powerful democracy marks the start of a dangerous new era. Today, the United States confronts a growing antidemocratic movement, not just from the ranks of fringe extremists but also from a substantial group of officeholders—a movement that is challenging the very foundations of electoral democracy. Should this effort succeed, the United States could become the first ever advanced industrial democracy to fail—that is, to no longer meet the minimum conditions for free and fair elections as political scientists and other scholars of democracy define them. The failure of American democracy would be catastrophic not only for the United States; it would also have profound global consequences at a time when freedom and democracy are already under siege. As Huntington noted, the diffusion of democratic movements and ideas from one country to another has helped drive positive democratic change. Antidemocratic norms and practices can spread in a similar fashion—especially when they emanate from powerful countries. That is why the acceleration of a democratic recession into a democratic depression happened largely on Trump’s watch. And it is why no development would more gravely damage the global democratic cause than the democratic backsliding of its most important champion.

#### Democracy solves every impact---it’s comparatively more stable than autocracies

Kroenig 20 Matt. 4/3. Professor of government and foreign service at Georgetown University – you know who he is. “Why the U.S. Will Outcompete China” <https://www.theatlantic.com/ideas/archive/2020/04/why-china-ill-equipped-great-power-rivalry/609364/>) 1/20/2021

National-security analysts see China as one of the greatest threats facing the United States and its allies. According to an emerging conventional wisdom, China has the leg up on the U.S. in part because its authoritarian government can strategically plan for the long term, unencumbered by competing branches of government, regular elections, and public opinion. Yet this faith in autocratic ascendance and democratic decline is contrary to historical fact. China may be able to put forth big, bold plans—the kinds of projects that analysts think of as long term—but the visionary projects of autocrats don’t usually pan out. Watch White Noise, the inside story of the alt-right The Atlantic’s first feature documentary ventures into the underbelly of the far-right movement to explore the seductive power of extremism. Stream Now Yes, democratic governments are obligated to answer to their citizens on regular intervals and are sensitive to public opinion—that’s actually democracies’ greatest source of strength. Democratic leaders have a harder time advancing big, bold agendas, but the upside of that difficulty is that the plans that do make it through the system have been carefully considered and enjoy domestic support. Historically speaking, once a democracy comes up with a successful strategy, it sticks with the plan, even through a succession of leadership. Washington has arguably followed the same basic, three-step geopolitical plan since 1945. First, the United States built the current, rules-based international system by providing security in important geopolitical regions, constructing international institutions, and promoting free markets and democratic politics within its sphere of influence. Second, it welcomed into the club any country that played by the rules, even former adversaries, like Germany and Japan. And, third, the U.S. worked with its allies to defend the system from those countries or groups that would challenge it, including competitors such as Russia and China, rogue states such as Iran and North Korea, and terrorist networks. America can pursue long-term strategy in part because it enjoys domestic political stability. While new politicians seek to improve on their predecessor’s policies, the United States is unlikely to see the drastic shifts in strategy that come from the fall of one political system and the rise of another. Democratic elections may be messy, but they’re not as messy as coups or civil wars. Daniel Blumenthal: The Unpredictable Rise of China Open societies have many other advantages as well. They facilitate innovation, trust in financial markets, and economic growth. Because democracies tend to be more reliable partners, they are typically skillful alliance builders, and they can accumulate resources without frightening their neighbors. They tend to make thoughtful, informed decisions on matters of war and peace, and to focus their security forces on external enemies, not their own populations. Autocratic systems simply cannot match this impressive array of economic, diplomatic, and military attributes. David Leonhardt recently wrote in The New York Times, “Chinese leaders stretching back to Deng Xiaoping have often thought in terms of decades.” Commonly cited examples of that long-term thinking include the Belt and Road Initiative, a program that invests in infrastructure overseas; Made in China 2025, an effort to subsidize China’s giant tech companies to become world leaders in 21st-century technologies, such as artificial intelligence; and Beijing’s promise to be a global superpower by 2049. Since putting in place sound economic reforms in the 1970s, China has seen its economy expand at eye-popping rates, to become the world’s second largest. Many economists predict that China could even surpass the United States within the decade, and some have suggested that China’s model of state-led capitalism will prove more successful, in terms of economic growth, than the U.S. template of free markets and open politics. I doubt these predictions. Because autocratic leaders are unconstrained and do not have to contend with a legislature or courts, they have an easier time taking their countries in new and radically different directions. Then, when the dictator changes his mind, he can do it again. Mao’s autocratic China ricocheted from one failed policy to another: the Great Leap Forward, then the Hundred Flowers Campaign, then the Cultural Revolution. Mao aligned with the Soviet Union in 1950 only to nearly fight a nuclear war with Moscow in the next decade. Beginning in the time of Deng Xiaoping, China pursued a fairly constant strategy of liberalizing its economy at home and “hiding its capabilities and biding its time” abroad. But President Xi Jinping abandoned these dictums when he took over. As the most powerful leader since Mao—he has changed China’s constitution to set himself up as dictator for life—he could once again jerk China in several new directions, according to his whims, and back again. According to the Asia Society, he has stalled or reversed course on eight of 10 categories of economic reform promised by the Chinese Communist Party (CCP) itself. Moreover, Xi is baring China’s teeth militarily, taking contested territory from neighbors in the South China Sea and conducting military exercises with Russia in Europe. The problem for Beijing is that stalled reforms will stymie its economic potential and its confrontational policies are provoking an international coalition to contain them. The 2017 U.S. National Security Strategy declared great-power competition with China the foremost security threat to the U.S.; the European Union labeled China a “systemic rival”; and Japan, Australia, India, and the United States have formed a new “quad” of powers to balance China in the Pacific. Furthermore, the plans often cited as evidence of China’s farsighted vision, the Belt and Road Initiative and Made in China 2025, were announced by Xi only in 2013 and 2015, respectively. Both are way too recent to be celebrated as brilliant examples of successful, long-term strategic planning. A certain level of domestic political stability is a prerequisite for charting a steady strategic course in foreign and domestic affairs. But autocratic regimes are notoriously brittle. While institutionalized political successions in democracies typically lead to changes of policy, political successions in autocracies are likely to result in regime collapse and war. China’s “5,000 years of history” were pockmarked by rebellion, revolution, and new dynasties. Fearing internal threats to domestic political stability—consider the protests this year in Hong Kong and Xinjiang—the CCP spends more on domestic security than on its national defense. If you follow the money, the CCP is demonstrating that the government is more afraid of its own people than of the Pentagon. This domestic fragility will frustrate China’s efforts to design and execute farsighted plans. If threats to Chinese domestic stability were to materialize and the CCP were to collapse tomorrow, for example, Chinese grand strategy could undergo another seismic shift, including possibly opting out of competition with the United States altogether. Shadi Hamid: China Is Avoiding Blame by Trolling the World Autocracies have other vulnerabilities as well. State-led planning has never produced high rates of economic growth over the long term. Autocrats are poor alliance builders who fight with their supposed allies more than with their enemies. And the highest priority of autocratic security forces is repressing their own people, not defending the country. The world has undergone drastic changes in just the past few years, but these enduring patterns of international affairs have not. Some fear that Trump’s nationalist tendencies will erode the U.S. position, but the momentum of America’s successful grand strategy has kept the country on a fairly steady course. Despite Trump’s criticism of NATO, for example, two new countries have joined the alliance on his watch, including North Macedonia this week. The coronavirus has upended a sense of security in the U.S., leading many people into the familiar trap of lauding autocratic China’s firm response in contrast to the halting and patchwork measures in the United States. But there is good reason to believe that this assessment will be updated in America’s favor with the benefit of hindsight. Already we are seeing evidence that conditions are much worse in China than CCP officials are letting on and that China’s attempts at international “disaster diplomacy” are backfiring. It has been revealed that the CCP has continually misrepresented the numbers of COVID-19 infections and deaths in China, and European nations have rejected and returned faulty Chinese coronavirus testing kits.

### Plan

#### Thus, the plan: The United States federal government should prohibit private sector business practices that violate an antitrust worker welfare standard.

### Solvency

#### The plan is key to reverse erroneous court judgement that distorted the purpose of antitrust law.

Daniel Hanley 21. A policy analyst at the Open Markets Institute. "Slate - How Antitrust Lost Its Bite" Open Markets Institute. 4-21-2021. https://www.openmarketsinstitute.org/publications/slate-how-antitrust-lost-its-bite

Antitrust is about determining and allocating the rights, privileges, and duties of all economic actors. When Congress originally enacted the Sherman Act, the law was intended to protect consumers, workers, and democracy from excessive concentrations of corporate power. Because of this reality, it is an inherently political area of law. The shift toward rooting it in economics, and making its application substantially more obscure than a bright-line rule, is effectively a means by the judiciary to strip the historical foundations of antitrust from the record and instead substitute its own judgment on what the priorities are for the economy and how it should be structured.

When combined with the rule of reason, the judiciary’s consumer welfare framework effectively erases Congress’ intent for the antitrust laws to operate as a “comprehensive charter of economic liberty” that “does not confine its protection to consumers, or to purchasers, or to competitors, or to sellers.” Such values are best determined by members of the elected legislature rather than unelected judges, a point ironically acknowledged by the Supreme Court in 1972.

Lower federal courts today continue to push the consumer welfare standard even further by, in violation of controlling Supreme Court precedent, weighing the competitive harms of a dominant firm’s conduct against one group to the benefits provided to another group. In ongoing litigation against the NCAA that was heard by the Supreme Court last week, the district court judge ruled that the NCAA’s compact with universities to set a ceiling on the amount of compensation that student-athletes can receive is legal because of the reputed benefit consumers derive from watching athletes knowing there is a cap on their compensation. The court employed the rule of reason to arrive at this result. In an alternative enforcement regime, the NCAA would be a per se illegal employer cartel that is suppressing workers’ wages.

Comprehensive empirical analysis has revealed that the rule of reason has been a rubber stamp for even the most egregious antitrust conduct. A 2009 analysis revealed that 97 percent of cases analyzed under the rule of reason result in victories for defendants. That means corporations are effectively shielded from most antitrust violations.

Part of the reason for such a skewed result in favor of antitrust defendants is that dominant firms have access to high-salaried economists that are able to manipulate analyses to mask the corporation’s conduct to look like it is operationally efficient instead of engaging in predatory practices. Such a situation also deters antitrust litigation because a plaintiff will also have to incur the cost of an economist—which can cost several thousand dollars and, in some cases, several hundred thousand dollars. Thus, the battle over the legality of a business tactic under a consumer welfare framework and rule of reason legal analysis depends on access to immense financial capital and judicial appeasement of policies that favor corporate integration rather than common notions of fairness, equity, and deconcentrated markets—which was the original purpose of the antitrust laws.

Despite controlling Supreme Court precedent prohibiting the use of economics in certain antitrust violations, courts now routinely use it to justify corporate consolidation. For example, in the context of merger analysis, the economization of antitrust has led courts to believe and depend on theoretical assumptions on how mergers are beneficial for society and consumers. In the case of AT&T and its pursuit of acquiring Time Warner in 2018, the corporation stated its merger would produce efficiencies and save customers money. District Court Judge Richard Leon was persuaded by AT&T’s statements holding that vertical integration is able to shrink its costs and will “lead to lower prices for consumers.” But such assumptions have been categorically repudiated by researchers. In one example, the economist John Kwoka found that 80 percent of studied mergers led to high prices and even reduced output. Other studies have found equivalent results. In the context of AT&T, subsequent evidence showed that AT&T did raise prices on consumers.

As Congress considers enacting new legislation, it must start by reclaiming control over antitrust by enacting laws with clear rules that could deter exclusionary conduct and greatly simplify the litigation process for plaintiffs. Moreover, instead of just restoring many of the historical bright-line rules that the judiciary has eroded over the last 60 years, new laws should go further to ensure that markets remain deconcentrated and to promote economic fairness. For example, Congress could enact strict prohibitions on firms entering certain lines of business, such as AT&T being prohibited from entering the computer industry in 1956, or ban the use of specific competitive practices outright, such as noncompetes that restrict the mobility of workers. Rules like these ensure the markets are structured by publicly accountable institutions to incentivize socially beneficial corporate conduct, such as investments in research and development and product quality.

Importantly, rules-based laws would also ensure the judiciary is adhering to Congress’ directive to keep markets deconcentrated and acknowledge that the judiciary is not a reliable safeguard for smaller independent firms and workers who often do not have access to significant amounts of capital to litigate an antitrust lawsuit. In fact, in commonly applied rules for how judges interpret Congress’ laws, the judiciary views ambiguity as an opportunity to fill any legal gaps with its interpretation and ideology.

History has consistently shown that only bright-line rules will lead to an effective and vigorous enforcement environment, as they do in other areas of law, and prevent the judiciary from favoring dominant economic enterprises and distorting the antitrust laws to preference increased concentration. The Supreme Court’s original development of the rule of reason and its subsequent gutting of the enforcement of the Clayton Act in the 1930s is particularly illustrative of why bright-line rules are necessary.

#### The plan’s codification is key to certainty.

Eric A. Posner 8/13/21. Kirkland & Ellis Distinguished Service Professor at University of Chicago. How Antitrust Failed Workers. Oxford University Press, 2021.

Anticompetitive behavior. Plaintiffs would be able to base their case on any of the following anticompetitive acts: mergers in highly concentrated markets; use of noncompete and related clauses; restrictions on employees’ freedom to disclose wage and benefit information; unfair labor practices under the National Labor Relations Act;38 misclassification of employees as independent contractors; no-poaching, wage-fixing, and related agreements that are also presumptively illegal under Section 1; and prohibitions on class actions. Of course, current law gives employees the theoretical right to allege these types of anticompetitive behavior, but the cases show a pattern of judicial skepticism, as noted earlier. Codification would help employees by compelling courts to take these claims seriously. Employers would be allowed to rebut a prima facie case of anticompetitive behavior by showing that the act in question would likely lead to an increase in wages.

This reform would strengthen and extend Section 2 actions against labor monopsonists by standardizing a list of anticompetitive acts. While not all of these acts are invariably anticompetitive, the employer would be able to defend itself by citing a business justification. For example, a noncompete could be justified because it protects an employer’s investment in training. If so, an employer could avoid antitrust liability by showing that its use of noncompetes benefits workers, who obtain higher wages as a result of their training.39

These reforms would strengthen Section 2 claims against labor monopsonies but would also preserve the doctrinal structure of Section 2. They would not generate significant legal uncertainty or require a revision in the way that we think about antitrust law.

#### Antitrust law must prioritize worker welfare---workers suffer a greater loss than consumers.

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As this Note has already stated, the purpose of antitrust law is to protect competition, but the meaning of competition is nebulous.136 Regardless of whether total welfare or the consumer welfare standard is the appropriate measure of net competitive effect,137 a body of law that protects competition should not allow firms to engage in conduct that restricts trade severely in one part of the supply chain merely because it prioritizes end customer benefits.138 As a class of consumers, workers also deserve protection from anticompetitive employer agreements. Congressional intent supports prioritizing the interests of workers over customers when analyzing anticompetitive restraints in labor markets. Unions are inherently anticompetitive; a union is a combination of workers jointly setting wages and other work conditions, just as a cartel is a combination of firms setting prices together.139 As a result, the existence of unions increases the wages that firms pay their workers, which in turn results in price increases for customers.140 Nonetheless, labor law staunchly defends the ability of workers to create unions. When antitrust restrictions would deter union conduct, Congress has decided that labor law carries more weight.141 Thus, the labor exceptions to antitrust law142 demonstrate a congressional decision that the welfare gains to workers from increased wages and other improved terms of employment outweigh the costs to customers in the output market from the resulting increased prices. Given that Congress protects workers in one class of anticompetitive conduct, it is reasonable to structure antitrust law to protect workers from conduct with parallel effects. Restraints of trade in labor markets are the converse of unions, trading lower wages for lower prices. However, it is possible that Congressional intent extends only to weighing the interests of workers over customers in the special case of union activity. Even though unions engage in political activies, the aims of unions are primarily economic.143 Thus, Congress supports the economic mission of unions (advancing the welfare of workers despite the potential economic effects on firms and customers) by favoring them in antitrust law. Unions are only special in antitrust because Congress has expressed a legislative preference for workers over other economic actors. It is thus appropriate for courts to weigh workers over other actors when firms engage in conduct that affects workers at the expense of other groups. Further, the welfare economics of restricting competition in employment markets supports worker protection. Economists generally agree that individuals exhibit diminishing marginal utilities of wealth—that is, each additional dollar an individual receives makes them a little less well off than the previous dollar did.144 Diminishing marginal utility of wealth thus implies that when two individuals lose equivalent amounts of money, the individual for whom the loss was a greater portion of his or her wealth suffers a greater loss.145 Generally, the wages that workers lose as a result of anticompetitive conduct will be larger than the price cuts for customers.146 Where the monopsonist also has market power in the output market, the price decrease passed on to customers will be even smaller than in a competitive output market.147 Because wages likely represent a larger portion of workers’ wealth than the additional wealth consumers gain from lower prices, workers lose more welfare than customers gain. Moreover, behavioral economics suggest that the losses to workers from wage reductions will hurt workers more than the gains that customers will receive from lower prices.148 Behavioral economists have recognized that individual utility is relative to a reference point like the status quo; losses relative to that reference point cause a welfare loss about twice the size of the welfare gain from an equivalent gain.149 Put simply, losses hurt more than equivalent gains feel good. Because monopsonistic conduct results in losses for workers and gains for customers relative to the competitive equilibrium, the total net effect on welfare that consumers experience is even more likely to be negative. To be sure, behavioral economics has not been universally welcomed in antitrust law.150 But courts have entertained behavioral economics arguments in antitrust before, generally in cases where neoclassical economic analysis would sharply diverge from what the court believes a “real” customer would do.151 Here, it is unlikely that customers weigh price decreases in the same way that workers weigh wage increases because wages are the primary source of most workers’ incomes; as a result, equivalent economic losses to workers likely outweigh the gain.152

#### Replacing consumer welfare with worker considerations lets labor win---alternatives legalize exploitation and ban collective bargaining.

Firat Cengiz 20. School of Law and Social Justice, University of Liverpool. "The conflict between market competition and worker solidarity: moving from consumer to a citizen welfare standard in competition law". Cambridge Core. 10-8-2020. https://www.cambridge.org/core/journals/legal-studies/article/conflict-between-market-competition-and-worker-solidarity-moving-from-consumer-to-a-citizen-welfare-standard-in-competition-law/6E783D1FC4BAB5605DFABCD17FBE3F35

Introduction

This paper offers a critical investigation of the law and economics of competition law enforcement in conflicts between workers and employers in the European Union (hereinafter EU) and the US. In such cases competition law comes into direct conflict with the principle of worker solidarity: according to the principle of market competition individuals are expected to take independent economic decisions and actions, whereas workers need to take collective economic actions and decisions to protect their interests. This conflict is particularly obvious in the context of the so-called gig economy,1 in which employers keep casualised workers at legal arms’ length to reduce labour and regulatory costs.2 If gig workers take collective action against their working conditions, they might face attack from competition law, because legally they might be considered independent service providers, rather than workers.3

The legal conundrum facing gig workers has become an increasingly popular subject in the law and economics literature.4 Nevertheless, the more fundamental question of how the enforcement of competition rules affects the overall position of workers beyond the limited case of the gig economy remains largely unexplored. This paper aims to investigate this broader and more fundamental question. In order to provide a sufficiently global answer, the paper focuses on the legal positions of the EU and US, as the leading competition law jurisdictions and primary competition policy exporters.5 The EU–US comparison shows that despite the slightly different legal tests applied in these polities, competition rules constitute nearly equally disciplining mechanisms against collective worker action on either side of the Atlantic.

This paper also makes an original contribution to the emerging debate on whether and how competition law can contribute to wealth equality between citizens in the post-2008 crisis economy. The existing debate on the competition law–equality relationship takes the ‘consumer welfare’ standard as its main reference point: it focuses exclusively on the distribution of wealth between consumers and producers; as a result, it overlooks the production process that takes place before consumers meet products and services, and the position of workers within it.6 This is a natural result of competition law's reliance on a limited area of neoclassical economics called ‘equilibrium economics’ that understands efficiency exclusively as a market mechanism in which the price manifests itself where supply meets demand.7 Departing from the mainstream competition law and economics methodology, this paper builds its investigation on a holistic theoretical foundation, looking beyond equilibrium economics at labour exploitation theory as established in neoclassical as well as Marxian models. This analysis shows that despite standing at opposing ends of the political spectrum and whilst having some fundamental differences, Marxist and neoclassical models agree that collective worker action is economically beneficial and socially necessary. As a result, a critical analysis of the current legal situation on both sides of the Atlantic in light of this holistic framework illustrates how competition law's hostility towards collective worker action is not only unjust but also economically unsound.

This paper demonstrates that the key problem in competition law's treatment of labour stems from the application of the consumer welfare standard in cases involving the competition–solidarity conflict without paying any attention to the idiosyncratic qualities of labour that render it naturally open to exploitation. Similarly, the consumer welfare standard overlooks the fact that consumers and workers are essentially the same group of people and one's welfare cannot be increased or decreased without affecting the other's.8 Even if worker exploitation could result in reduced labour costs and decreased prices, this cannot be deemed efficient as it reduces the workers’ welfare and results in broader negative socio-economic effects. Similarly, collective worker action resulting in higher labour costs and potentially higher prices cannot automatically be deemed inefficient, because although this might increase the prices consumers pay, they benefit from higher wages and better working conditions in their position as workers. As a result of this critical analysis, the paper proposes an original and more inclusive ‘citizen welfare’ standard that takes into account the economic effects of anti-competitive behaviour on workers as well as consumers. The citizen welfare standard could also potentially be applied in other contexts to solve long-standing conflicts between competition and other policy objectives, such as industrial, environmental and social policy objectives,9 although this paper primarily focuses on the application of citizen welfare to the competition–solidarity conflict.

The structure of the paper is as follows: the next section provides an opening discussion of competition law, consumer welfare and equality. This is followed by a discussion of the economic theory of labour exploitation. Then, the paper investigates how competition law approaches the competition–solidarity conflict in the EU and the US. The fourth section critically discusses the EU and US legal positions in light of economic theory. This section also develops the citizen welfare approach as an alternative to consumer welfare for the resolution of the competition–solidarity conflict. This is finally followed with conclusions. Regarding terminology, this paper uses the term ‘worker’ (rather than employee) as a non-legal, generic term encompassing all individuals who make a living by providing labour power as a production factor in the production process of goods and services. Similarly, the term ‘labour’ is used to refer to the contribution of the workers to the production process as an abstract human factor. However, if the courts or authorities in question use a different term (such as employee) in a specific case, the paper uses the same term in the discussion of that specific case.

#### Worker welfare can easily be assessed by the Courts.

Eugene K. Kim 20. J.D. 2020; Yale College, B.A. 2016. “Labor’s Antitrust Problem: A Case for Worker Welfare” The Yale Law Journal. 2020. https://www.yalelawjournal.org/pdf/130.2Kim\_q1s8bt8t.pdf

Just as consumer welfare can be measured through economic factors like price, output, quality, and innovation, **courts and economic experts can assess worker welfare through a set of analogous factors:** wages and benefits, hours, working conditions,65 and training. One major tension between these two standards is that workers benefit from higher wages while consumers benefit from lower prices, but these factors capture **similar characteristics of equilibria in both markets**.66 Wages and hours are the labor-market analogs of price and quantity, and benefits can be considered along with wages as a type of compensation. **Working conditions reflect heterogeneity within a single type of employment**, just as quality reflects heterogeneity within a single type of product. And training reflects how labor markets can be dynamic, just as innovation reflects how product markets can be dynamic: that is, labor productivity can improve over time, just as firm productivity can improve over time. As in product-market analysis, courts and economic experts can assess how a contested activity (e.g., a merger) **affects these factors and estimate the net effect on worker welfare.** A worker welfare standard would be similar to a consumer welfare standard in that much of its application would fall on economic experts, whose work would be assessed and weighed by courts. Of course, some cases will be clearer and may be amenable to per se analysis, like an agreement between firms to fix wages. But, as in product markets, other cases will be subtle, and economics will have a role to play. **Just as economic models are used to forecast** the effects of certain market events on price and quantity, and aggregate those effects to estimate net effects on consumer welfare,67 economics will also be instrumental in forecasting the effects of market events on wages and hours, and aggregating those effects to estimate net effects on worker welfare. Antitrust analysis is highly technical in the status quo,68 and **a worker welfare standard would not be any different in its reliance on economics**. The main difference is that a worker welfare standard **focuses attention on the interests of workers, who are often neglected** despite their vulnerability to rent-extractive firm behavior, and recognizes that advancing the interests of workers may **require more than advancing the interests of consumers.**

## 2AC

### Adv---Inequality

#### Inequality wrecks democracy---adversely effects participation and trust.

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Democratic theory assumes a society of free, equal, and autonomous individuals. Although democracy may have different meanings for different people, an ideal of democracy is that all individuals are supposed to have equal standing. This means that each individual is equal before the law, has the same vote as other individuals, the same right to express oneself in the political sphere, and perhaps most importantly the same potential to influence what government does, even if they opt not to exercise that potential. All citizens, then, have the same access to governing institutions. Within this theoretical construct, which may also characterize American democracy, money is supposed to be irrelevant to one’s standing. Both the rich and the poor are equal before government (Hacker and Pierson 2010). This conception of equality, otherwise known as procedural equality is not usually concerned with how resources, wealth and income are distributed, but with how individuals stand in relation to one another. Individuals can have more than others so long as they are equal in terms of their legal and political standing. Procedural equality is especially critical to democratic society because it serves to secure another essential condition: personal freedom, which is also a necessary condition for individuals to function autonomously. The greater their autonomy, the more likely they are to participate in the democratic process. Individuals are free to pursue their goals and objectives—i.e. self-interests—so long as their pursuit does not interfere with others’ ability to pursue their own goals and objectives. In a very basic sense, and certainly within the context of classical political thought, this is what it means to talk about personal independence or autonomy. But as Tocqueville observed there cannot be real political equality without some measure of economic equality as well, because a society with great concentrations of poor people can be dangerous (Zetterbaum 1987). Therefore, economic inequality could pose serious problems in a procedural democracy.

Why, then, might inequality be so dangerous to democracy? According to Acemoglu and Robinson (2006), unrest is often a consequence of inequality. And yet, changes are more likely to occur in those societies with greater inequality between elites and citizens. The more equal the society, the less likely are the masses to demand democratization. Democratization requires that society be sufficiently unequal so that the threat of revolution is credible. Therefore, an elite may be willing to begin a transition by extending the right of franchise because it is in its interests to do so. The transition effectively preserves the status quo by staving off the threat of revolution, which in the end may preserve the power base of the elite. Yet, the elite only democratizes to the degree necessary to stave off the threat of revolution, because the former effectively limits the power of the majority by diluting popular pressure and undermining the power of the majority. Democratization refers to achieving voice through fair procedures. But democratization could mean achieving greater equality through the redistribution of resources aimed at achieving equality of result.

Economic equality, then, effectively promotes democracy because it effectively reduces the pressure for redistribution, which could occur as a byproduct of mass revolution and the subsequent creation of an authoritarian regime (Boix 2003). More unequal distribution of wealth increases the redistributive demands of the population and the ultimate level of taxes in a democratic system. But what happens when the political system is unresponsive to a so-called democratic vote on the tax rate?

A truly democratic regime would not simply take away from the wealthy elite for the benefit of the masses, but it might set a higher tax rate for purposes of redistribution. In a democracy, everybody votes on the tax rate in accordance with what is known as the median voter theorem. This holds that the more inequality there is the greater will be the distance between the median income and society’s average income. The greater the distance, the more calls there are for redistribution, and it is the distance itself that effectively determines the tax rate (Meltzer and Richard 1981).

On an individual level, unequal distribution of wealth and income, however, may adversely affect individuals’ ability to participate in the democratic process as equals. It may result in procedural inequality to the extent that those lacking in wealth and income may not enjoy the same access to political and policy officials as those who possess wealth and income enjoy. With a greater concentration of wealth at the top, elites are in a better position to use their wealth toward the attainment of their political and other ideological objectives (Bachrach and Botwinick 1992, pp. 4-5). Those at the top of the distribution often enjoy inordinate power and are able to not only limit redistribution, but shape the rules of the game in favor of those with more resources (Stiglitz 2012). Various studies have found legislative bodies to be more responsive to affluent constituents than to non-affluent constituents (Bartels 2008; Gilens 2012; Volscho and Kelly 2012).

Inequality, especially in its extreme form of poverty, does in the end deprive us of our capabilities, which is said to be a kind of freedom. To the extent that individuals at the bottom of the income distribution could be said to be poor, poverty deprives individuals of their capabilities. Therefore, there is a strong case to be made for judging individual advantage in terms of the capability that a person has — “the substantive freedoms he or she enjoys to lead the kind of life he or she has reason to value” (Sen 1999, p.87). Such freedoms are the basis of individual autonomy. Those with more resources may be better positioned to pursue their goals and objectives, while those with fewer resources may find that their ability to pursue their goals and objectives are limited.

An individual’s ability to pursue their goals and objectives is important to democracy for yet another reason. A democracy, especially as its legitimacy and power are derived from popular consent, assumes that individuals have the capacity to reason for themselves, i.e. to deliberate in the public square, and to act on that capacity in a responsible manner. They cannot effectively participate, whether it be in full policy discussions or selecting their own representatives, if they cannot deliberate in a rational manner. As democracy requires that individuals execute their agency, human agency must be protected. But this human agency also presupposes that basic material needs will have been met, which may be less likely given ever widening disparities in wealth and income. Democracy also requires a measure of trust between people, and growing income inequality is said to threaten trust as various groups, mainly those at the bottom, experience political alienation and perceive the system not to be fair. As social capital is the glue that holds society together (Stiglitz 2012), if individuals believe that the economic and political system is unfair, the glue does not work and society does not function well. This is because institutions effectively promote trust. A trusting population tends to be more cooperative, and governments with trusting populations tend to be less corrupt and function with less conflict and greater responsiveness (Uslaner 2008).

#### Only growth incentivizes the necessary innovations to achieve sustainability --- transition fails.

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11.1 Introduction

The sustainability of modern economic growth, as it developed in the todays Western industrialized economies from the beginning of the industrial revolution at the end of the eighteenth century, has been questioned at the latest since 1972 when the book The Limits to Growth was published by the Club of Rome (Meadows et al. 1972). After more than 200 years of industrial production, large parts of the world population are richer than ever before. However, industrial production in its current form is also closely linked with the exploitation of natural resources and the strong accumulation of greenhouse gases in the atmosphere, endangering human survival. In economics two fundamentally different solution strategies are discussed as a reaction on man-made climate change and irreversible environmental damages: (1) conservation of resources by growth abstinence and (2) decoupling of growth and exploitation of resources. In this chapter, we show that the first perspective with its emphasis on the efficiency of price competition is not suited to conceive a transformation of the production system towards a knowledge-based bioeconomy. Only the emphasis of the superiority of innovation competition, inherent to the second perspective, allows for the inclusion of the required transformative perspective.

The supporters of the first approach (e.g., Blewitt and Cunningham 2014; Kallis et al. 2014), summarized under the headings of abstinence and downscaling, claim a renunciation of our lifestyles based on consumption and increasing deployment of resources. This is considered the only way to enable a sustainable and environment-friendly lifestyle and form of economic activity. At first sight, it might look surprising that these growth-hostile approaches are strictly in line with the thinking put forward in mainstream neoclassical growth theories. This follows from the fact that the standard neoclassical approach relies on the assumption of stable economic structures and an understanding of economic growth as a continuous increase in the quantity of the goods that are produced. Figure 11.1 depicts the impressive growth performance of the German economy, where—in particular in the period of the so-called Wirtschaftswunder after 1945—income per head skyrocketed: at the beginning of the twenty-first century, per capita GDP is approximately four times higher than three generations earlier. But does this mean that German consumers today have four Volkswagen Beatles in their garages? Obviously not! Today we have completely different goods and services in our consumption baskets, we acquire different competences in universities, we work in different jobs, etc. Restricting economic growth analysis to a quantitative dimension only dismisses these most important qualitative dimensions. Such an analysis can only serve for a very short-term observation.

The alternative approach of neo-Schumpeterian economics (e.g., Hanusch and Pyka 2007) challenges this quantitative orientation and instead emphasizes the importance of qualitative aspects, which make fundamental changes of economic structures over longer periods visible. Without the consideration of the qualitative levels of economic growth, the quantitative figures cannot tell much about the massive technological and socioeconomic developments. The neo-Schumpeterian approach highlights that innovations, market forces, structural change, and urban ways of life are both part of the problem and part of the solution to the sustainability problem. Innovation-triggered development generates both quantitative, i.e., income-increasing growth, and qualitative, i.e., structure-changing development. Only the creative solutions characteristic for capitalistic-organized economies will enable to reform our future economy in the sense of sustainability, thereby supporting the UN’s sustainability goals and simultaneously ensuring growth and development (Mazzucato and Perez 2015).

The central role of innovation in neo-Schumpeterian economics highlights that abstinence in the sense of economic downscaling is neither the first nor the only solution. This does not mean that all ideas of the proponents of the camp are rejected: in perfect accordance, certain past patterns like the high energy intensity of production because of too low oil prices not covering the total environmental costs or so-called planned obsolescence in consumption require urgent adjustments. Especially concepts resulting in a more intensive use of goods and therefore contributing to the economization of resources like the sharing economy or displacing physical goods by digital goods are promising. The same applies for closed-loop material cycles, recycling systems, and intelligent waste avoidance and treatment. These concepts are perfectly applicable to foster learning and behavioral changes on the supply and the demand side. The core idea of neo-Schumpeterian economics, however, is the supply of and demand for new technological solutions within a comprehensive economic transformation process (Geels 2002), i.e., different goods and services are produced and demanded in different, namely, sustainable ways. Exploring and exploiting the technological possibilities of the bioeconomy not only creates new investment opportunities but is also the condition sine qua non for the required socioeconomic and cultural changes. The consumers’ acceptance of bio-based products and their demand are indispensable for a successful transformation. Innovations and changed consumer attitudes are complementary conditions for the creation of a sustainable production system.

Change can be either of an incremental type in terms of small improvements step-by-step along well-known technological trajectories, or it can be fundamental, leading to structural changes and the emergence of new and the disappearance of old industries. To simplify, we assume in this chapter that incremental technological changes are based on existing technological solutions, whereas radical technological changes question major existing production processes. They might lead to massive upheaval in the global production system in the sense of creative destruction (Schumpeter 1943). Because this chapter deals with the fundamental transformation of current production systems, radical technological innovations are in the spotlight which encompass the overcoming of the lock-in situation in fossil fuels (Unruh 2000) and the establishment of a knowledge-based bioeconomy (Pyka 2017; Pyka and Buchmann 2016). Without doubt this transformation process is radical, qualitative, and long term. It was already in Business Cycles, published in 1939, when Schumpeter revitalized Kondratieff’s theory of long waves in order to explain such processes as regular processes in long-term economic development. His illustration of the discontinuous nature of economic development is famous: “Add successively as many mail coaches as you please, you will never get a railway thereby” (Schumpeter 1934, p. 64). So far, the literature highlights five long waves: The beginning industrialization around the year 1800 represented the first long wave and was fueled by the steam engine and by cotton processing. Then, starting around the year 1850, the widespread availability of steel and the diffusion of railways constituted a second long wave. Again, in the early twentieth century, this Kondratieff cycle was replaced by electricity and chemicals. In the postwar period, the third long wave gained momentum by mass production and the automobile as well as the petrochemical industries. Since then, manufacturing activities built on oil as a second fossil fuel apart from coal. From the 1980s, one refers to the fifth long wave, which is reflected in the fast and ubiquitous diffusion and application of information and communication technology. Now, at the beginning of the twenty-first century, another paradigmatic change is in the air, being characterized, however, by one major difference to previous situations of radical change: whereas previous cycles were driven by technological bottlenecks and their overcoming, in the twentyfirst century, we face the vital question of how to restore environmental sustainability of economic activities. The knowledge-based bioeconomy plays a key role in this transformation process which, of course, like previous radical changes, still is confronted by fundamental uncertainty (Knight 1921).

The literature provides many alternative terms for the massive change, shaking global production systems: Freeman (1991) and Dosi (1982) call them techno-economic paradigm changes; Sahal (1985) uses cartographic analogies and refers to technological guideposts that are pointing to technological avenues. All authors highlight the confrontation with profound changes economic systems are faced with over longer periods of time, which question all established production approaches. Not a single technology is responsible for this phenomenon but several complementary developments that include, apart from a package of mutually dependent technologies (e.g., combustion engine, petrochemistry, assembly line production), numerous infrastructural developments (e.g., road structure, filling station network), behavioral changes (e.g., suburbs and commuter flow, shopping malls outside the city centers), as well as institutional changes (e.g., spatial planning and commuter allowance, etc.). The old paradigm will not be replaced by the new one until all these elements interact.

The neo-Schumpeterian approach provides us with crucial hints on the process of the forthcoming change. For this purpose, we discuss in the following section how innovations are supported by the discovery and successful diffusion of new knowledge. Knowledge-based economies organize innovation systems composed of different actors which establish a creative environment for mutual learning and knowledge creation. No innovation would have ever been established if it had not attracted consumers’ interest and if it had not been leveraged by their purchasing power. We will focus on these questions in Sect. 11.3. Knowledge-based societies consider new concepts in the sense of responsible innovation that are decisive in bringing an entire economy on a new sustainable path-shaping growth and development. Section 11.4 deals with the massive economic impacts originating from these technological and knowledge-driven changes. It requires, besides technological change, also institutional change in a coevolutionary fashion, if new sustainable technologies are to achieve the aspired transformation of the economic system.

11.2 Innovation Systems and Knowledge

Neo-Schumpeterian scholars (e.g., Dosi et al. 1988; Lundvall 1992, 1998; Nelson 1993) strongly emphasize the systemic character of innovation processes. So-called innovation systems are composed of different actors (companies, research institutions, political actors, consumers, etc.) and linkages between these actors (flows of goods, R&D cooperation, knowledge transfer relationships, user-producer relationships, etc.). These linkages are required to ensure mutual learning and common knowledge development to solve complex innovation challenges. Such systems are characterized by their dynamic and coevolutionary nature and are thus enormously complex, as both actors and their knowledge and linkages and interactions between actors may change over time.

Dosi (1982) takes this systemic conception as a starting point in defining technological paradigms as “[...] set of procedures, or a definition of the ‘relevant’ problems and of the specific knowledge related to their solution.” Transferred to the knowledge-based bioeconomy, the core idea is substitution, i.e., replacing carbon-based materials and energy with bio-based materials and energy. This can only be achieved by applying a variety of technological processes in the entire breadth and depth of the value-added chain. In this process the exploration of economic complementarities in terms of crossfertilization of different knowledge fields matters. For example, to a large extent, digitalization allows for an extension of value chains by increasing the added value in new sustainable production sectors in a CO2-neutral way (e.g., by electric mobility based on renewables, by establishing so-called smart grids, etc.). The concept of technological paradigms also illustrates that a paradigm shift is not possible at any time. A window of opportunity will only occasionally be opened and allow for a paradigm shift when several interconnected technologies are established and the creation of conducive demand side and institutional conditions happens simultaneously. This, of course, also holds for the emergence of a new bioeconomic innovation system and requires a sound balance of the various actors and their activities. For this reason, we introduce the notion of a dedicated innovation system.

The theory of industrial life cycles, which emphasizes the strong dynamics in the emergence and decline of industries, gives a first hint on the meaning of the development of a dedicated innovation system supporting the transformation towards a knowledge-based bioeconomy. Typically, industrial development is divided into four stages: (1) a development phase (new knowledge creates prerequisites for innovation), (2) an entrepreneurial and growth phase (many market entries of smaller innovative firms), (3) a saturation and consolidation phase (formation of industrial standards, mergers, and acquisitions as well as market exits), and (4) a downturn phase (oligopolistic competition in only less innovative industries) (e.g., Audretsch and Feldman 1996). Although the bioeconomy does not represent a well-defined industrial sector, understanding the theory of industrial life cycles is of crucial importance to govern the transformation process towards the knowledge-based bioeconomy. Without doubt, the bioeconomy has to be characterized as cross sectional. On the one hand, several new sectors will emerge, e.g., in the fields of bioplastic, waste management, or biorefineries. On the other hand, already existing sectors in the fields of vehicle construction, battery technology, pharmaceuticals, etc. will gain new momentum by the arrival of bioeconomic approaches. Therefore, we argue that new sectors will emerge by establishing bioeconomic technologies and development dynamics of some already existing industries will receive new impetus at the same time. Adjustments of old and development of new institutions (e.g., in Germany the Renewable Energy Act, the Greenhouse Gas Emissions Trading Law, etc.), adjustments of consumer habits, and the emergence of new educational opportunities in terms of coevolution will accompany these processes and establish the institutional, the industrial, and the consumer pillars of a dedicated innovation system.

The patterns and nature of new businesses in the bioeconomy are thus strongly influenced by national institutions and organizations (Casper et al. 1999; Whitley 1999). Institutions are defined as “a set of rules, formal or informal, that actors generally follow, whether for normative, cognitive, or material reasons.” “Organizations are durable entities with formally recognized members, whose rules also contribute to the institutions of the political economy” (North 1990; Hall and Soskice 2001). In this interplay between organizations and institutions, the knowledge base of an economy is created by the education and research system and represents one of the most important prerequisites for the transformation towards a bioeconomic production system (Geels 2002). This automatically relates to a high level of uncertainty in particular concerning the required future competences. In this complex process, numerous individual knowledge fields are potentially relevant for the transformation and are already identified, e.g., synthetic chemistry, process engineering, genetic engineering, food technology, or informatics. It is decisive to understand the dynamics of these knowledge fields and the possibilities of their recombination with other knowledge fields and adequate actors in order to create an innovation system. In many cases, linkages of different knowledge fields (cross-fertilization) are responsible for the emergence of extensive technological opportunities: for instance, a complete new industry, bioinformatics, has been initiated by the fusion of two so far unrelated knowledge fields, database technology and molecular biology. Because linking different knowledge fields is highly uncertain, private actors might not start and governmental innovation policies matter. Knowledge about future potentials, therefore, is essential for supporting research and innovation policies: the analysis of knowledge and network dynamics allows for the identification of development trajectories showing sectors requiring public attention and support concerning research and development in order to close existing knowledge gaps and build bridges between various knowledge domains (Burt 2004; Zaheer and Bell 2005).

11.3 Innovation in Knowledge-Based Societies

It has already been mentioned that also consumer knowledge plays an important role for the development and establishment of sustainable consumption patterns in a knowledge-based bioeconomy (Geels 2002). Therefore, the analysis of the transformation process has to include the interaction of technological development, demand, and acceptance of innovative solutions as well as sociological variables. The latter include education, age, income, and gender. All are important explanatory factors determining attention and readiness to deal with bioeconomic issues. A bioeconomic innovation will only be successful when consumers accept it. The direction of the transformation process is, comparable to the importance of the policy realm, determined by consumers, i.e., an important question has to address consumers’ openness to the bioeconomy and its products.

Finally, (real and virtual) social networks matter for the establishment of new consumption patterns. They can contribute significantly to a diffusion of consumers’ behavioral patterns and values (Robertson et al. 1996; Valente 1996; Nyblom et al. 2003; Deffuant et al. 2005). Recent studies show that attitudes are substantial for the development of social relationships and that, in turn, social relationships considerably influence behavior and attitudes. In the field of renewable energies, for example, the initiative of municipal utilities’ customers has led in many cases to a “green” orientation of regional power supply. In some cases, citizens’ networks finally transformed to investment companies that are engaged in wind farms.

Critical issues are to be dealt with in democratic processes in order to be widely accepted. Not everything that is technically possible is also socially desirable. In the field of the bioeconomy, this may, for instance, include the use of genetically modified organisms in agriculture. In fact, these organisms promise efficiency advantages with regard to the consumption of land and water, etc., but their long-term health and environmental risks cannot be completely (as with any new technology) anticipated. Accordingly, technological developments require consumers’ acceptance and thus depend on the level of education in an economy. This raises the question of a society’s openness towards innovations that are fundamentally associated with uncertainty. The concept of responsible innovation summarizes the future-oriented organization of development and is currently discussed with a high priority by European policy makers and institutions. A comprehensive working definition has been developed by Von Schomberg (2011). He describes responsible innovation as “a transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view to the (ethical) acceptability, sustainability and societal desirability of the innovation process and its marketable products (in order to allow a proper embedding of scientific and technological advances in our society).” This means that innovations are not exclusively evaluated by their economic efficiency, but different aspects (e.g., consumer protection or ecological aspects; see Schlaile et al. 2017) also matter and are to be evaluated. Discussions on biofuels (“fuel vs. food”) show that both a pure economic and a one-dimensional ethical perspective are not sufficient. The quality of these discussions depends on the discussants’ mutual understanding which in turn depends on the participants’ level of knowledge.

Modern plant breeding and production of seeds are bioeconomy fields of innovation in which issues of responsibility are discussed frequently and controversially. German consumers are skeptical about interference with the genome of food crops, but individual points of criticism remain unclear. New breeding techniques introduced, e.g., genome editing, enable scientists to selectively modify DNA strands of crop plants. These techniques are considered innovative as they may allow breeding of potentially efficient plants in fast and cheap ways. Species developed this way hardly differ from those of conventional breeding. The Central Advisory Committee for Biological Safety does not classify these techniques as genetic engineering, especially because no new combinations of genetic material are made. As the Genetic Engineering Act does not explicitly address these techniques, legal clarification is still necessary as to whether these techniques are classified as genetic engineering at all. Dissemination potential and acceptance are influenced by this result. Here again, the necessity to include education and information policies becomes evident to support the transformation towards a knowledge-based bioeconomy.

The concept of social innovation (e.g., Hanusch and Pyka 2013) emphasizes the importance of active citizenship in innovation. Thus, according to the understanding of the European Commission, this term includes innovations that are social, both in relation to their objective and their instruments. In particular, this includes innovations referring to the development and the application of new ideas (for products, services, and models), covering at the same time social demand and creating new social relationships or collaborations. The whole society should benefit and contribute to generate new impetus for improvement. Social innovations can make a major contribution to rural development and promote economic resilience in these regions by strengthening cooperative behavior. Rural cooperatives (e.g., regional producer and marketing associations, winegrowers’ cooperatives, tourism associations, etc.) can help to develop regional competitiveness considering ecological and social aspects. As a consequence, within the framework of a bioeconomy, rural regions that are notably affected by the already imminent demographic change and subsequent depopulation receive new opportunities for economic development.

11.4 The Economics of Change

The sections above illustrate that a transformation of the prevailing economic system towards a bioeconomy is an extremely complex process. Various different actors participating in different roles are contributing different pieces of knowledge. In this process, innovative adjustments in already existing industries as well as the emergence of new and the disappearance of mature industries can be observed simultaneously. In addition to the substitutive relations of new bio-based industries to traditional oil-based industries, there are numerous essential complementary relations giving further momentum for the transformation process. First and foremost, there are the possibilities and application fields of digitalization. Digitalization allows to replace many oil-based products and energyintensive services simply by bits and bytes. Simultaneously, digitalization offers a wide range of opportunities by coordinating decentralized and very detailed bioeconomic technologies and processes such as energy production and distribution. This affects the composition of individual sectors where a coexistence of large diversified companies and small highspecialized technology companies is a likely solution. Finally, digitalization also offers consumer platforms to efficiently organize “sharing economy” approaches. Finally, successful knowledge generation and diffusion of relevant bioeconomic knowledge depends on dynamic innovation networks (Pyka 2002) in which different actors jointly share and create new knowledge. The consumers, represented, for example, by consumer associations or politics, will play a key role in these innovation networks and will help to establish networks in early stages of technology development.

In a knowledge-based bioeconomy, investment and economic growth still represent a crucial element for employment, international competitiveness, and income generation. The bioeconomy can make important contributions to accelerate investments by providing new investment opportunities generated by fundamental innovations and thereby bringing currently available large quantities of liquidity to a productive use. This, in turn, accelerates the technological paradigm shift (Pe´rez 2010).

The time path of the transformation process represents another critical component and has been explored only partially so far. On the one hand, it is high time to reduce carbon-based production methods. On the other hand, there will be frictions in the transformation process being caused, for example, by a lack of specialists and required competences. In this context, the so-called sailing ship effects (Howells 2002), frequently observed with radical innovations, could be made of good use. In the middle of the nineteenth century, when the existence of the established sailing ship technology was threatened by the arrival of new steam ships, shipbuilders—not having changed their technologies for many decades, if not centuries—began to innovate again. Due to the threat of innovative technologies, adjustment reactions in predecessor technologies can be observed with the aim to prevent the ancient technologies to be quickly replaced. Such adjustment reactions are, for example, fuel-efficient combustion engines and hybrid technologies as a reaction to the emergence of electric vehicles. These adjustments are advantageous since they pursue the same environmental objectives (e.g., inner-city fine dust and noise reduction, etc.) and thus provide more time to develop new technologies. Accordingly, the transformation process will for longer periods of time feature a coexistence of traditional and bio-based industries. Furthermore, it will be important to concurrently steer the relevant innovation processes in traditional technologies. This coexistence further increases complexity. At the same time, innovation policy is given room for maneuver and yet insufficiently developed technologies are prevented from being introduced prematurely which might cause promising approaches to fail.

Distributional effects of the transformation process are important for social acceptance. A bio-based economy on an industrial scale will largely represent a knowledge-based economy. Consequently, additional demand for highskilled workers arises whereas opportunities for low-skilled workers decrease. This means a potential loss of jobs for less skilled workers in traditional industrial production. But apart from that, there will be demand for different goods and services whose compensation potential with regard to added value and employment is still unclear. Moreover, it remains open to what extent companies are prepared for this transformation into the bioeconomy. Transformation processes will lead to a devaluation of competences so far responsible for economic success. How do established companies deal with the so-called not-invented-here syndrome, overcome operational blindness, and shape transformation processes actively in order to obtain added value at their established locations?

From this follows that distributional effects have an important regional dimension: does the bioeconomy strengthen divergence processes between regions or does it help to achieve more convergence? The approach of creating networks in the sense of the so-called smart specialization principle (Foray et al. 2009), connecting regional strengths along value-added chains in the best possible way, is promising but only sparsely implemented so far. Thus, in general, polarization tendencies leading to economic as well as political and cultural concentration of power and resulting in strong center-periphery structures can be avoided. But it still remains unclear, how strong and operational meaningful politically induced networks are in comparison to self-organized networks and how policy might exert influence. First findings indicate signs of a potential disintegration of the networks when political support is withdrawn (Green et al. 2013).

Transformation towards a knowledge-based bioeconomic production system is supposed to terminate the existing negative relations between economic growth and environmental pollution, use of resources, climate change, and energy consumption and to promote a sustainable economy. The following questions are closely linked to the basic uncertainty of innovation and cannot be answered ex ante: “which contributions are to be made by individual sectors?,” “what complex feedbacks for national and international competitiveness are to be expected?,” and “do the so-called rebound effects possibly reduce or even overcompensate the positive effects of the transformation?” Institutional rules, such as a self-commitment of oil-producing countries to reduce their outputs due to the declining demand caused by bioeconomics, are a way to reduce these uncertainties, at least partly. It remains necessary for the leading actors, companies, households, and policy makers to refrain from optimization approaches and profit maximization in this transformation process. The complexity and uncertainty of this process requires the awareness of all actors to experimental behavior (trial and error) which always also includes the possibility of failure.

#### All environmental indicators prove growth is sustainable.

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The role that technology plays in reducing humanity’s dependence on nature explains this paradox. Human technologies, from those that first enabled agriculture to replace hunting and gathering, to those that drive today’s globalized economy, have made humans less reliant upon the many ecosystems that once provided their only sustenance, even as those same ecosystems have often been left deeply damaged.

Despite frequent assertions starting in the 1970s of fundamental “limits to growth,” there is still remarkably little evidence that human population and economic expansion will outstrip the capacity to grow food or procure critical material resources in the foreseeable future.

To the degree to which there are fixed physical boundaries to human consumption, they are so theoretical as to be functionally irrelevant. The amount of solar radiation that hits the Earth, for instance, is ultimately finite but represents no meaningful constraint upon human endeavors. Human civilization can flourish for centuries and millennia on energy delivered from a closed uranium or thorium fuel cycle, or from hydrogen-deuterium fusion. With proper management, humans are at no risk of lacking sufficient agricultural land for food. Given plentiful land and unlimited energy, substitutes for other material inputs to human well-being can easily be found if those inputs become scarce or expensive.

There remain, however, serious long-term environmental threats to human well-being, such as anthropogenic climate change, stratospheric ozone depletion, and ocean acidification. While these risks are difficult to quantify, the evidence is clear today that they could cause significant risk of catastrophic impacts on societies and ecosystems. Even gradual, non-catastrophic outcomes associated with these threats are likely to result in significant human and economic costs as well as rising ecological losses.

Much of the world’s population still suffers from more-immediate local environmental health risks. Indoor and outdoor air pollution continue to bring premature death and illness to millions annually. Water pollution and water-borne illness due to pollution and degradation of watersheds cause similar suffering.

Even as human environmental impacts continue to grow in the aggregate, a range of long-term trends are today driving significant decoupling of human well-being from environmental impacts.

Decoupling occurs in both relative and absolute terms. Relative decoupling means that human environmental impacts rise at a slower rate than overall economic growth. Thus, for each unit of economic output, less environmental impact (e.g., deforestation, defaunation, pollution) results. Overall impacts may still increase, just at a slower rate than would otherwise be the case. Absolute decoupling occurs when total environmental impacts — impacts in the aggregate — peak and begin to decline, even as the economy continues to grow.

Decoupling can be driven by both technological and demographic trends and usually results from a combination of the two.

The growth rate of the human population has already peaked. Today’s population growth rate is one percent per year, down from its high point of 2.1 percent in the 1970s. Fertility rates in countries containing more than half of the global population are now below replacement level. Population growth today is primarily driven by longer life spans and lower infant mortality, not by rising fertility rates. Given current trends, it is very possible that the size of the human population will peak this century and then start to decline.

Trends in population are inextricably linked to other demographic and economic dynamics. For the first time in human history, over half the global population lives in cities. By 2050, 70 percent are expected to dwell in cities, a number that could rise to 80 percent or more by the century’s end. Cities are characterized by both dense populations and low fertility rates.

Cities occupy just one to three percent of the Earth’s surface and yet are home to nearly four billion people. As such, cities both drive and symbolize the decoupling of humanity from nature, performing far better than rural economies in providing efficiently for material needs while reducing environmental impacts.

The growth of cities along with the economic and ecological benefits that come with them are inseparable from improvements in agricultural productivity. As agriculture has become more land and labor efficient, rural populations have left the countryside for the cities. Roughly half the US population worked the land in 1880. Today, less than 2 percent does.

As human lives have been liberated from hard agricultural labor, enormous human resources have been freed up for other endeavors. Cities, as people know them today, could not exist without radical changes in farming. In contrast, modernization is not possible in a subsistence agrarian economy.

These improvements have resulted not only in lower labor requirements per unit of agricultural output but also in lower land requirements. This is not a new trend: rising harvest yields have for millennia reduced the amount of land required to feed the average person. The average per-capita use of land today is vastly lower than it was 5,000 years ago, despite the fact that modern people enjoy a far richer diet. Thanks to technological improvements in agriculture, during the half-century starting in the mid-1960s, the amount of land required for growing crops and animal feed for the average person declined by one-half.

Agricultural intensification, along with the move away from the use of wood as fuel, has allowed many parts of the world to experience net reforestation. About 80 percent of New England is today forested, compared with about 50 percent at the end of the 19th century. Over the past 20 years, the amount of land dedicated to production forest worldwide declined by 50 million hectares, an area the size of France. the “forest transition” from net deforestation to net reforestation seems to be as resilient a feature of development as the demographic transition that reduces human birth rates as poverty declines.

Human use of many other resources is similarly peaking. The amount of water needed for the average diet has declined by nearly 25 percent over the past half-century. Nitrogen pollution continues to cause eutrophication and large dead zones in places like the Gulf of Mexico. While the total amount of nitrogen pollution is rising, the amount used per unit of production has declined significantly in developed nations.

Indeed, in contradiction to the often-expressed fear of infinite growth colliding with a finite planet, demand for many material goods may be saturating as societies grow wealthier. Meat consumption, for instance, has peaked in many wealthy nations and has shifted away from beef toward protein sources that are less land intensive.

As demand for material goods is met, developed economies see higher levels of spending directed to materially less-intensive service and knowledge sectors, which account for an increasing share of economic activity. This dynamic might be even more pronounced in today’s developing economies, which may benefit from being late adopters of resource-efficient technologies.

Taken together, these trends mean that the total human impact on the environment, including land-use change, overexploitation, and pollution, can peak and decline this century. By understanding and promoting these emergent processes, humans have the opportunity to re-wild and re-green the Earth — even as developing countries achieve modern living standards, and material poverty ends.

#### Resource substitution overcomes limits --- their studies are anti-scientific.

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The results, published in the 1970 book The Limits to Growth, used estimate of resources, combined with population and economic growth, to find when exhaustion would occur, as well as estimating pollution levels.10 Their conclusion that existing trends were unsustainable was, again, seized on by many to promote deindustrialization, zero economic growth, [END OF PAGE 58] and a number of similar ideologies. It certainly helped to influence the Carter administration's views on resources, as Chapter 2 demonstrated.

AN ENORMOUS BUT

Unfortunately, this entire area is based on mistaken principles. The Limits to Growth made the very basic mistake of assuming no change in growth rates, when in fact, the post-World War II economic trends were elevated by recovery from war-time damage, just as Chinese and Indian growth rates are now elevated by the movement of the workforce from agriculture to industry and services. Already, global population growth rates have dropped sharply, and a peak is in sight (although demographic trends do change!), and, more important for commodities, they ignore the mechanism by which growth rates change: scarcity yields higher prices, which reduces consumption; causes switching to substitutes; and leads to new supplies being developed. The early models assumed no feedback effects.

That mistake is compounded by the use of resource estimates that are much too conservative. The Limits to Growth team attempted to avoid this problem by using estimates that were multiples of then-official numbers; however, they didn't realize that the data they were relying on were not actual estimates of global resources, but known developed reserves, a small subset of the resource base (see Chapter 15).

Petroleum is the clearest example of how these numbers were far too conservative. The authors thought that they would avoid such criticism by testing the results of a resource base that was five times more than known reserves of 455 billion barrels, or 2,275 billion barrels. I I Since then, the world has used 1,100 billion barrels of oil and still has about 1,700 billion barrels of reserves. Even excluding heavy oil and the so-called spurious reserve revisions, the assumption in The Limits to Growth would mean no more oil remained to be discovered.

MY FAIR MALTHUSIAN

"Just you wait, 'Enry 'iggins!" Eliza Doolittle, "My Fair Lady"

The amazing thing is that, like the Millenarians, the Malthusians never seem to be concerned when their predictions fail. Indeed, many of them look back and find that their expectations were (somehow) confirmed. The Limits to Growth authors are quite enthusiastic about the fact that [END OF PAGE 59] growing mineral reserves (and production) had confirmed their warnings, since it implied that we are "closer to the end."

There seem to be three approaches to dealing with the problem of model and/or theoretical failure: claim you missed on the timing, ignore much of what you said earlier, or insist you were right all along. All have been used by various neo-Malthusians, including the peak oil advocates.

Gardner discusses a number of neo-Malthusian analysts who proved not just wrong but woefully so, and yet none admits to it. This includes not only Ehrlich but also Heilbroner and Kunstler, the latter now a peak oil advocate. Gardner explains that "the first line of defense of the failed prophet is ... the clock is still ticking." 12

Two recent appraisals of the original Limits To Growth work carry this even further. Validating the model's forecasts, both Turner and Alexander and Hall and Day argue that they were quite accurate. 13 In reality, the model's forecast of continued growth was the accurate element, since the impending collapse remains in the future. Thus, the socioeconomic trends of the past four decades in no way confirm the model and especially its principal warning that resource scarcity would have a major impact in the 21st century.

This is reminiscent of the London astrologers, described by Charles MacKay, who predicted that River Thames would catastrophically flood London on February 1, 1524. When it failed to do so, and the citizenry considered dunking said astrologers in the river, they explained that "By an error (a very slight one) of a little figure, they had fixed the date of this awful inundation a whole century too early. The stars were right after all, and they, erring mortals, were wrong." 14 In other words, the model was correct; a bad piece of data was to blame.

Peak oil advocates emulate this approach, with Campbell stiffly quoting Keynes, "When I have new information, I change my conclusions. What do you do? Sir."15 Of course, he ignores the fact that his most important claim was to have robust data that were not revised (see Chapter 7). He also doesn't mention his many earlier predictions of a peak in production, rather showing the "depletion midpoint," which he says changed only by five years over a decade.

Robert Hirsch lists predictions of peak oil, but only the most recent ones at the time of the report, ignoring that a number of other dates have already passed. Few discuss forecasts for individual countries, and there appears to be no recognition that Simmons's warning of the impending collapse of Saudi oil production failed abysmally ( see Chapter 8). [END OF PAGE 60]

The same thing occurs with neo-Malthusians, the classic example being The Limits to Growth work, which continues to be updated and, to the uninitiated, appears sound, while those sympathetic to its views continue to trumpet its quality. Simmons, for example, said, "The most amazing aspect of the book is how accurate many of the basic trend extrapolation worries ... still are, some 30 years later, ... there was nothing that I could find in the book which has so far been even vaguely invalidated." 16

He goes beyond this to say, "There was not one sentence or even a single word written about an oil shortage, or limit to any specific resource, by the year 2000." 17 Why he thinks the year 2000 was referenced is not clear, but the authors clearly did describe one scenario as finding, "Eventual depletion of nonrenewables brings a sudden collapse of the industry system."18

The authors themselves, in the first update, note that energy reserves have been rising, even relative to consumption. Does this mean their model was wrong? They change this question into, does this mean that there was more fuel in 1990 than in 1970? "No, of course not. There were 450 fewer billion barrels of oil, 90 billion fewer tons of coal, and 1100 trillion few cubic meters of natural gas." 19

Changing the subject is also popular. Thus, Simmons rebuts criticism of The Limits to Growth by noting that population and economic growth have, in fact, continued, and use of resources has soared. 20 Similarly, Patterson argues that Ehrlich was right because the population has grown as he had predicted. 21 Of course, these were not the points at issue, something that goes unmentioned.

FINITE RESOURCES: THINK INSIDE THE BOX

One of the major tenets of peak oilers is the fact that oil resources are finite, and therefore we are running out, and thus they must peak. (Implied is that we might not foresee the peak and that it will somehow be catastrophic.) Repeatedly, I have had hostile questioners ask me to admit that oil is finite. [END OF PAGE 61]

This is so prevalent that it often becomes a straw man for peak oil advocates, who accuse "optimists" like me of believing in "infinite resources." Campbell goes so far as to tum a comment by M. A. Adelman and me that resources are so large as to be effectively infinite into actually infinite. 23 And others such as Bartlett have used the term flat-earth economist to refer to someone who doesn't seem to recognize that the Earth is a sphere, and, as such, any given resource is finite. This is a simplistic error, which we shall return to later. 24

Indeed, one reason that many support renewables it that they are "sustainable." The wind doesn't run out and crops are reborn every year. Our great-great-great grandchildren could still be getting wind from nearby mountain passes or offshore sites, and (ignoring climate change and soil erosion and degradation) without fearing that the resource will deplete, while the oil industry must constantly struggle to replace wells and fields whose resource has been exhausted.

Problem 1

The first problem is that the finite nature of oil is not strictly speaking true. Unlike mineral resources, petroleum resources are created in an ongoing manner from biomass. Admittedly, it takes millions of years and the right combination of heat and pressure to turn organic (mostly plant and algae) material into coal, oil, and gas. (And actually mineral resources are born in supernovae explosions, but replenishment of Earth's minerals from a supernova anytime soon seems pretty unlikely.) The length of time is not really important, though, since the process started many millions of years ago; what matters is the rate and accumulated amount.

And there, as Hamlet would say, is the rub. Only about 2 million barrels of petroleum are created in a year, according to best estimates, which represents approximately 0.0064% of what we are currently consuming. In other words, the fact that oil is actually renewable is not important because the rate is too small to matter, which brings us to the point that the (allegedly) finite nature of petroleum is not important either, because only the numbers matter. Pointing to oil's finite nature is valuable only as evidence of either one's ignorance of resources or poor math skills.

Greek Fire

Optimists often remark that "The Stone Age didn't end because we ran out of stones," but more relevantly, neither did the Bronze or Iron Ages [END OF PAGE 62] end because those more rare and scarce nonrenewable resources were depleted. Indeed, it was prior to the Golden Age of Greece when the primary soldiers were hoplites, that is, landed gentry who had enough wealth to afford the bronze armor that they wore.

Now, roughly five millennia after the Bronze Age began, copper is no longer the province of the wealthy but the stuff of pennies! Granted, copper pipes are valuable enough to attract the attention of the avaricious (thieves, not Congress), but it remains readily available, and every boom in prices has been followed by a bust.

So Much for Solar Power

An astronomer was giving a luncheon talk to a local group, and happened to mention that the sun would bum out in five billion years. An elderly woman in the front row gasped, and asked him to repeat it. When he did, she heaved a sigh of relief, "Thank goodness, I thought you said million!" (old joke)

This brings us back to the point that numbers matter. Just like petroleum, the sun's fuel is finite-but don't expect a wave of solar power cancellations when that realization goes around. Numbers tell us that we don't need to worry about the "finite" nature of the sun's fuel.

And while the petroleum resource is hardly comparable to the life of the sun's fuel, the real issue is: how much is that resource, not whether it is finite. Given their estimates of only 2-2.5 trillion barrels of recoverable oil, half of which has been consumed, an argument of peak oil advocates that scarcity is imminent seems credible. And this recalls the neoMalthusian' s error mentioned earlier; assume a static resource and use a conservative number.

DEAD FROGS: THE BUGABOO OF EXPONENTIAL GROWTH

Thomas Malthus was one of many people who has observed that population growth seemed to be outstripping the growth in agricultural production, but being an economist, he didn't assume that this was somehow driven by immutable natural laws and instead argued for agricultural reform to increase food production.

More recently, there has been a clamor about "peak everything" based on the idea that, well, everything is finite and we 're using it up, so it is "running out." Or at least, production must peak. Or, as one physicist [END OF PAGE 63] points out, eventually human energy production will generate as much heat as the sun does-eventually being 1400 years.

Flat Earth

Colin Campbell, in the famed (well, famous in the IEA's offices) debate at the IEA in 1997, compared resource optimists to the conservative Spanish court that opposed the visionary, Columbus, and has since referred to those, like Adelman and me, who disagreed with him as "flat-earth economists." Albert Bartlett later explained that the term actually meant that economists thought the earth had two dimensions and thus was infinite, containing equivalently infinite resources.

But this description ignores two important variables: capital and knowledge. Additional investment can often increase the production of renewables like agricultural products and nonrenewables like minerals and oil in the same amount of space, as can better technology. Neo-Malthusians tend to ignore this factor and argue that the rate of technological advance (and greater scientific knowledge) has diminished or disappeared, as described in Chapter 7.

The argument is somewhat specious and relies in part the question of the finiteness of resources, discussed earlier-or a static measure of resources and dynamic view of consumption, as in The Limits to Growth.

HOW LONG?

Perhaps the most important factor that raises skepticism is the fact that at least some exponential alarmists fear the distant future. Any number of pundits have looked at long-term forecasts of economic and/or technological development and characterized them as foolish. We have no flying cars, nuclear power is not too cheap to meter, and no one is eating Soylent Green. On the other hand, most of these were not serious forecasting efforts, but rather off-the-cuff remarks (or the equivalent), and those making them were not particularly serious about achieving them within a specific time frame. And we do eat Soylent Green already; only we call it tofu and vegemite. (Read the book, it wasn't people.)

NEWTON'S FIRST LAW

The biggest mistakes have come from an apparent source: extrapolation of a trend endlessly, as if there were no feedback or other variables [END PAGE 64] involved. Jay Forrester, the inventor of Systems Dynamics, which was used in The Limits to Growth model (and which I have used), reportedly once said that feedback effects tend to overwhelm the initial stimuli, which is probably true in many cases. Yet, many neo-Malthusians and especially peak oil advocates tend to extrapolate a given trend endlessly, assuming no feedback effect whatsoever.

Indeed, the first wave of peak oil advocates explicitly argued that no feedback effect would occur: prices didn't affect production or consumption levels. Technological advances were either unimportant or had ceased and so could not increase the resource base.

An important element of the fear of exponential growth is the analysts' choice of particularly high growth rates. As Figure 4.1 showed, Ehrlich chose the highest observed growth in the 20th century for his calculations, even though it represented the post-World War II baby boom and should have been considered an exception, not the norm. Similarly, Bartlett, writing in 1998, talks about the growth in oil demand from the 1950s and 1960s at 7% a year, which causes a doubling of use every decade, 25 which sounds alarming, given the arguments about the difficulty of making a speedy energy transition, until you realize that consumption growth dropped to 3% per year in the 1970s (a doubling time of 24 years), and under 1% per year in the 1980s (a doubling period of 75 years), before recovering to 1.5% in the seven years before his talk (48 years).

This emphasizes the lack of feedback mechanism used in these simplistic models and how important they are in the real world.

REAL SCARCITY

Indeed, the subtext of the fear of resource scarcity is that renewable resources have repeatedly been the source of problems. In Tainter's The Collapse of Complex Societies, he talks about resources as causing the fall of a number of (mostly) ancient civilizations; nearly all suffered from problems like lengthy droughts and salt buildup in irrigated farmland. 26

And similar problems continue today, especially if you consider endangered species, from rhinos to tuna. In all cases, these are renewable resources, the very ones that are NOT finite, that are sustainable, that we can rely on for all eternity-in theory. No lasting shortage of nonrenewable resources minerals and energy-has occurred since the advent of the global economy.

#### Collapse kills billions and degrades the environment --- it’s try-or die to engineer a soft-landing.

George MONBIOT 9. Visiting Professor in the School of the Built Environment, Oxford Brookes University; recipient of the United Nations Global 500 Award for outstanding environmental achievement; named one of the forty international prophets of the twenty-first century by the UK’S Independent. “Is There Any Point in Fighting to Stave Off Industrial Apocalypse.” Guardian. August 17. <http://www.guardian.co.uk/commentisfree/cif-green/2009/aug/17/environment-climate-change>.

The interesting question, and the one that probably divides us, is this: to what extent should we welcome the likely collapse of industrial civilisation? Or more precisely: to what extent do we believe that some good may come of it?

I detect in your writings, and in the conversations we have had, an attraction towards – almost a yearning for – this apocalypse, a sense that you see it as a cleansing fire that will rid the world of a diseased society. If this is your view, I do not share it. I'm sure we can agree that the immediate consequences of collapse would be hideous: the breakdown of the systems that keep most of us alive; mass starvation; war. These alone surely give us sufficient reason to fight on, however faint our chances appear. But even if we were somehow able to put this out of our minds, I believe that what is likely to come out on the other side will be worse than our current settlement.

Here are three observations: 1 Our species (unlike most of its members) is tough and resilient; 2 When civilisations collapse, psychopaths take over; 3 We seldom learn from others' mistakes.

From the first observation, this follows: even if you are hardened to the fate of humans, you can surely see that our species will not become extinct without causing the extinction of almost all others. However hard we fall, we will recover sufficiently to land another hammer blow on the biosphere. We will continue to do so until there is so little left that even Homo sapiens can no longer survive. This is the ecological destiny of a species possessed of outstanding intelligence, opposable thumbs and an ability to interpret and exploit almost every possible resource – in the absence of political restraint.

From the second and third observations, this follows: instead of gathering as free collectives of happy householders, survivors of this collapse will be subject to the will of people seeking to monopolise remaining resources. This will is likely to be imposed through violence. Political accountability will be a distant memory. The chances of conserving any resource in these circumstances are approximately zero. The human and ecological consequences of the first global collapse are likely to persist for many generations, perhaps for our species' remaining time on earth. To imagine that good could come of the involuntary failure of industrial civilisation is also to succumb to denial. The answer to your question – what will we learn from this collapse? – is nothing.

This is why, despite everything, I fight on. I am not fighting to sustain economic growth. I am fighting to prevent both initial collapse and the repeated catastrophe that follows. However faint the hopes of engineering a soft landing – an ordered and structured downsizing of the global economy – might be, we must keep this possibility alive. Perhaps we are both in denial: I, because I think the fight is still worth having; you, because you think it isn't.

#### Growth path-dependency and elites block the transition --- default to behavioral psychology.

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

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

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

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

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

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

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

6. Consent

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

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

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

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

**decline causes Great power war.**

Lawrence H. **Summers** **17**. Secretary of the Treasury (1999-2001) and Director of the US National Economic Council (2009-2010), former president of Harvard University, where he is currently University Professor. “Will the Center Hold?” *Project Syndicate*. 12/21/2017. <https://www.project-syndicate.org/onpoint/recession-or-financial-crisis-political-fallout-by-lawrence-h--summers-2017-12?a_la=english&a_d=5a37edac78b6c709b8d260dd&a_m=&a_a=click&a_s=&a_p=%2Fsection%2Feconomics&a_li=recession-or-financial-crisis-political-fallout-by-lawrence-h--summers-2017-12&a_pa=section-commentaries&a_ps>=

There is also the question of financial institutions’ health. While major firms appear far better capitalized and far more liquid than they were prior to the crisis, market indicators of risk suggest we may not be quite as far out of the woods as many suppose. Despite apparently large increases in capital and consequent declines in leverage, it does not appear that bank stocks have become far less volatile, as financial theory would predict if capital had become abundant. Financial markets are widely cited, including by US President Donald Trump, as providing comfort in the current moment. But a relapse into **financial crisis** would likely have **catastrophic** political **consequences**, sweeping into power even more **toxic populist nationalists**. In such a scenario, the center **will not hold**. Beyond the kind of near-term risks that markets price, there is the question of an economic downturn. The good news is that sentiment is positive in most of the world. Inflation seems unlikely to accelerate out of control and force a lurch toward contractionary fiscal and monetary policies. Most forecasters regard the near-term risk of recession as low. But recessions are never predicted successfully, even six months in advance. The current expansion in the US has gone on for a long time, and the risk of policy mistakes there is very real, owing to highly problematic economic leadership in the Trump administration. I would put the annual probability of recession in the coming years at 20-25%. So the odds are better than even that the US economy will fall into recession in the next three years. The risk from a purely economic point of view is that the traditional strategy for battling recession – a reduction of 500 basis points in the federal funds rate – will be unavailable this year, given the zero lower bound on interest rates. Nor is it clear that the will or the room for fiscal expansion will exist. This means that the next recession, like the last, may well be **protracted and deep**, with **severe** global consequences. And the political capacity for a global response, like that on display at the London G-20 Summit in 2009, appears to be **absent** as well. Just compare the global visions of US President Barack Obama and UK Prime Minister Gordon Brown back then with those of Trump and Prime Minister Theresa May today. I shudder to think what a serious recession will mean for politics and policy. It is hard to imagine avoiding a resurgence of **protectionism, populism, and scapegoating**. In such a scenario, as with another financial crisis, the center will not hold. But the greatest risk in the next few years, I believe, is neither a market meltdown nor a recession. It is instead a **political doom loop** in which voters’ conclusion that government does not work effectively for them becomes a self-fulfilling prophecy. Candidates elected on platforms of resentment delegitimize the governments they lead, fueling further resentment and even more problematic new leaders. Cynicism pervades. How else can one explain how the candidacy of Roy Moore for a US Senate seat? Moore, who was twice dismissed for cause from his post on the Alabama Supreme Court, and who is credibly charged with sexually assaulting teenage girls when he was in his 30s, could enter the US Senate as many of his colleagues look the other way. If a country’s citizens lose confidence in their government’s ability to improve their lives, the government has an incentive to **rally popular support** by focusing attention on threats that only it can address. That is why in societies pervaded by anger and uncertainty about the future, the temptation to stigmatize minority groups increases. And it is why there is a tendency for officials to **magnify foreign threats**. We are seeing this phenomenon all over the world. Russian President Vladimir Putin, Turkish President Recep Tayyip Erdoğan, and Chinese President Xi Jinping have all made nationalism a central part of their governing strategy. So, too, has Trump, who has explicitly rejected the international community in favor of the idea that there is only a ceaseless struggle among nation-states for competitive advantage. When the world’s preeminent power, having upheld the idea of international community for nearly 75 years, rejects it in favor of ad hoc deal making, others have no choice but to follow suit. Countries that can no longer rely on the US feel pressure to provide for their own security. America’s adversaries inevitably will seek to **fill the voids** left behind as the US **retrenches**.

#### collapse of unipolarity causes extinction via transition wars. The structure of the international system explains conflict.

Michael Beckley 18. Professor of political science at Tufts. *Unrivaled: Why America Will Remain the World’s Sole Superpower*. Cornell University Press.

The story of world politics is often told as a game of thrones in which a rotating cast of great powers battles for top-dog status. According to researchers led by Graham Allison at Harvard, there have been sixteen cases in the past ﬁve hundred years when a rising power challenged a ruling power. 3 Twelve of these cases ended in carnage. One can quibble with Allison’s case selection, but the basic pattern is clear: hegemonic rivalry has sparked a catastrophic war every forty years on average for the past half millennium.

The emergence of unipolarity in 1991 has put this cycle of hegemonic competition on hold. Obviously wars and security competition still occur in today’s unipolar world—in fact, as I explain later, unipolarity has made certain types of asymmetric conﬂict more likely—but none of these conﬂicts have the global scope or generational length of a hegemonic rivalry. To appreciate this point, just consider the Cold War—one of the four “peaceful” cases of hegemonic rivalry identiﬁed by Allison’s study. Although the two superpowers never went to war, they divided the world into rival camps, waged proxy wars that killed millions of people, and pushed each other to the brink of nuclear Armageddon. For forty-ﬁve years, World War III and human extinction were nontrivial possibilities. Since the collapse of the Soviet Union, by contrast, the United States has not faced a hegemonic rival, and the world, though far from perfect, has been more peaceful and prosperous than ever before. Just look at the numbers. From 1400 to 1991, the rate of war deaths worldwide hovered between 5 and 10 deaths per 100,000 people and spiked to 200 deaths per 100,000 during major wars. 4 After 1991, however, war death rates dropped to 0.5 deaths per 100,000 people and have stayed there ever since. Interstate wars have disappeared almost entirely, and the number of civil wars has declined by more than 30 percent. 5 Meanwhile, the global economy has quadrupled in size, creating more wealth between 1991 and 2018 than in all prior human history combined. 6 What explains this unprecedented outbreak of peace and prosperity? Some scholars attribute it to advances in communications technology, from the printing press to the telegraph to the Internet, which supposedly spread empathy around the globe and caused entire nations to place a higher value on human life. 7 Such explanations are appealing, because they play on our natural desire to believe in human progress, but are they convincing? Did humans suddenly become 10 to 20 times less violent and cruel in 1991? Are we orders of magnitude more noble and kind than our grandparents? Has social media made us more empathetic? Of course not, which is why the dramatic decline in warfare after 1991 is better explained by geopolitics than sociology. 8 The collapse of the Soviet Union not only ended the Cold War and related proxy ﬁghting, it also opened up large swathes of the world to democracy, international commerce, and peacekeeping forces—all of which surged after 1991 and further dampened conﬂict. 9 Faced with overwhelming U.S. economic and military might, most countries have decided to work within the American-led liberal order rather than ﬁght to overturn it. 10 As of 2018, nearly seventy countries have joined the U.S. alliance network—a Kantian community in which war is unthinkable—and even the two main challengers to this community, China and Russia, begrudgingly participate in the institutions of the liberal order (e.g., the UN, the WTO, the IMF, World Bank, and the G-20), engage in commerce with the United States and its allies, and contribute to international peacekeeping missions. 11 History may not have ended in 1991, but it clearly changed in profound ways—and mostly for the better.

#### both sides miscalc---powers misread the transition.

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Underlying these arguments for an inevitable war between the two superpowers is PTT. PTT originally formulated by Organski (1958) posits that **war is likely** when the power of the dominant state in the international system (i.e. hegemon) is **declining** and that a dissatisfied rising challenger **substantially reduces the power gap between the hegemon and itself**. Unlike balance of power theory, PTT argues that the war is most likely when there is near power parity between a dominant state and a rising and dissatisfied challenger (Organski and Kugler, 1980, pp. 19-20)[5]. A rising power here is generally dissatisfied with the existing international order and **initiates war against a declining hegemon in order to impose orders that are more favorable to itself** (Organski 1958, pp. 364-367). Layne (2018, p. 110) put these power transition dynamics quite succinctly as follows: “Over time, however, the relative power of states changes, and eventually the international order no longer reflects the actual distribution of power between or among the leading Great Powers. When that happens, the legitimacy of the prevailing order is called into question, and it will be challenged by the rising power(s).” And when the balance of power between a dominant state and a rising challenger changes sufficiently, a new order replaces an old one typically **by a hegemonic war** (2018, p. 104). Paying close attention to the **growing Sino–US competition** over hegemony in the twenty-first century, therefore, Shirk (2007, p. 4), China specialist, argues that “History teaches us that rising powers are likely to provoke war.” On the other hand, scholars like Gilpin (1981) contend that the power transition war between great powers is likely to occur when a hegemonic state whose power is declining due to imperial overstretch[6] views “**preventive war as the most attractive means of eliminating the threat** posed by challengers” (Ned Lebow and Valentino, 2009, p. 391), although they do acknowledge that there might be some “ways to prolong the period of its power preponderance vis-à-vis the rising challenger, so that the rapidly rising power will not dare to challenge the hegemonic leadership” (Kim and Gates, 2015, p. 221). In this case, the initiator of war is a declining hegemon, rather than a rising challenger. The declining hegemon who fears a rising challenger’s overtaking its power in the near future **sees war as a better option** than other options of maintaining its hegemony such as reducing its commitments abroad and appeasing a rising challenger.

#### China is a revisionist power---must be deterred cohesively.

Dr. John Hemmings and James Rogers 21. Dr. John Hemmings is an associate professor at the Daniel K. Inouye Asia-Pacific Center for Security Studies based in Honolulu and an adjunct fellow at the Center for Strategic and International Studies. The views voiced here are his alone. James Rogers. “America’s New Great-Power Problem” The National Interest. 01-23-21. <https://nationalinterest.org/feature/america’s-new-great-power-problem-176949>

**China Is Developing Two Stealth Bombers** If we apply this typology to the three most recent historical episodes of “rising-power challenges,” then we believe that we can extract lessons in relation to the emerging competition with China. These periods include the European rivalry before World War I, the global competition before World War II, and the era of geopolitical struggle now known as the Cold War. From there, it is clear that there are many commonalities between those periods and the one we are moving into. What do these three eras of competition offer American, British and Indo-Pacific policymakers in terms of insight when dealing with the rise of China? China has a leader around which **power has become increasingly centralized** to the extent that a cult-of-personality style of leadership has emerged. These behaviors might have been predicted in the first years of Xi Jinping’s regime by looking at his **earliest speeches to the CCP** cadre. As with other totalitarian leaders, such as Stalin and Hitler, Xi believes in the power of the party-state ideology to drive policy as well as consolidate domestic control. As we saw from those unhappy regimes, as power is centralized, intolerance towards pluralism grows, to the extent that minorities—especially those considered hostile by the regime—come under mounting surveillance and discrimination. Here there are echoes between the plight of the Uighurs and various ethnicities in Nazi Germany and the USSR. Likewise, under Xi’s authoritarian leadership, more and more of China’s society has fallen under the power of an increasingly expansive party-state structure (similar to the totalitarian party-states of the 1930s), which utilizes an international ideology (socialism), combined with nationalism (with Chinese characteristics), **to export the Chinese model abroad to reorder the international system.** This approach is not unlike those of past regimes. Like the Kaiser, Xi believes China has the right to shine like the sun. Unlike Hitler, he shies away from open warfare as a means of policy. But, like the party bosses of the USSR, he believes in economic and political **warfare to expand China’s power.** In terms of regime type, we can see forces at work in China that were also found in Wilhelmian and Nazi Germany. This is because there are few mechanisms for legitimizing the leadership of the party, such as elections or referendums in one-party systems. Therefore, **jingoistic nationalism begins to fill that space**—or is deliberately positioned to fill it—and if allowed to become too virulent, can **lead to domestic pressures for more aggressive, even expansionist, foreign policies.** As an authoritarian state, contemporary China, much like the Nazi and Soviet regimes before it, has proven adroit at integrating the dimensions of state power to the extent that it appears more successful than the fatigued and exhausted liberal democracies. As we know from the struggles with those regimes, the United States, the UK and their allies in the Indo-Pacific region will need to develop greater internal **cohesion** and overcome many of the “critical” or “core” assumptions that have sapped them of their strength if they are to **compete successfully against China.** In terms of polarity, the previous struggles were more focused. While Japan was a major regional power in the run-up to World War II, the key powers have been concentrated in the Euro-Atlantic region for the past three centuries. In the emerging period of competition, the major powers are spread out. China, India and Japan are in Asia, the United States is in the Americas, and Britain, Germany and Russia are in Europe. American, British and Indo-Pacific policymakers will need to look at an increasingly global theatre, one where the Euro-Atlantic region and the Indo-Pacific region are intrinsically linked. **Polarity matters**, and whether this period is a transition to a bipolar U.S.-China era or a truly multipolar era will **impact how states construct their national strategies**. If China and the United States are the only superpowers—or whether India and the Europeans are able to develop superpower metrics and the political will to use them—then that sill deeply impact alignment behavior, and correspondingly the leadership approach of the United States. Methods of competition also have historical echoes. While China is, like the USSR, a communist regime, it has a **much higher GDP relative** to the leading democracy, the US, than the Soviet Union ever did. It is also, similarly to Wilhelmian Germany, deeply ingrained into global supply chains and the world economy. Therefore, rather than looking for examples of dealing with economic statecraft or coercion from the Cold War, policymakers might consider Wilhelmian Germany in 1914 which utilized dumping, finance, and trade for strategic ends across Europe. Thus, we should look to the policy options of France, Italy, and the UK for dealing with economic conflict with China. The West relied heavily on regional alliances to deal with the Wilhelmian and Soviet threats. And now, similar to what occurred in the 1930s, there is an aversion to developing regional alliances or collective defense measures against today’s revisionist: China. This is despite the fact that NATO kept the peace in Europe for nearly seventy years. In addition, there is an allergic reaction to giving Taiwan an open defense guarantee; however, the 1930s showed that the same style of strategic ambiguity by France and Great Britain toward Austria and Czechoslovakia encouraged Nazi ambitions. Indeed, as we think about how Nazi Germany went from attempting to unify German-speaking peoples to absorbing non-Germans, we should think about whether or not a failure to react to more “legitimate” claims can give encouragement to entirely illegitimate ones. While modern-day China is not as aggressive as Nazi Germany, allied weakness and lack of cohesion at critical moments—as when Berlin took the Ruhr region, undermined the governments of Austria and Czechoslovakia before using diplomacy to expand its power—made **miscalculation more**, not less, **likely**. When thinking about Hong Kong and Taiwan, this is a relevant lesson.

#### Unipolarity solves interventions BUT retrenchment causes prolif of proxy conflicts and adventurism.

Noel Thomas Anderson 19. Assistant professor in the Department of Political Science at the University of Toronto. “Competitive Intervention, Protracted Conflict, and the Global Prevalence of Civil War.” International Studies Quarterly 63(3): 692-706.

Systemic Dimensions: The Varying Prevalence of Competitive Intervention

The framework articulated above not only provides a comprehensive account of the duration effects of competitive intervention on civil wars—it also highlights a candidate explanation for the recent decline in the prevalence of intrastate conflict. Insofar as state decisions to aid combatants are consistent with competitive state policy-making, temporal variation in geopolitical competition between states should affect trends in the prevalence of competitive intervention. Variation in the prevalence of competitive intervention should in turn affect temporal trends in the prevalence of internal conflict through the duration effects described above.

Consider the pervasiveness of US-Soviet competition during the Cold War. Bipolarity extended the geographic scope of concern and broadened the range of factors included in the competition between the superpowers. American and Soviet leaders worried that challenges to the existing distribution of power might raise doubts about the credibility of their alliance commitments, thereby encouraging their allies to drift toward neutrality or, worse still, switch sides (Hironaka 2005, 107–11). Because challenges to the status quo were perceived to threaten the relative balance of power and credibility, they were resisted. Yet, because any action by one superpower was perceived as an attempt to gain a geostrategic advantage, it demanded a response. The end result was a proliferation of US-Soviet competitive intervention, wherein the superpowers committed resources to opposing government and rebel forces fighting on the periphery of their spheres of influence.

That many civil wars during the Cold War were superpower proxy wars is a well-rehearsed perspective, but what is missing from existing accounts is an explanation for why superpower sponsorship should be associated with longer conflicts. If foreign civil wars played such a key role in the larger Cold War struggle, why did the superpowers not do what was necessary to help their respective sides win? The theory outlined above provides an answer: challenges to the relative balance of power and credibility necessitated reflexive responses, but the impossible stakes of direct confrontation advised caution. While the superpowers were compelled to intervene, they were simultaneously—and paradoxically—compelled to do so with restraint.

Superpower rivalry also had secondary duration effects. Constrained by the need to both deter and avoid direct confrontation, Washington and Moscow employed indirect strategies for projecting power. Military aid was an integral element of their competition for influence, and accordingly, money and weapons diffused not only to civil wars, but across the international system. This assistance empowered client states, providing a set of Cold War framings and superpower arms that could be used to justify and implement independent foreign policy objectives. Notably, the superpowers struggled to control their clients’ adventurism; by exploiting fears of defection to the opposing bloc, clients found ways to commandeer superpower aid for their own self-interested ends (Krause 1991). The net result was a proliferation of interventions by otherwise weak states in civil wars across the globe.

In the post–Cold War period, by contrast, state clients have a harder time garnering American aid. Regional powers continue to intervene in civil wars, but they can no longer rely on the reflexive support of the USSR when conflicts of interest arise vis-à-vis US policy, nor can they threaten defection to the Soviet-bloc in the face of American sanction. In the unipolar period, the United States has greater choice in which state clients it chooses to support, enjoys greater flexibility to discipline adventurism by weaker powers, and maintains “command of the commons” to restrict flows of economic and military aid around the globe (Posen 2003). Together, these features of the unipolar system constrain foreign adventurism by lesser powers relative to the Cold War period, thereby reducing—though not eliminating—the prevalence of competitive interventions among neighboring states and regional rivals. In this way, the transition from a bipolar to unipolar system not only terminated superpower proxy warfare, but also decreased the rate of competitive intervention by lesser powers.

#### Unipolarity is sustainable.

Michael Beckley 18. Professor of political science at Tufts. *Unrivaled: Why America Will Remain the World’s Sole Superpower*. Cornell University Press. 1-2.

Yet in terms of wealth and military capabilities—the pillars of global power—the United States is in a league of its own. With only 5 percent of the world’s population, the United States accounts for 25 percent of global wealth, 35 percent of world innovation, and 40 percent of global military spending. 4 It is home to nearly 600 of the world’s 2,000 most proﬁ table companies and 50 of the top 100 universities. 5 And it is the only country that can ﬁght major wars beyond its home region and strike targets anywhere on earth within an hour, with 587 bases scattered across 42 countries and a navy and air force stronger than that of the next ten nations combined. 6 According to Yale historian Paul Kennedy, “Nothing has ever existed like this disparity of power; nothing.” The United States is, quite simply, “the greatest superpower ever.” 7 Why is the United States so dominant? And how long will this imbalance of power last? In the following pages, I argue that the United States will remain the world’s sole superpower for many decades, and probably throughout this century. We are not living in a transitional post–Cold War era. Instead, we are in the midst of what could be called the unipolar era—a period as profound as any epoch in modern history. This conclusion challenges the conventional wisdom among pundits, policymakers, and the public. 8 Since the end of the Cold War, scholars have dismissed unipolarity as a ﬂeeting “moment” that would soon be swept away by the rise of new powers. 9 Bookstores feature bestsellers such as The Post-American World and Easternization: Asia’s Rise and America’s Decline ; 10 the U.S. National Intelligence Council has issued multiple reports advising the president to prepare the country for multipolarity by 2030; 11 and the “rise of China” has been the most read-about news story of the twenty-ﬁ rst century. 12 These writings, in turn, have shaped public opinion: polls show that most people in most countries think that China is overtaking the United States as the world’s leading power. 13 How can all of these people be wrong? I argue that the current literature suffers from two shortcomings that distort peoples’ perceptions of the balance of power. First, the literature mismeasures power. Most studies size up countries using gross indicators of economic and military resources, such as gross domestic product (GDP) and military spending. 14 These indicators tally countries’ resources without deducting the costs countries pay to police, protect, and provide services for their people. As a result, standard indicators exaggerate the wealth and military power of poor, populous countries like China and India—these countries produce vast output and ﬁeld large armies, but they also bear massive welfare and security burdens that drain their resources. To account for these costs, I measure power in net rather than gross terms. In essence, I create a balance sheet for each country: assets go on one side of the ledger, liabilities go on the other, and net resources are calculated by subtracting the latter from the former. When this is done, it becomes clear that America’s economic and military lead over other countries is much larger than typically assumed—and the trends are mostly in its favor. Second, many projections of U.S. power are based on ﬂawed notions about why great powers rise and fall. Much of the literature assumes that great powers have predictable life spans and that the more powerful a country becomes the more it suffers from crippling ailments that doom it to decline. 15 The Habsburg, French, and British empires all collapsed. It is therefore natural to assume that the American empire is also destined for the dustbin of history. I argue, however, that the laws of history do not apply today. The United States is not like other great powers. Rather, it enjoys a unique set of geographic, demographic, and institutional advantages that translate into a commanding geopolitical position. The United States does not rank ﬁrst in all sources of national strength, but it scores highly across the board, whereas all of its potential rivals suffer from critical weaknesses. The United States thus has the best prospects of any nation to amass wealth and military power in the decades ahead. For the foreseeable future, therefore, no country is likely to acquire the means to challenge the United States for global primacy. This is an extraordinary development, because the world has been plagued by great power rivalry for millennia. In the past ﬁve hundred years alone, there have been sixteen hegemonic rivalries between a ruling power and a rising power, and twelve of them ended in catastrophic wars. 16 In the ﬁrst half of the twentieth century, for example, when the world was multipolar, Germany twice challenged Britain for European primacy. The result was two world wars. In the second half of the twentieth century, under bipolarity, the Soviet Union challenged the United States for global primacy. The result was the Cold War, a conﬂict in which the superpowers spent between 6 and 25 percent of their GDPs on defense every year, waged proxy wars that killed millions of people, and brought the world to the brink of nuclear Armageddon. Today, by contrast, unipolarity makes a comparable level of great power competition impossible and thus makes a comparable level of conﬂict highly unlikely. 17

### Adv---Modeling

### Adv---Democracy

### T---Pro Se

#### Prohibition includes per se and rule of reason.

Anu Bradford and Adam S. Chilton 18. Anu Bradford Henry L. Moses Professor of Law and International Organization, Columbia Law School. Adam S. Chilton. Assistant Professor of Law and Walter Mander Research Scholar.

Before discussing our data and the coding of the CLI, it is important to recognize that there are limitations to any index that attempts to quantify competition regulation. This is because it is difficult to produce a single metric that tells the comprehensive story of country’s competition regime. For example, if a specific type of conduct is prohibited, is it prohibited always (per se) or sometimes (rule of reason)? This seems like a relevant distinction to code, but it turns out to be difficult to capture systematically in many jurisdictions. For instance, Article 101(3) of the Treaty on the Functioning of the European Union (TFEU) seems to regulate anticompetitive agreements under the rule of reason standard in the European Union, but, in practice, cartels are per se prohibited. This highlights the challenge of coding even just the law in books, let alone accounting for all the nuances of a country’s competition policies.20

#### Anticompetitive business practices include rule of reason.

Charlotte Wezi Mesikano-Malonda 16. Executive director. "Global Competition Review". No Publication. 7-22-2016. https://globalcompetitionreview.com/review/the-european-middle-eastern-and-african-antitrust-review/the-european-middle-eastern-and-african-antitrust-review-2017/article/malawi-competition-and-fair-trading-commission

Anticompetitive business practices are generally defined as the category of agreements, decisions and concerted practices that result in the prevention, restriction or distortion of either actual or potential competition. Abuse of dominance and market power is an example of anticompetitive business practices and hence falls within the purview of the CFTA.3 Anticompetitive business practices are either illegal per se or illegal by rule of reason. A conduct is illegal per se if, regardless of its objective and effect or any justifications of the conduct, there is a presumption of harm on competition.

#### No bright line---rule of reason is a prohibition---they function synonymously.

Light 19, Sarah E. Light Assistant Professor of Legal Studies and Business Ethics, The Wharton School, University of Pennsylvania., The Law of the Corporation as Environmental Law, 71 Stan. L. Rev. 137, 2019, Lexis/Nexis

While antitrust law can serve as an environmental mandate by prohibiting collusive behavior that keeps environmentally preferable goods from the market, there is also conflict between antitrust law's goals of promoting competition and environmental law's goals of promoting [\*177] conservation. 192 Because antitrust law's per se rule and rule of reason operate on a somewhat fluid continuum, 193 this Subpart discusses the two doctrines together. The per se rule operates as a prohibition, whereas the rule of reason operates as both a prohibition and a disincentive. As noted above, antitrust law generally prohibits certain types of market activity - price fixing, horizontal boycotts, and output limitations - as illegal per se, and harm to competition is presumed. 194 For example, if an industry association declines to award a seal of approval necessary for a product's sale without any good faith attempt to test the product's performance, but rather simply because that product is manufactured by a competitor, such an action would be illegal per se. 195 Under this Article's framework, a per se violation is thus a prohibition. The more fact-intensive inquiry under the rule of reason tests "whether the restraint imposed is such as merely regulates and perhaps thereby promotes competition or whether it is such as may suppress or even destroy competition." 196 While this extremely broad statement might suggest that any fact is relevant to the inquiry, the salient facts under the rule of reason are "those that tend to establish whether a restraint increases or decreases output, or decreases or increases prices." 197 If an anticompetitive effect is found, then the action is illegal and the rule of reason operates, like the per se rule, as a prohibition. 198 The rule of reason can also operate as a disincentive, even if no [\*178] court finds an anticompetitive effect, as uncertainty and litigation risk may discourage firms from undertaking legally permissible, environmentally positive industry collaborations. 199 Associations of firms have adopted numerous mechanisms of private environmental governance to address the management of common pool resources like fisheries, forests, and the global climate. 200 Examples include the Sustainable Apparel Coalition's Higg Index 201 and the American Chemistry Council's Responsible Care program. 202 But private industry standards raise special antitrust concerns. An agreement among competitors with respect to product or process specifications may exclude competitors who fail to meet such standards, raising the specter that such industry collaborations really constitute output limitations or efforts to limit competition. 203 While the U.S. Supreme Court has scrutinized private standard-setting associations carefully, 204 it has noted that if associations "promulgate … standards based on the merits of objective expert judgments and through procedures that prevent the standard-setting process from being biased by members with economic interests in stifling product competition … , those private standards can have significant procompetitive advantages." 205 In the absence of price fixing or a boycott, a rule of reason analysis generally applies to product standard setting by private associations. 206 The uncertain outcome [\*179] inherent in the application of antitrust law in this context could therefore serve as a potential disincentive to the adoption of private industry standards. 207 The challenge of course is that some form of explicit sanctions on noncompliant industry members may be necessary for private industry standards to be effective. In the context of private reputational mechanisms like the New York Diamond Dealers Club, 208 Barak Richman has pointed out that the Club's use of reputational sanctions and voluntary refusals to deal with actors who flout industry norms, while welfare enhancing, could nonetheless amount to violations of antitrust law. 209 This echoes the concern raised by Andrew King and Michael Lenox in their extensive empirical analysis of the Responsible Care program created by the Chemical Manufacturers Association (now the American Chemistry Council). 210 King and Lenox concluded that the absence of explicit sanctions on members who failed to meet the standards set by the program left the program vulnerable to "opportunism." 211 While they suggested that industry associations could look to third parties to enforce the rules, 212 an alternative way to facilitate the long-term environmental benefits of stronger sanctions would be to interpret antitrust law in conformity with the environmental priority principle presented below. 213 [\*180] In some instances, the conflict between the values of promoting competition and conserving environmental resources can be stark. 214 Jonathan Adler, for example, has identified this conflict in the context of fisheries - a tragedy of the commons situation in which some form of collective action is required to avoid overfishing. 215 He cites as an example Manaka v. Monterey Sardine Industries, Inc., in which a fisherman was excluded from a local fishing cooperative. 216 The fisherman sued the cooperative under the Sherman Act, and the court found an antitrust violation in his exclusion. 217 While the fishing cooperative's policies were no doubt exclusionary, Adler contends that they also promoted conservation by restricting catch. 218 The fishery collapsed by the 1950s, a collapse Adler hypothesizes might have been "inevitable" but that perhaps might not have occurred in the absence of the antitrust suit. 219 While a court performing a rule of reason analysis must consider whether a restraint on trade suppresses or destroys competition, Adler points out that courts may also "consider offsetting efficiencies from otherwise anticompetitive arrangements." 220 It is not clear, however, that the courts have consistently taken these factors into account. 221 Among other potential remedies, Adler argues that to resolve this tension between antitrust law, on the one hand, and private collective action to conserve environmental resources, on the other, courts should more actively consider the "ancillary conservation benefits of otherwise anticompetitive conduct." 222 Recognizing the long-term health of a fishery would be consistent with antitrust law's purpose of ensuring viable markets exist in the future, and consistent with the environmental priority principle introduced below. 223

#### Grammar---prohibition modifies anticompetitive practices---that requires effect.

Don R. Willett 15. Justice in the Supreme Court of Texas. “In RE Memorial Hermann Hospital System; Memorial Hermann Physician Network; Michael Macris, m.d.; Michael Macris, m.d., p.a.; and Keith Alexander, Relators”. http://www.txcourts.gov/media/981611/140171.pdf

The trial court found that the documents at issue “are relevant to an anticompetitive action.” Before we can resolve the parties’ dispute regarding the correctness of this finding, we must first determine the meaning of the statutory phrase “relevant to an anticompetitive action.”35 Statutory construction is a question of law we review de novo.36 Our objective is to determine and give effect to the Legislature’s intent, 37 and “the truest manifestation of what lawmakers intended is what they enacted.”

38 Proper construction requires reading the statute as a whole rather than interpreting provisions in isolation.39 “[C]ourts should not give an undefined statutory term a meaning out of harmony or inconsistent with other provisions, although it might be susceptible of such a construction if standing alone.”40 “We presume that the Legislature chooses a statute’s language with care,” and we will not ignore the statute’s use of a term that carries a “particular meaning.”41 “Privileges are not favored in the law and are strictly construed.”42

Neither section 160.007 nor any other peer review committee privilege that incorporates the phrase “anticompetitive action” defines the term.43 Black’s Law Dictionary defines “anticompetitive” as “[h]aving a tendency to reduce or eliminate competition” in contrast to the term procompetitive.44 Procompetitive is in turn defined as “[i]ncreasing, encouraging, or preserving competition.”45 Competition itself is defined as “[t]he struggle for commercial advantage; the effort or action of two or more commercial interests to obtain the same business from third parties.”46 The dictionary also notes that the term anticompetitive “describes the type of conduct or circumstances generally targeted by antitrust laws,”47 although the statement is “not purely definitional.”48

This framework accurately maps out the meaning afforded the term “anticompetitive” in court decisions in the antitrust context. As noted by the Supreme Court of the United States, to restrain competition is the “very essence” of every agreement and regulation of trade.49 Therefore, regarding restraints of trade, “[t]he true test of legality is whether the restraint imposed is such as merely regulates and perhaps thereby promotes competition or whether it is such as may suppress or even destroy competition.”50 As such, an “abbreviated or ‘quick-look’ analysis” is appropriate only when “an observer with even a rudimentary understanding of economics could conclude that the arrangements in question would have an anticompetitive effect on customers and markets.”51 The goal of judicial scrutiny of restraints on trade is to “distinguish[] between restraints with anticompetitive effect that are harmful to the consumer and restraints stimulating competition that are in the consumer’s best interest.”52

Judicial scrutiny in other areas of antitrust law confirms that the antitrust laws were designed as a “consumer welfare prescription” that requires consideration of both anticompetitive and procompetitive effects.53 Thus, proof that a firm’s dominant position is the “consequence of a superior product, business acumen, or historic accident”—circumstances that either benefit the consumer or are outside the firm’s control—will defeat a claim of monopoly.54 Claims of attempted monopolization require the further showing that the defendant “pose[s] a danger of monopolization,” because judging unilateral conduct absent actual potential to achieve a monopoly would “risk that the antitrust laws will dampen the competitive zeal of a single aggressive entrepreneur.”55 Similarly, in scrutinizing a proposed merger, the “economic efficiencies produced by the merger must be weighed against anticompetitive consequences in the final determination whether the net effect on competition is substantially adverse.”56 Ultimately, the “use of the word ‘competition’ [is] a shorthand for the invocation of the benefits of a competitive market,” 57 and antitrust law acknowledges that “it is sometimes difficult to distinguish robust competition from conduct with long-run anticompetitive effects.”58

We have no trouble holding that the Legislature intended the term “anticompetitive” in section 160.007 to denote an overall substantially adverse effect on competition, rather than the existence of some negative effects. However, we reject Memorial Hermann’s characterization of the term “anticompetitive action” as synonymous with “antitrust action.” Although we agree that the term anticompetitive “describes the type of conduct or circumstances generally targeted by antitrust laws,”59 the term itself is broader because the law of antitrust does not encompass all conduct that could substantially lessen competition in a particular market. For example, certain conduct—regardless of its overall impact on competition—is immune from antitrust law under the state action doctrine,60 the exemption for political activity,61 or the exemptions, both implicit and explicit, for labor unions.62 The terms anticompetitive and antitrust are therefore not inherently coextensive, and we cannot ignore the Legislature’s use of the broader term, particularly in juxtaposition to section 160.007(b)’s specificity regarding its application to civil rights proceedings.63

#### “By” means we only have to expand the scope.

Crown Academy of English 18, (Andrew, Fully qualified English teacher with TESOL (Teaching English to Speakers of Other Languages) qualification. “Preposition BY – Meaning and use”, https://www.crownacademyenglish.com/preposition-by-meaning-use/)

by + ING form of verb

This describes how to do something. It describes the method for achieving a a particular result.

### CP---Econ advantage

#### Growth alone can’t solve inequality---protections for workers are key.

Orsetta Causa 17. \*Senior economist, Ireland/Portugal desk, Organization for Economic Cooperation and Development (OECD). \*Mikkel Hermansen, economist, Bulgaria/Denmark desk, OECD. \*Nicolas Ruiz, senior economist, Estonia/Poland desk, OECD. "Does growth lead to inequality? It depends." OECD. 1-10-2017. https://oecdecoscope.blog/2017/01/10/does-growth-lead-to-inequality-it-depends/

Using a novel empirical framework, Hermansen et al. (2016) shed new light on the old growth and inequality nexus by assessing the impact of growth on household incomes across the distribution, that is, progressively encompassing poor, middle class and rich households. Their conclusion is that that there is no single answer to the growth and inequality question. Labour productivity growth is found to have contributed to rising market income inequality, while this was partly mitigated through government redistribution, on average across OECD countries over the past three decades (Chart 1, Panel A). By contrast, employment growth is found to have had an equalising impact, benefiting mostly and importantly households in the lower part of the income distribution (Chart 1, Panel B). Overall, these two forces have tended to offset each other and resulted in a broadly distribution-neutral impact of GDP per capita growth, on average across OECD countries over the last three decades. So, with reducing inequality remaining a defining challenge of the post-crisis era, promoting job creation is a key policy goal, in particular where employment rates still fall short of pre-crisis levels. But, perhaps more importantly, in looking for ways to revive productivity growth, governments need comprehensive policy strategies to ensure that the gains are more broadly shared across the population.

### CP---Multilat advantage

#### Can’t change TPP

McBride et al 21, 9-20-2021, James McBride, Andrew Chatzky, and Anshu Siripurapu. "What’s Next for the Trans-Pacific Partnership (TPP)?," Council on Foreign Relations, https://www.cfr.org/backgrounder/what-trans-pacific-partnership-tpp

Though President Trump withdrew from the TPP, the remaining members of the trade pact have forged ahead with a new version, leaving the U.S. role in the Asia-Pacific in question.

### CP---Inequality advantage

### DA---Horsetrading

#### No link---it’s only about affs that breakup online platforms. Emory = blue.

1NC Perera 3-12-2021, veteran cybersecurity reporter, Data security & privacy reporter for MLex (Dave, “US antitrust legislation faces uphill battle despite unified Democratic government,” <https://mlexmarketinsight.com/news-hub/editors-picks/area-of-expertise/antitrust/us-antitrust-legislation-faces-uphill-battle-despite-unified-democratic-government>)

Renewed interest among US lawmakers in antitrust legislation is unlikely to produce radical policy shifts, notwithstanding the Democratic Party’s unified control of the federal government. Democrats promised a “big, bold agenda” after they captured the Senate by a hairsbreadth in January. Democratic lawmakers may very well stick to those ambitions and announce audacious legislative proposals. But the fate of those bills is at the mercy of a political dynamic ensuring that the more liberal the policy prescriptions, the less likely they are to become law. The most likely outcome over the next two years is more funding for enforcers at the Department of Justice and Federal Trade Commission, whether directly through appropriated funds, steeper merger notification filing fees, or both. It’s also possible Congress could incrementally tinker along the edges of antitrust. It might lower the threshold for challenging mergers, or mandate data portability requirements for social media companies. Those expecting — or fearing — more ambitious outcomes likely won’t see them enacted. So until America’s November 2022 election, scratch from the list of high probabilities reforms such as requiring dominant firms to separate lines of business, or shifting the burden of proof onto an acquiring company. Put another way, unless a bill can attract significant Republican support, not even two years of unified Democratic government can guarantee reforms. — American exceptionalism — Single party control of both congressional chambers and the presidency is relatively rare in American politics. It has occurred in fewer than a third of legislative sessions since 1980. When it strikes, it doesn’t last long — typically just the two years between one congressional election and another. Historically, unified control is a fertile period for new regulations. President George W. Bush overhauled Medicare. President Barack Obama ushered in financial sector reforms and the Affordable Care Act. Indications are that President Joe Biden is emboldened by his party’s last-minute capture of the Senate. History, of course, isn’t a blueprint. Even a brief look at past episodes of unified control reveals that not even single-party capture of the executive and legislative branches of the US government can assure the enactment of a partisan agenda. For one thing, neither political party is a monolith. Although far more politically aligned than when Democratic conservatives found common cause in the 20th century with Republicans, the major American parties nonetheless are coalitions of centrist and activist wings. For Democrats, the tensions inherent in appeasing all sides became apparent earlier this month when centrists trimmed benefits in the $1.9 trillion coronavirus stimulus package. Neither is single party grip on power secure unless it commands an overwhelming majority in the Senate, thanks to a uniquely American institution: the filibuster. In the Senate, the rules mandate a three-fifths vote before debate over a bill is cut off. In recent decades, it’s become a weapon routinely wielded by the minority party to kill legislation. The upshot is that policy legislation needs supermajority support before it can proceed, meaning the 50 Democrats of today’s Senate have little choice but to resign themselves to the grind of finding Republican supporters. There are limited exceptions. Assuming Democrats stay in unison, they don’t need Republican votes to appoint judges, approve executive branch nominations or pass fiscal legislation such as the coronavirus stimulus that just became law. It’s within Democrats’ power to abolish the filibuster, but for now, the maneuver appears safe. Asked just days ago about the matter, White House spokeswoman Jen Psaki told reporters that the president’s preference is for it to stay in place. “The president is an optimist by nature,” Psaki added. — Hunting for bipartisan consensus — Not every bill introduced in Congress, nor even every bill approved by a committee or even an entire single chamber, makes it through the process because its sponsors believe it’ll become law. There are a host of bills drafted with the intent of sending a message to industry, to independent regulators, to donors, to constituents. There are bills that lawmakers view as setting out a position to influence an ongoing policy debate. Even if it won’t become law this year, it might the next year, or the next, reintroduced and refined along the way. Telltale signs of whether a bill is a serious attempt at law are the number of cosponsors, and whether that list of names includes members of both parties in good stead with their party’s leadership. Bipartisan support is important even in the House, where Democrats have the votes to completely bypass Republicans. Because the House doesn’t have the filibuster to contend with, those with the majority of seats control the chamber. House Democrats can and do pass bills in the face of absolute House Republican opposition, but — special exceptions for fiscal bills aside — those bills are dead on arrival in the Senate. As long as the filibuster exists or Democrats lack a Senate supermajority, the House Judiciary antitrust subcommittee must court Republican support if its intention is to make new law. Finding clues of what House Democrats might seriously achieve, then, may be little more difficult than looking up the policy prescriptions House Republicans favor: giving regulators more resources, shifting the burden of proof in merger cases and boosting data portability and interoperability. A report issued by now-ranking Republican Ken Buck as a rejoinder to last year’s Democratic House Judiciary antitrust subcommittee staff report on competition in digital markets allowed that the GOP shares other Democratic concerns, including predatory pricing, monopoly leveraging and control over marketplace platforms. That conciliatory signal also came weighted, with warnings that Congress should be wary of “handing additional regulatory to agencies in an attempt to micromanage.” Instead, try instead telling enforcers they should return to first principles, the Colorado lawmaker advised. Whether Republicans and Democrats in the Senate can find common cause is an even more fraught question. Unlike its House counterpart, the Senate Judiciary subcommittee on antitrust hasn't conducted a 16-month investigation into digital monopolization. The subcommittee’s senior Republican, Utah’s Mike Lee, is prone to touting the importance of the consumer welfare standard and rails against online platforms “eager to impose the ideological censorship called for by their political benefactors.” Lee also says he’s open to working with subcommittee Chairwoman Amy Klobuchar on strengthening enforcement, adding the caveat that current antitrust laws are sufficient. Klobuchar, a Minnesota Democrat, doesn’t need Lee to get a bill through her subcommittee, but failing to find consensus with Republicans imperils her chances of making law. The prospects for her Competition and Antitrust Law Enforcement Reform Act becoming law as current written aren't good. — 'Big tech is out to get conservatives' — A looming question hanging over any bill, even one tailored to win bipartisan support, is whether it could be derailed by Republican anger at online platforms for alleged anti-conservative bias. A right-wing trope especially spread by President Donald Trump during his last year in office — the belief that platforms use their content moderation powers to silence conservatives — has mainstream acceptance in Republican circles. It’s a refrain almost obligatory for Republican lawmakers to repeat when discussing any issue related to online platforms. “Big tech is out to get conservatives,” House Judiciary Committee ranking member Jim Jordan of Ohio has said more than once. Democrats have their own share of anger at online platforms’ content-moderation practices, to be sure. They accuse online platforms of circumventing consumer protections, undermining civil rights laws and not doing enough to stymie disinformation. It’s Republicans, though, who appear the angriest, and are the more likely to insist that any legislative reform ***touching online platforms*** address content moderation, with the intention of making it harder, not easier, for online platforms to remove users, potentially imperiling a compromise measure.

#### No bill to attach.

Margeurite Reardon 21. “Section 230: How it shields social media, and why Congress wants changes.” July 29 2021. https://www.cnet.com/news/section-230-how-it-shields-social-media-and-why-congress-wants-changes/

As the rhetoric around Section 230 has heated up, lawmakers on both sides of the political aisle have introduced a flurry of legislation over the past year. Some call for liability protections to go away entirely, while others want to alter or refine the protections. Other bills entirely strip away liability protections and would have companies earn those protections by showing they're politically neutral in how they moderate content.

But the fact that so many bills have been introduced -- some of which overlap in scope, and some of which are vastly different in approach -- is perhaps a good indication that there's no easy fix for this issue.

#### plan is popular.

Brishen Rogers 18. An Associate Professor at Temple University's Beasley School of Law, and a Fellow at the Roosevelt Institute. “The Limits of Antitrust Enforcement” Boston Review. 04-30-18. http://bostonreview.net/class-inequality/brishen-rogers-limits-antitrust-enforcement

**Left and right seem to be converging** here. **Progressives** are concerned that corporate power **threatens equality**, **conservatives** are concerned that it **threatens individual liberty**, and both are concerned that it threatens innovation. A **populist critique** of corporate power run amok may also **be good politics**. Political culture in the United States has never abandoned the Jeffersonian ideal of the yeoman farmer or independent artisan, nor has it abandoned its characteristic distrust of major institutions. There is now a Congressional Antitrust Caucus, and numerous foundations are sponsoring research into the causes and consequence of market concentration. This is all part of a renewed and **essential focus on structural inequality** and generally for the good.

#### Biden’s executive order thumps---should have been met with Republican legislative backlash.

Lisa Nagele-Piazza 7/14. Senior Legal Editor at SHRM Online. “What Does President Biden's Order on Noncompetes Mean for Employers?” 7/14/21. https://www.shrm.org/resourcesandtools/legal-and-compliance/employment-law/pages/what-biden-order-on-noncompetes-means-for-employers.aspx

Employers should review their noncompete agreements and other restrictive covenants in light of a new executive order that aims to curb the use of these contracts in the workplace. The federal government has yet to issue any new rules, but employers should prepare for potential changes.

President Joe Biden recently signed an executive order that encourages the Federal Trade Commission (FTC) to ban or limit noncompete agreements. The order is meant to promote competition and economic growth by making it easier for workers to change jobs, among other objectives.

Employers generally use noncompetes to protect their proprietary information by preventing employees from working for competitors in a specific geographic area for a limited amount of time. But such agreements, particularly with low-wage earners in the retail and restaurant industries, have been scrutinized in recent years.

Carson Sullivan, an attorney with Paul Hastings in Washington, D.C., said there's a lot of debate about what the executive order means for noncompetes. "We really can't tell how broad the ban will be," she said, though she noted that the order focused on "unfair" use of noncompetes and other agreements that limit employee mobility.

#### State action thumps. Emory = blue.

1NC Carpenter 21, contributing writer for The Nation. She received the James Aronson Award for Social Justice Journalism in 2018, and has been a finalist for the Livingston Awards and the National Awards for Education Reporting. Her writing has also appeared in Rolling Stone, Guernica, and various other publications (Zoe, “Misinformation Is Destroying Our Country. Can Anything Rein It In?,” *The Nation*, <https://www.thenation.com/article/society/right-wing-media-misinformation/>)

Natali Fierros Bock says she could feel this mass delusion calcifying in the wake of the election in Pinal County, a rural area between Phoenix and Tucson where she serves as co–executive director of the group Rural Arizona Engagement. “It feels like an existential crisis,” Bock adds. Many of the Sharpiegate claims online referred to Pinal County, and Gosar, whose district includes a portion of the area, was reportedly responsible for helping organize the January 6 “Stop the Steal” rally in Washington that resulted in the deaths of five people. Mark Finchem, a Republican who represents part of Pinal County in the statehouse, was also in Washington on January 6. The Capitol insurrection threw into relief the real-world consequences of America’s increasingly siloed media ecosystem, which is characterized on the right by an expanding web of outlets and platforms willing to entertain an alternative version of reality. Social media companies, confronted with their role in spreading misinformation, scrambled to implement reforms. But right-wing misinformation is not just a technological problem, and it is far from being fixed. Any hope that the events of January 6 might provoke a reckoning within conservative media and the Republican Party has by now evaporated. The GOP remains eager to weaponize misinformation, not only to win elections but also to advance its policy agenda. A prime example is the aggressive effort under way in a number of states to restrict access to the ballot. In Arizona, Republicans have introduced nearly two dozen bills that would make it more difficult to vote, with the big lie about election fraud as a pretext. “When you can sell somebody the idea that their elections were stolen, they’ve been violated, right? So then you need protection,” Bock says, explaining the conservative justification for the suite of new restrictions in her state. Voting rights is her organization’s “number one concern” at the moment. But Bock’s fears about political misinformation are more sweeping. Community organizing is difficult in the best of times. “But when you can’t agree on what is true and not true, when my reality doesn’t match the reality of the person I’m speaking to, it makes it more difficult to find common ground,” she says. “If we can’t agree on a common truth, if we can’t find a starting place, then how does it end?” Around the time of the 2016 election, Kate Starbird, a professor at the University of Washington who studies misinformation during crises, noticed that more and more social media users were incorporating markers of political identity into their online personas—hashtags and memes and other signifiers of their ideological alignment. In the footage from the Capitol she saw the same symbols, outfits, and flags as those she’d been watching spread in far-right communities online. “To see those caricatures come alive in this violent riot or insurrection, whatever you want to call it, was horrifying, but it was all very recognizable for me,” Starbird says. “There was a time in which we were like, ‘Oh, those are bots, those aren’t real people,’ or ‘That’s someone play-acting,’ or ‘We’re putting on our online persona and that doesn’t really reflect who we are in an offline sense.’ January 6 pretty much disabused us of that notion.” It was a particularly rude awakening for social media companies, which had long been reluctant to respond to the misinformation that flourished on their platforms, treating it as an issue of speech that could be divorced from real-world consequences. Facebook, Twitter, and other platforms had made some changes in anticipation of a contested election, announcing plans to label or remove content delegitimizing election results, for instance. Facebook blocked new campaign ads for the week leading up to the election; Twitter labeled hundreds of thousands of misleading tweets with fact-checking notes. Yet wild claims about election fraud spread virally anyway, ping-ponging from individual social media users to right-wing influencers and media. During the 2016 campaign, most public concern about misinformation centered on shadowy foreign actors posing as news sources or US citizens. This turned out to be an oversimplification, though many on the center and left offered it as an explanation for Hillary Clinton’s defeat in 2016; blaming Russian state actors alone ignored factors like sexism, missteps made by the Clinton campaign itself, and the home-grown feedback loop of right-wing media. In 2020, according to research done by Starbird and other contributors to the Election Integrity Project, those most influential in disseminating misinformation were largely verified, “blue check” social media users who were authentic, in the sense that they were who they said they were—Donald Trump, for example, and his adult sons. DONATE NOW TO POWER THE NATION. Readers like you make our independent journalism possible. Another key aspect in the creation of the big lie was what Starbird calls “participatory disinformation.” Trump was tweeting about the election being stolen from him months beforehand, but once voting got under way, “what we see is that he kind of relies on the crowd, the audiences, to create the evidence to fit the frame,” Starbird explains. Individuals posted their personal experiences online, which were shared by more influential accounts and eventually featured in media stories that placed the anecdotes within the broader narrative of a stolen election. Some of the anecdotes that fueled Sharpiegate came from people who used a felt-tip pen to vote in person, then saw online that their vote had been canceled—though the “canceled” vote actually referred to mail-in ballots that voters had requested before deciding to vote in person. “It’s a really powerful kind of propaganda, because the people that were helping to create these narratives really did think they were experiencing fraud,” Starbird says. Action by content moderators usually came too late and was complicated by the fact that many claims of disenfranchisement by individual users were difficult to verify or disprove. The Capitol riot led the tech giants to take more aggressive action against Trump and other peddlers of misinformation. Twitter and Facebook kicked Trump off their platforms and shut down tens of thousands of accounts and pages. Facebook clamped down on some of its groups, which the company’s own data scientists had previously warned were incubating misinformation and “enthusiastic calls for violence,” according to an internal presentation. Google and Apple booted Parler, a social media site used primarily by the far right, from their app stores, and Amazon stopped hosting Parler’s data on its cloud infrastructure system, forcing it temporarily offline. But these measures were largely reactions to harm already done. “Moderation doesn’t reduce the demand for [misleading] content, and demand for that content has grown during some periods of time when the platforms weren’t moderating or weren’t addressing some of the more egregious ways their tools were abused,” says Renée DiResta, technical research manager at the Stanford Internet Observatory. Deplatforming individuals or denying service to companies that tolerate violent rhetoric, as Amazon did with Parler, can have an impact, particularly in the short term and when done at scale. It reduces the reach of influential liars and can make it more difficult for “alt-tech” apps to operate. A notorious example of deplatforming involved Alex Jones, the conspiracy theorist behind the site Infowars. Jones was kicked off Apple, Facebook, YouTube, and Spotify in 2018 for his repeated endorsement of violence. He lost nearly 2.5 million subscribers on YouTube alone, and in the three weeks after his accounts were cut off, Infowars’ daily average visits dropped from close to 1.4 million to 715,000. But Jones didn’t disappear—he migrated to Parler, Gab, and other alt-tech platforms, and he spoke at a rally in Washington the night before the Capitol attack. One outcome of unplugging Trump and other right-wing influencers has been a surge of interest in those alternative social media platforms, where more dangerous echo chambers can form and, in encrypted spaces, be more difficult to monitor. “Isn’t this just going to make the extreme communities worse? Yes,” says Ethan Zuckerman, founder of the Institute for Digital Public Infrastructure at the University of Massachusetts at Amherst. “But we’re already headed there, and at least the good news is that [extremists] aren’t going to be recruiting in these mainstream spaces.” The bad news, in Zuckerman’s view, is that the far right is now leading the effort to create new forms of online community. “The Nazis right now have an incentive to build alternative distributed media, and the rest of us are behind, because we don’t have the incentive to do it,” Zuckerman explains. He argues that a digital infrastructure that is smaller, distributed, and not-for-profit is the path to a better Internet. “And my real deep fear is that we end up ceding the design of this way of building social networks to far-right extremists, because they are the ones who need these new spaces to discuss and organize.” In March, Trump spokesman Jason Miller said on Fox that the former president was likely to return to social media this spring “with his own platform.” A more fundamental problem than Trump’s presence or absence on Twitter is the power that a single executive—Jack Dorsey, in the case of Twitter—has in making that decision. Social media companies have become so big that they have little fear of accountability in the form of competition. “To put it simply, companies that once were scrappy, underdog startups that challenged the status quo have become the kinds of monopolies we last saw in the era of oil barons and railroad tycoons,” concluded a recent report by the staff of the Democratic members of the House Judiciary Subcommittee on Antitrust. For now, the reforms at Facebook and other companies remain largely superficial. The platforms are still based on algorithms that reward outrageous content and are still financed via the collection and sale of user data. Karen Hao of MIT Technology Review recently reported that a former Facebook AI researcher told her “his team conducted ‘study after study’ confirming the same basic idea: models that maximize engagement increase polarization.” Hao’s investigation concluded that Facebook leadership’s relentless pursuit of growth “repeatedly weakened or halted many initiatives meant to clean up misinformation on the platform.” The modest “break glass” measures Facebook took during the election in response to the swell of misinformation, which included tweaks to its ranking algorithm to emphasize news sources it considered “authoritative,” have already been reversed. Tech companies could do more, as the election-time tweaks revealed. But they still “refuse to see misinformation as a core feature of their product,” says Joan Donovan, research director for the Shorenstein Center on Media, Politics and Public Policy at Harvard University. The problem of misinformation appears so vast “because that’s exactly what the technology allows.” There are some signs of a growing appetite for regulation on Capitol Hill. Democrats have proposed reforms to Section 230 of the Communications Decency Act, which insulates tech companies from legal liability for content posted to their platforms, such as requiring more transparency about content moderation and opening platforms to lawsuits in limited circumstances when content causes real-world harm. (GOP critiques of Section 230, on the other hand, make the false argument that it allows platforms to discriminate against conservatives.) Another legislative tactic would focus on the algorithms that platforms use to amplify content, rather than on the content itself. A bill introduced by two House Democrats would make companies liable if their algorithms promote content linked to acts of violence. Democratic lawmakers are also eyeing changes to antitrust law, while several antitrust lawsuits have been filed against Facebook and Google. But litigation could take years. Even breaking up Big Tech would leave intact its predatory business model. To address this, Zuckerman and other experts have called for a tax on targeted digital advertising. Such a tax would discourage targeted advertising, and the revenue could be used to fund public-service media. Held to account? Twitter CEO Jack Dorsey testified remotely before the Senate Judiciary Committee in November 2020. (Matt York / AP) Social media plays a key role in amplifying conspiracy theories and political misinformation, but it didn’t create them. “When we think of disinformation as something that appeared [only in the Trump era], and that we used to have this agreed-upon narrative of what was true and then social platforms came into the picture and now that’s all fragmented… that makes a lot of assumptions about the idea that everyone used to agree on what was true and what was false,” says Alice E. Marwick, an assistant professor at the University of North Carolina who studies social media and society. Politicians have long leveraged misinformation, particularly racist tropes. But it’s been made particularly potent not just by social media, Marwick argues, but by the right-wing media industry that profits from lies. “The American online public sphere is a shambles because it was grafted onto a television and radio public sphere that was already deeply broken,” argue Yochai Benkler, Robert Faris, and Hal Roberts of Harvard’s Berkman Klein Center for Internet and Society in their book Network Propaganda. The collapse of local news left a vacuum that for many Americans has been filled by partisan outlets that, on the right, are characterized by blatant disregard for journalistic standards of sourcing and verification. This insulated world of right-wing outlets, which stretches from those that bill themselves as objective sources, Fox News chief among them, to talk radio and extreme sites like Infowars and The Gateway Pundit, “represents a radicalization of roughly a third of the American media system,” the authors write. The conservative movement spent decades building this apparatus to peddle lies and fear along with miracle cures and pyramid schemes, and was so successful that Fox and other far-right outlets ended up in a tight two-step with the White House. Fox chairman Rupert Murdoch maintained a close relationship with Trump, as did Sean Hannity and former Fox News copresident Bill Shine, who became White House communications director in 2018. The backlash against Fox in the wake of the election hinted at a possible dethroning of the ruler of the right’s media machine. Its farther-right rival Newsmax TV posted a higher rating than Fox for the first time ever in the month after the election, following supportive tweets from Trump, and during the week of November 9 it passed Breitbart as the most-visited conservative website. But Fox quickly regained its perch. The network backpedaled rapidly during its post-election ratings slump, firing an editor who’d defended the projection of a Biden win in Arizona and replacing news programming with opinion content. According to Media Matters, Fox News pushed the idea of a stolen election nearly 800 times in the two weeks after declaring Biden the winner. The network’s ad revenue increased 31 percent during the final quarter of 2020, while its parent company, Fox Corporation, saw a 17 percent jump in pretax profit. The far-right media ecosystem has become so powerful in part because there’s been no downside to lying. Instead, the Trump administration demonstrated that there was a market opportunity in serving up misinformation that purports to back up what people want to believe. “In this day and age, people want something that tends to affirm their views and opinions,” Newsmax CEO Chris Ruddy told The New York Times’ Ben Smith in an interview published shortly after the election. Claims of a rigged election were “great for news,” he said in another interview. Trump’s departure from the White House won’t necessarily reduce the demand for this kind of content. Since the Capitol riot, two voting-systems companies have launched an unusual effort to hold right-wing outlets and influencers accountable for some of the lies they’ve spread. Dominion Voting Systems, a major provider of voting technology, and another company called Smartmatic were the subjects of myriad outlandish claims related to election fraud, many of which were used in lawsuits filed by Trump’s campaign and were repeatedly broadcast on Fox, Newsmax TV, and OAN. Since January the companies have filed several defamation suits against Trump campaign lawyers Sidney Powell and Rudy Giuliani, MyPillow CEO Mike Lindell, and Fox News and three of its hosts. Dominion alleges that as a result of false accusations, its “founder and employees have been harassed and have received death threats, and Dominion has suffered unprecedented and irreparable harm.” The threat of legal action forced a number of media companies to issue corrections for stories about supposed election meddling that mentioned Dominion. The conservative website American Thinker published a statement admitting its stories about Dominion were “completely false and have no basis in fact” and “rel[ied] on discredited sources who have peddled debunked theories.” OAN simply deleted all of the stories about Dominion from its website without comment. These lawsuits will not dismantle the world of right-wing media, but they have prompted a more robust debate about how media and social media companies could be held liable for lies that turn lethal—and whether this type of legal action should be pursued, given the protections afforded by the First Amendment and the fact that the powerful often use libel law to bully journalists. Alternative reality: Trump supporters in Maricopa County derided Fox for reporting on election night that Biden had won the state. (Hannah McKay / Pool / Getty Images) Ethan Zuckerman has been thinking about how to build a better Internet for years, a preoccupation not unrelated to the fact that, in the 1990s, he wrote the code that created pop-up ads. (“I’m sorry. Our intentions were good,” he wrote in 2014.) Still, he believes that framing misinformation as a problem of media and technology is myopic. “It’s very hard to conclude that this is purely an informational problem,” Zuckerman says. “It’s a power problem.” The GOP is increasingly tolerant of, and even reliant on, weaponized misinformation. “We’re in a place where the Republican Party realizes that as much as 70 percent of their voters don’t believe that Biden was legitimately elected, and they are now deeply reluctant to contradict what their voters believe,” Zuckerman says. Republicans are reluctant, at least in part, because of a legitimate fear of primary challenges from the right, but also because they learned from Trump the power of using conspiracy theories to mobilize alienated voters by preying on their deep mistrust of public institutions. It’s one thing for an ordinary citizen to retweet a false claim; it’s another for elected officials to legitimize conspiracy theories. But holding the GOP to account may prove to be even harder than reforming Big Tech. The radical grass roots have been empowered by small-dollar fundraising and gerrymandering, while more moderate Republicans are retiring or leaving the party. Writer Erick Trickey argued recently in The Washington Post that what undercut a similar wave of conservative crackpot paranoia driven by the John Birch Society in the 1960s was explicit denunciation by prominent conservatives like William Buckley and Ronald Reagan as well as Republican congressional leaders. But today’s party leaders have been unwilling to excommunicate conspiracy-mongers. In the aftermath of the Capitol riot, elected officials who spread rumors that the violence was actually the result of antifascists—including Arizona’s Paul Gosar and Andy Biggs—gained notoriety, while those critical of Trump were publicly humiliated. The embrace of conspiratorial narratives has been particularly pronounced in state GOP organizations. The Texas GOP recently incorporated the QAnon slogan “We are the storm” into official publicity media, and the Oregon GOP’s executive committee endorsed the theory that the riot had been a “false flag” operation. In March, members of the Oregon GOP voted to replace its Trump-supporting chairman with a candidate even farther out on the extremist fringe. Weaponized misinformation could have a lasting impact not only on the shape of the GOP but also on public policy. Republicans are now using the big lie to try to restrict voting rights in Arizona, Georgia, and dozens of other states. As of February 19, according to the Brennan Center for Justice, lawmakers in 43 states had introduced more than 250 bills restricting access to voting, “over seven times the number of restrictive bills as compared to roughly this time last year.” In late March, Georgia Governor Brian Kemp signed a 95-page bill making it harder to vote in that state in a number of ways. Many of the far-right extremists, politicians, and media influencers who spread misinformation about the presidential election are now pushing falsehoods about Covid-19 vaccines. The rumors, which have spread on social media apps like Telegram that are frequented by QAnon adherents and militia groups, among others, range from standard anti-vax talking points to absurd claims that the vaccines are part of a secret plan hatched by Bill Gates to implant trackable microchips, or that they cause infertility or alter human DNA. Sidestepping the craziest conspiracies, prominent conservatives like Tucker Carlson and Wisconsin Senator Ron Johnson, who has become one of the GOP’s leading purveyors of misinformation, are casting doubt about vaccine safety under the pretense of “just asking questions.” Vaccine misinformation plays into the longstanding conservative effort to sow mistrust in government, and it appears to be having an effect: A third of Republicans now say they don’t want to get vaccinated. These are the true costs of misinformation: deadly riots, policy changes that could disenfranchise legitimate voters, scores of preventable deaths. These translate into financial externalities: the additional expense of securing the Capitol, additional dollars devoted to the pandemic response. More abstract but no less real are the social costs: the parents lost down QAnon rabbit holes, the erosion of factual foundations that permit productive argument. The problem with the far right’s universe of “alternative facts” is not that it’s hermetically sealed from the universe the rest of us live in. Rather, it’s that these universes cannot truly be separated. If we’ve learned anything in the past six months, it’s that epistemological distance doesn’t prevent collisions in the real world that can be lethal to individuals—and potentially ruinous for democratic systems.

#### Texas law thumps.

Jessica Guynn 21. USA TODAY. “Texas is about to pass a new law Republicans say will stop censorship of conservatives on Facebook, Twitter” 09-01-21. https://www.usatoday.com/story/tech/2021/09/01/texas-censorship-conservatives-facebook-twitter-youtube-trump-law/5683621001/

**Texas is on the verge of passing a new law that would crack down on social media companies Republicans say are censoring conservative speech.** The legislature passed the bill. It now heads to the desk of Gov. Greg Abbott, a Republican who has publicly backed it and is **expected to sign it.** The new law, passed in the final days of the second special session called by Abbott, would allow any Texas resident banned from Facebook, Twitter or Google's YouTube for their political views to **sue the companies**. The state attorney general also would be able to sue on behalf of a user or a group of users.

## 1AR

### Adv---Inequality

#### Yes extinction

Starr, ’14 Steven Starr, the Senior Scientist for Physicians for Social Responsibility and Director of the Clinical Laboratory Science Program at the University of Missouri. Starr has published in the Bulletin of the Atomic Scientists and the Strategic Arms Reduction (STAR) website of the Moscow Institute of Physics and Technology, June 11th, 2014, “There Can be No Winners in a Nuclear War”, Truth Out, <https://truthout.org/articles/there-can-be-no-winners-in-a-nuclear-war/>, EO

Nuclear war has no winner. Beginning in 2006, several of the world’s leading climatologists (at Rutgers, UCLA, John Hopkins University, and the University of Colorado-Boulder) published a series of studies that evaluated the long-term environmental consequences of a nuclear war, including baseline scenarios fought with merely 1% of the explosive power in the US and/or Russian launch-ready nuclear arsenals. They concluded that the consequences of even a “small” nuclear war would include catastrophic disruptions of global climate and massive destruction of Earth’s protective ozone layer. These and more recent studies predict that global agriculture would be so negatively affected by such a war, a global famine would result, which would cause up to 2 billion people to starve to death. These peer-reviewed studies – which were analyzed by the best scientists in the world and found to be without error – also predict that a war fought with less than half of US or Russian strategic nuclear weapons would destroy the human race. In other words, a US-Russian nuclear war would create such extreme long-term damage to the global environment that it would leave the Earth uninhabitable for humans and most animal forms of life. A recent article in the Bulletin of the Atomic Scientists, “Self-assured destruction: The climate impacts of nuclear war,” begins by stating: “A nuclear war between Russia and the United States, even after the arsenal reductions planned under New START, could produce a nuclear winter. Hence, an attack by either side could be suicidal, resulting in self-assured destruction.” In 2009, I wrote “Catastrophic Climatic Consequences of Nuclear Conflicts” for the International Commission on Nuclear Non-proliferation and Disarmament. The article summarizes the findings of these studies. It explains that nuclear firestorms would produce millions of tons of smoke, which would rise above cloud level and form a global stratospheric smoke layer that would rapidly encircle the Earth. The smoke layer would remain for at least a decade, and it would act to destroy the protective ozone layer (vastly increasing the UV-B reaching Earth) as well as block warming sunlight, thus creating Ice Age weather conditions that would last 10 years or longer. Following a US-Russian nuclear war, temperatures in the central US and Eurasia would fall below freezing every day for one to three years; the intense cold would completely eliminate growing seasons for a decade or longer. No crops could be grown, leading to a famine that would kill most humans and large animal populations. Electromagnetic pulse from high-altitude nuclear detonations would destroy the integrated circuits in all modern electronic devices, including those in commercial nuclear power plants. Every nuclear reactor would almost instantly meltdown; every nuclear spent fuel pool (which contain many times more radioactivity than found in the reactors) would boil off, releasing vast amounts of long-lived radioactivity. The fallout would make most of the US and Europe uninhabitable. Of course, the survivors of the nuclear war would be starving to death anyway. Once nuclear weapons were introduced into a US-Russian conflict, there would be little chance that a nuclear holocaust could be avoided. Theories of “limited nuclear war” and “nuclear de-escalation” are unrealistic. In 2002 the Bush administration modified US strategic doctrine from a retaliatory role to permit preemptive nuclear attack; in 2010, the Obama administration made only incremental and miniscule changes to this doctrine, leaving it essentially unchanged. Furthermore, Counterforce doctrine – used by both the US and Russian military – emphasizes the need for preemptive strikes once nuclear war begins. Both sides would be under immense pressure to launch a preemptive nuclear first-strike once military hostilities had commenced, especially if nuclear weapons had already been used on the battlefield. Both the US and Russia each have 400 to 500 launch-ready ballistic missiles armed with a total of at least 1800 strategic nuclear warheads, which can be launched with only a few minutes warning. Both the US and Russian Presidents are accompanied 24/7 by military officers carrying a “nuclear briefcase,” which allows them to transmit the permission order to launch in a matter of seconds. Yet top political leaders and policymakers of both the US and Russia seem to be unaware that their launch-ready nuclear weapons represent a self-destruct mechanism for the human race. For example, in 2010, I was able to publicly question the chief negotiators of the New START treaty, Russian Ambassador Anatoly Antonov and (then) US Assistant Secretary of State Rose Gottemoeller, during their joint briefing at the UN (during the Non-Proliferation Treaty Review Conference). I asked them if they were familiar with the recent peer-reviewed studies that predicted the detonation of less than 1% of the explosive power contained in the operational and deployed US and Russian nuclear forces would cause catastrophic changes in the global climate, and that a nuclear war fought with their strategic nuclear weapons would kill most people on Earth. They both answered “no.” More recently, on April 20, 2014, I asked the same question and received the same answer from the US officials sent to brief representatives of the NGOS at the Non-Proliferation Treaty Preparatory Committee meeting at the UN. None of the US officials at the briefing were aware of the studies. Those present included top officials of the National Security Council. It is frightening that President Obama and his administration appear unaware that the world’s leading scientists have for years predicted that a nuclear war fought with the US and/or Russian strategic nuclear arsenal means the end of human history. Do they not know of the existential threat these arsenals pose to the human race . . . or do they choose to remain silent because this fact doesn’t fit into their official narratives? We hear only about terrorist threats that could destroy a city with an atomic bomb, while the threat of human extinction from nuclear war is never mentioned – even when the US and Russia are each running huge nuclear war games in preparation for a US-Russian war. Even more frightening is the fact that the neocons running US foreign policy believe that the US has “nuclear primacy” over Russia; that is, the US could successfully launch a nuclear sneak attack against Russian (and Chinese) nuclear forces and completely destroy them. This theory was articulated in 2006 in “The Rise of U.S. Nuclear Primacy,” which was published in Foreign Affairs by the Council on Foreign Relations. By concluding that the Russians and Chinese would be unable to retaliate, or if some small part of their forces remained, would not risk a second US attack by retaliating, the article invites nuclear war. Colonel Valery Yarynich (who was in charge of security of the Soviet/Russian nuclear command and control systems for 7 years) asked me to help him write a rebuttal, which was titled “Nuclear Primacy is a Fallacy.” Colonel Yarynich, who was on the Soviet General Staff and did war planning for the USSR, concluded that the “Primacy” article used faulty methodology and erroneous assumptions, thus invalidating its conclusions. My contribution lay in my knowledge of the recently published (in 2006) studies, which predicted even a “successful” nuclear first-strike, which destroyed 100% of the opposing side’s nuclear weapons, would cause the citizens of the side that “won” the nuclear war to perish from nuclear famine, just as would the rest of humanity.

#### Growth key to space col---extinction---justified because 2NC read 5 new impacts

Everett 16 (Sean, CEO of Prome Biological Intelligence, a global biotechnology company, editor of Medium’s news outlet dedicated to space colonialization titled “The Mission”, BS Mathematics & Actuarial Science, MBA from UChicago,“Humanity’s Extinction Event Is Coming” https://medium.com/the-mission/humanitys-extinction-event-is-coming-c0f84f1803f)

But the reality is that an asteroid impact, a change in our magnetic field, or the rising temperature of Earth’s climate are all events that we currently cannot escape. There is no back-up plan. We are, for better or worse, tied to the fate of this planet. As history has shown, that’s not a good fate to be tied to. In fact on September 7, 2016 a 30-foot asteroid flew between the Earth and the Moon. Our most powerful instruments only detected it with two days notice. Two days. If the asteroid was only 1000-foot wide, it would destroy all human life and we’d have no back-up to get out of it. Even the White House is worried about it. Five, yes five, major extinction events have occurred on our planet that we know about. We’re due for another. And when that happens, what’s our alternative? You can’t move to another house. You can’t buy survival, even with a billion dollars in the bank. The only way out, is up. We must find a way to become multi-planetary if we want to save humanity, your family, and yes, even yourself. Only this can restore the honor we seemed to have lost from the brave days of the 60s, while also ensuring our survival. It’s for the species, folks. And as a species, we have not allowed ourselves the opportunity to blast off for the stars. Only the space race in the 60s when we were afraid enough of a self-inflicted global extinction event (read: nuclear) that we put forth the funding required to launch into orbit and onto our moon. We didn’t have calculators back then, and now we have supercomputers in our pocket, but no one is allowed out of our atmosphere, save for a few communication and spy satellites. Doesn’t that make you mad? It’s not some oppressive government that tells us no. It’s us. We pay our taxes. We elect leaders. Those leaders choose Defense as the primary budget line item, but forget about defending against the forthcoming apocalypse. Funding for NASA in the United States has decreased from 4% of the national budget in the 60s to about 0.5% from 2010 onwards. That’s just the money side. But in order to move past this threshold from our home planet to space and then onto other planets, we need to do two things: Travel there. Survive. Luckily, we can simplify the problem of passing this barrier by sending machines in our place. Like TARS from Interstellar, they can go places humans cannot and explore the environment for habitability and resources, even in particularly hostile conditions. Maybe not black hole hostile, but definitely Mars hostile, as the Curiosity Rover has shown. Only now, with a few bold, private startups are we beginning to see a re-emergence of the space industry. We are about to pass a few very important tests that allow us to explore and visit the cosmos. The first is launching physical things into space. This is the catalyst that will jump start a new space race. Prices of sending cargo are falling dramatically, down to nearly $500 per pound of payload with SpaceX’s Falcon 9 heavy re-usable rocket. Note that the re-usable part is key. We can’t throw away our “space car” every time we Uber it. And once that becomes standard and cost-optimized we might be able to get that down to $10 per pound. Imagine what could happen when it costs the same amount to ship something across town as it does into space. The second, and this is just as important, is the wave of autonomous machines. Tesla has popularized the notion of self-driving cars. SpaceX lands their rocket onto a small barge in the ocean autonomously. Companies are buying startups in the space. Self-driving will be our gift, our talisman, on the quest to save the species by becoming multi-planetary. II. Shipping Ourselves to Space The graph below is from the Founders Fund manifesto, showing the decreasing cost of launching something into space. It begins with the 1960s US-versus-Russia space race and extends to the present day SpaceX-versus-Blue Origin reusable rocket race. The cheapest method we have today is SpaceX’s Falcon series rockets. With the Falcon 9 Heavy, it’s predicted launching cargo into space will be cheaper than ever before, at $750 per pound of payload delivered to low earth orbit (LOE)on an expendable rocket. You have to note here, however, that these statistics are as cheap as possible. It costs more to deliver payload on a non-reusable rocket, and on something that’s further out than LEO, like geosynchronous orbit, or to Mars. For example, based on SpaceX’s published pricing, it would be at least 4x more expensive to deliver far less cargo to Mars. So what happens when we reduce that cost to $10 per pound? Namely, an explosion of startups, much like iOS. Instead of pushing to production for your continuously deployed web and mobile app, we will see future developers push to production by deploying physical things into space. “STAGE” takes on an entirely new meaning for software developers when it means your automated regression tests fail, it could blow up a rocket and hurt people on board. That’s why SpaceX and Blue Origins exist. To make this continuous-deployment-to-space process as cheap and fast as possible. By Elon’s calculations, every 15 minutes. III. Self-Driving Space Explorers The most successful products for space, at least in the beginning, will make money by pushing this stuff into orbit. Things like science experiments and new 3D printers. A company called Made in Space creates a number of these products, including the empty box you see below used for sending things up with Blue Origin. The box shown in gray is a specialized 3D printer that works in zero gravity. Remember how most 3D printers work. It squeezes out a single layer of liquid ooze, and then another, over and over again until it builds up enough vertically that it creates an object. This can be simple plastic or more esoteroic metals. But when you’re “dripping” something, held down in place by gravity, the entire process has to be re-imagined for space. Things in zero-G would just float away. Enter these chaps. There’s also the very real need for oxygen, food, water, and shelter from the harsh elements. Funny how we will end up recreating Maslow’s Heirarchy in every new voyage or planetoid we want to colonize. And space mining is off to the races with the recent announcement of Deep Space Industry’s Prospector-1: Their vision is to extract water from asteroids and use the chemical components to hydrate us, but also as oxygen (breathing) and hydrogen (fuel). To do that, you have to identify candidate asteroids, physically get to them, land and attach, and then do surveying, prospecting, and extraction. In short, you’re going to need some level of self-driving capabilities to make this happen. And wouldn’t it be nice if it “just worked” right out of the box. Unfortunately, in space you don’t have fleets of these space craft, millions of miles of training data, maps, or an internet connection to the cloud so how the heck are deep learning algorithms going to work? I don’t think they will. And that’s what I believe we need a better approach.

#### Bioterror

Blum\* and Neumann\*, 20 - \* senior scientist within the verification division of the Organization for the Prohibition of Chemical Weapons in The Hague, \*\* computer-science researcher, German journalist and academic studying terrorism ( \*Marc-Micael and \*\*Peter, ‘Corona and Bioterrorism: How serious is the threat?’, june 22 2020, <https://warontherocks.com/2020/06/corona-and-bioterrorism-how-serious-is-the-threat/> )//hecht

Among terrorists, however, the use of biological weapons has been rarer, although groups from nearly all ideological persuasions have contemplated it. Recent examples include a plot to contaminate Chicago’s water supply in the 1970s; food poisoning by a religious cult in Oregon in the 1980s; and the stockpiling of ricin by members of the Minnesota Patriot Council during the 1990s. No one died in any of these instances. The same is true for the biological warfare programs of al-Qaeda and the Islamic State group. Both groups have sought to buy, steal, or develop biological agents. For al-Qaeda, this seems to have been a priority in the 1990s, when its program was overseen by (then) deputy leader Ayman al-Zawahiri, a trained physician. With the Islamic State, evidence dates back to 2014, when Iraqi forces discovered thousands of files related to biological warfare on a detainee’s laptop. Yet none of these efforts succeeded. The only al-Qaeda plot in which bioterrorism featured prominently — the so-called “ricin plot” in England in 2002 — was interrupted at such an early stage that none of the toxin had actually been produced. The Islamic State’s most serious attempt, in 2017, involved a small amount of ricin, whose only fatality was the hamster on which it was tested. Of the tens of thousands of people that jihadists have murdered, not a single one has died from biological agents. It may be no accident that the most lethal bioterrorist attack in recent decades was perpetrated by a scientist and government employee. In late 2001, the offices of several U.S. senators and news organizations received so-called “anthrax letters,” which killed five people and injured 17. Following years of investigation, the FBI identified the sender as Bruce Ivins, a PhD microbiologist and senior researcher at the U.S. Army’s Medical Research Institute of Infectious Diseases. Unlike the others, he was no amateur or hoaxer, but a trained expert with years of experience and full access to the world’s largest repository of lethal biological agents. Technical Challenges Ivins’ case helps to explain why so many would-be bioterrorists have failed. At a technical level, launching a sophisticated, large-scale bioterrorist attack involves a toxin or a pathogen — generally a bacterium or a virus — which needs to be isolated and disseminated. But this is more difficult than it seems. As well as advanced training in biology or chemistry, isolating the agent requires significant experience. It also has to be done in a safe, contained environment, to stop it from spreading within the terrorist group. Contrary to what al-Qaeda said in one of its online magazines, you can’t just make a (biological) weapon “in the kitchen of your mom!” In addition, there is the challenge of dissemination. Unless the agent is super-contagious, a powerful biological attack relies on a large number of initial infections in perfect conditions. In the case of the bacterium anthrax, for example, only spores of a particular size are likely to be effective in certain kinds of weather. State-sponsored programs often needed years of testing and experimentation to understand how their weapons could be used. Though not impossible, it is unlikely that terrorist groups possess the resources, stable environment, and patience to do likewise. Doomsday Scenarios Even if terrorists somehow succeeded, it is nearly inconceivable that the resulting “weapon” would be as powerful as the recent coronavirus, SARS-CoV-2. One of its uniquely devastating features has been that people are infectious while experiencing no symptoms. As it spread across the globe, there was no treatment, no vaccine, an incomplete understanding of its pathological modes of action, and no easy, cheap and widely available testing. It was the viral equivalent of a “zero-day exploit” — a cyber-attack that happens before any patch is available. None of the viruses on the U.S. Centers for Disease Control and Prevention’s list of the most dangerous biological agents could be easily “weaponized” or would have the same, devastating effects as SARS-CoV-2. Pathogenic viruses such as smallpox, Ebola, Marburg, and Lassa are extremely hard to find, isolate, and spread. Botulinum and ricin are dangerous toxins, but not contagious, while Tularemia cannot be transmitted from human to human. The plague is, of course, capable of causing pandemics, but most countries are nowadays well prepared for this particular virus, and will be able to limit — and cope with — localized outbreaks. This leaves only anthrax, a soil bacterium which is relatively easy to obtain. Even so, isolating a highly pathogenic strain is difficult. More importantly, anthrax is not contagious, and while its spores are durable and affected areas can be hard to de-contaminate, it is unable to spread on its own. Regarding SARS-CoV-2, it is important to distinguish between the possibility that the virus occurred naturally and escaped from a laboratory, and the idea that it was engineered for maximum infectiousness and deliberately released. The first remains a possibility, although other explanations are equally — if not more — plausible, while the second has been debunked by a comprehensive examination in the journal Nature Medicine, which concluded that SARS-CoV-2 was “not a laboratory construct or a purposefully manipulated virus.” The chances that terrorists would be capable of engineering a virus such as SARS-CoV-2 without access to a state’s resources are virtually zero. If anything, the possibility of a lab escape — however remote — highlights the importance of biosafety. While governments have paid much attention to laboratories with the highest biosafety level (level 4), work on bat-born coronaviruses is regularly performed at lower levels (level 3, and even level 2), and should instead be subject to similar safety requirements. In sum, small-scale attacks using anthrax or other agents may be possible, but the risk of a highly advanced, weaponized pathogen that spreads among large populations — a terrorist-initiated biological doomsday — is very low. The only exception, of course, is if terrorists received support from a state, acted as its proxies, or were able to draw on its resources — as in Ivins’ case.

#### Disease

Adalja 16 [Amesh Adalja, infectious disease physician at the University of Pittsburgh] “Why Hasn't Disease Wiped out the Human Race?” June 17, 2016 (http://www.theatlantic.com/health/archive/2016/06/infectious-diseases-extinction/487514/) - MZhu

But when people ask me if I’m worried about infectious diseases, they’re often not asking about the threat to human lives; they’re asking about the threat to human life. With each outbreak of a headline-grabbing emerging infectious disease comes a fear of extinction itself. The fear envisions a large proportion of humans succumbing to infection, leaving no survivors or so few that the species can’t be sustained. I’m not afraid of this apocalyptic scenario, but I do understand the impulse. Worry about the end is a quintessentially human trait. Thankfully, so is our resilience. For most of mankind’s history, infectious diseases were the existential threat to humanity—and for good reason. They were quite successful at killing people: The 6th century’s Plague of Justinian knocked out an estimated 17 percent of the world’s population; the 14th century Black Death decimated a third of Europe; the 1918 influenza pandemic killed 5 percent of the world; malaria is estimated to have killed half of all humans who have ever lived. Any yet, of course, humanity continued to flourish. Our species’ recent explosion in lifespan is almost exclusively the result of the control of infectious diseases through sanitation, vaccination, and antimicrobial therapies. Only in the modern era, in which many infectious diseases have been tamed in the industrial world, do people have the luxury of death from cancer, heart disease, or stroke in the 8th decade of life. Childhoods are free from watching siblings and friends die from outbreaks of typhoid, scarlet fever, smallpox, measles, and the like. So what would it take for a disease to wipe out humanity now? In Michael Crichton’s The Andromeda Strain, the canonical book in the disease-outbreak genre, an alien microbe threatens the human race with extinction, and humanity’s best minds are marshaled to combat the enemy organism. Fortunately, outside of fiction, there’s no reason to expect alien pathogens to wage war on the human race any time soon, and my analysis suggests that any real-life domestic microbe reaching an extinction level of threat probably is just as unlikely. Any apocalyptic pathogen would need to possess a very special combination of two attributes. First, it would have to be so unfamiliar that no existing therapy or vaccine could be applied to it. Second, it would need to have a high and surreptitious transmissibility before symptoms occur. The first is essential because any microbe from a known class of pathogens would, by definition, have family members that could serve as models for containment and countermeasures. The second would allow the hypothetical disease to spread without being detected by even the most astute clinicians. The three infectious diseases most likely to be considered extinction-level threats in the world today—influenza, HIV, and Ebola—don’t meet these two requirements. Influenza, for instance, despite its well-established ability to kill on a large scale, its contagiousness, and its unrivaled ability to shift and drift away from our vaccines, is still what I would call a “known unknown.” While there are many mysteries about how new flu strains emerge, from at least the time of Hippocrates, humans have been attuned to its risk. And in the modern era, a full-fledged industry of influenza preparedness exists, with effective vaccine strategies and antiviral therapies. HIV, which has killed 39 million people over several decades, is similarly limited due to several factors. Most importantly, HIV’s dependency on blood and body fluid for transmission (similar to Ebola) requires intimate human-to-human contact, which limits contagion. Highly potent antiviral therapy allows most people to live normally with the disease, and a substantial group of the population has genetic mutations that render them impervious to infection in the first place. Lastly, simple prevention strategies such as needle exchange for injection drug users and barrier contraceptives—when available—can curtail transmission risk. Ebola, for many of the same reasons as HIV as well as several others, also falls short of the mark. This is especially due to the fact that it spreads almost exclusively through people with easily recognizable symptoms, plus the taming of its once unfathomable 90 percent mortality rate by simple supportive care. Beyond those three, every other known disease falls short of what seems required to wipe out humans—which is, of course, why we’re still here. And it’s not that diseases are ineffective. On the contrary, diseases’ failure to knock us out is a testament to just how resilient humans are. Part of our evolutionary heritage is our immune system, one of the most complex on the planet, even without the benefit of vaccines or the helping hand of antimicrobial drugs. This system, when viewed at a species level, can adapt to almost any enemy imaginable. Coupled to genetic variations amongst humans—which open up the possibility for a range of advantages, from imperviousness to infection to a tendency for mild symptoms—this adaptability ensures that almost any infectious disease onslaught will leave a large proportion of the population alive to rebuild, in contrast to the fictional Hollywood versions. While the immune system’s role can never be understated, an even more powerful protector is the faculty of consciousness. Humans are not the most prolific, quickly evolving, or strongest organisms on the planet, but as Aristotle identified, humans are the rational animals—and it is this fundamental distinguishing characteristic that allows humans to form abstractions, think in principles, and plan long-range. These capacities, in turn, allow humans to modify, alter, and improve themselves and their environments. Consciousness equips us, at an individual and a species level, to make nature safe for the species through such technological marvels as antibiotics, antivirals, vaccines, and sanitation. When humans began to focus their minds on the problems posed by infectious disease, human life ceased being nasty, brutish, and short. In many ways, human consciousness became infectious diseases’ worthiest adversary.

#### Soil

UNCTAD 17. “The role of science, technology and innovation in ensuring food security by 2030.” The United Nations Conference on Trade and Development. New York and Geneva. May. <http://unctad.org/en/PublicationsLibrary/dtlstict2017d5_en.pdf>.

A number of new technologies and techniques are making more sustainable fertilizer use viable. New methods of nitrogen fixation and other fertilizer components that avoid the current capital- and energy-intensive methods could make nutrient supplementation more environmentally sustainable. A recent study found that nitrogen-fixing trees within critical water and temperature thresholds can increase yields by improving both the water-holding capacity of soil and water infiltration rates (Folberth, 2014; United Nations, 2015b). For example, “N2Africa” is a large-scale, science-based development-to-research project focused on putting nitrogen fixation to work for smallholder farmers growing legume crops in Africa (Giller et al., 2013).17

New technologies to make biological fertilizers (composting, manure or dung) more viable and effective could also increasingly replace the use of synthetic fertilizers. Nigeria’s National Research Institute for Chemical Technology (NARICT) has developed neem-based fertilizer and organic fertilizer from Moringa oleifera, which is environmentally friendly.1816 However, such biological fertilizers, in particular those made from human waste, may require sanitation infrastructure. Furthermore, precision agriculture can help facilitate the precise application of inputs to crop type and soil conditions in ways that increase yields while minimizing potential environmental impacts (Box 2) (Buluswar et al., 2014).

#### Insects

Miller 2016- Robert Wesson Fellow in Scientific Philosophy and Public Policy @ Hoover  
Henry I, "The Buzz: Six Reasons Not to Worry about the Beeswww.forbes.com/sites/henrymiller/2016/08/24/the-buzz-seven-reasons-not-to-worry-about-the-bees/2/#1abb6357488a

Bees are in the news, but for all the wrong reasons—mainly, dire tales of disappearing bees threatening a third of our food supply. Time Magazine, opting for sensationalism over accuracy, said we were headed toward “A world without bees,” with an online video explaining, “Why bees are going extinct.” They called it the “beepocalypse” and blamed it all on modern agricultural technologies, urging immediate and aggressive action before it’s too late. This would be scary stuff indeed—if it were true. But like so many overly simplistic, sky-is-falling claims, these predictions are misleading and false. Activist groups like Loonies of the Earth—sorry, I mean Friends of the Earth—and the Pesticide Action Network work tirelessly to provide the media a steady stream of suitable doom-and-gloom material that they and other groups then use for “save the bees” fundraising opportunities. Bees are popular, even iconic. The public naturally wants them to survive, but it simply isn’t true that honeybees are about to disappear–so they don’t need “saving.” The truth about the bees turns out to be far more complex, and far more interesting, than the alarmist headlines suggest. 1. There are billions more bees than a decade ago In 2015, the U.S. Department of Agriculture counted 2,660,000 million honeybee colonies across the United States. A decade earlier, in 2004, there were 2,556,000 honeybee colonies. That’s a gain of 104,000 colonies, not a loss. At around 50,000 bees per colony, that’s an increase of five billion honeybees in the United States. The overall honeybee numbers in the United States have stayed steady at about 2.5 million colonies for the last two decades, dipping slightly when the mysterious “colony collapse disorder” (CCD) hit in 2006, then rebounded at a healthy clip and actually reached a 20-year high in 2014. Europe and Canada have experienced significant increases in their honeybee populations as well, and worldwide, there are 30 million more hives today than in 1961, an increase of about 60%. That means there about 1.5 trillion more bees buzzing around today than there were 50 years ago. There simply is no bee-pocalypse and never was. The way thousands of reporters and editors of supposedly serious publications were able to turn a massive expansion of bee populations into a cataclysmic near-extinction event is, well, beyond bee-lief. 2. Bees are always dying–and reproducing–at an “alarming” rate Not so long ago, amusing photos spread across the Internet adorned with the phrase, “bees are dying globally at an alarming rate.” The first of these memes depicted Eli Manning, the New York Giants quarterback, purportedly pondering unhappily the fate of the pollinators. While it’s true that beekeepers in the U.S. are having increasing trouble keeping their hives healthy, and that hive losses have been elevated in recent years, if it weren’t a spoof, I’d suggest that Manning should worry less about bees being blitzed and more about the adequacy of his own offensive line. High losses, while they may create economic hardship for some beekeepers, don’t spell catastrophe. That’s because bees also reproduce “at an alarming rate,” or at least, very, very quickly. Unlike the animals we tend to be more familiar with, honeybees have an exceptionally short lifespan–about six weeks. It is shorter during warm weather months and in perennially warm climates where honeybees never go into winter hibernation, or “cluster.” Many generations of honeybees are born and die within any given year, so rapid rises and falls in population numbers within any given year are common. Recently, the Bee Informed Partnership–which conducts an annual survey of U.S. beekeepers–decided to add the warm weather losses to the traditional count of overwinter losses to come up with the startling announcement that, “Beekeepers lost 41 percent of Bees in 2015-2016.” Bee Informed is funded by USDA, and this change in reporting was a sure-fire way to heighten concern and therefore increase funding dollars for the U.S. government (pardon my cynicism), but it did little to enlighten anyone as to what was really going on with bees. Not surprisingly, most journalists reported this as if our entire bee population was on the verge of being wiped out in the space of a few years. A May CBS News headline, for example, read, “Death rate for honeybees takes turn for the worse.” As usual in “if it bleeds, it leads” journalism, there was no mention that even with these cataclysmic-sounding losses, the U.S. bee population was still very near a two-decade high. 3. Bees are livestock, just like cattle Activists spread hysteria about dying honeybees because it advances their political aims. They want the public to think the happy little bees we see buzzing about our gardens are about to draw their final breath, and that their imminent disappearance will threaten the world’s ability to feed itself. The exact opposite of this apocalyptic theory is true: Agricultural production guarantees steady honeybee numbers because of the potent effects of market forces. The honeybee is a domesticated species, imported from Europe. Like cattle and other livestock, bees are raised in the numbers needed, in this case to pollinate agricultural crops. Human intervention is the driving force underlying their population numbers. Certainly, hives can experience severe health problems, usually driven by disease caused by mites and viruses, and those hives can collapse or die. The rest of the story, however, is that given the demand for bees, beekeepers adapt to losses by “splitting” a healthy hive to grow more bees to suit their needs. One of the most basic beekeeping skills is to divide an existing colony and introduce (or grow) a new queen for the “new” hive. The new queen, which can be ordered online for as little as $25, will lay enough eggs—about 2,000 a day—so that what was once a single hive becomes two hives. With a little help from its human friends, nature is resilient. Honeybee numbers fluctuate with beekeepers’ expectations about market conditions, including domestic and overseas demand for specific types of honey or other bee byproducts. 4. Crop pesticides aren’t killing honeybees Activists’ political goal is to convince regulators and lawmakers to ban the most popular agricultural chemicals, especially a class of insecticides called neonicotinoids, or neonics for short. They have had some success in doing so by blaming the disappearance of honeybees, which isn’t actually happening, on neonics. This is a particularly obnoxious attack since modern crop protection products such as neonics are actually designed to target harmful pests while, when used according to the instructions on the label, keeping beneficial insects like honeybees as safe as possible. There are several ways we know neonicotinoids aren’t killing bees. First of all, bees aren’t attracted to the most popular U.S. crops like corn, rice, soybean and wheat, which account for the majority of neonic usage. Honeybees would come into contact with neonics used on these crops only if beekeepers place their colonies close to fields that are about to be planted so that dust from the planting machines might drift and spread to the hive. This is a rather simple problem to fix, by ensuring beekeepers and farmers talk to one another so they know when to keep the bees away. Second, 98% of the time, neonics aren’t sprayed on crops at all but are used as seed treatments. This high-tech approach is what makes the product friendly to bees and other non-target organisms while still being lethal to biting insects that attack plants at the earliest stage, when they are most vulnerable. Bees forage much later, on nectar and pollen from flowers. By the time bee-attracting, neonic- seed-treated crops reach the flowering stage, the amount of neonics expressed in crop pollen (and, for crops that produce it, nectar) is extremely low. A small amount of the pesticide is applied to the seed, and as the plant grows, the chemical becomes more and more diluted, to the point that it has no significant effect on bees. That’s why bees positively thrive in Canada’s extensive canola fields, which are almost 100% grown from seeds treated with neonicotinoids. A good account of the Canadian experience can be found in the blog, “Alberta Buzzing,” by Lee Townsend, one of Alberta’s most successful beekeepers. Like other beekeepers in Alberta, he loves neonics because they keep the canola healthy, and canola produces a particularly tasty brand of honey. There’s more evidence. Since neonics arrived on the scene in the mid-1990′s, honeybee hive numbers have climbed. Bee populations fell before neonics were introduced. That was due in large part to the loss of small farms, with their individual beehives, after World War II, and the devastation wrought by the Varroa destructor mite, which hit the U.S. in the mid-1980′s and which bee scientists recognize is the chief cause of bee health problems. But as soon as the supposedly evil neonics were introduced around 1995, bee populations have been steady or climbing. And yet, activists and some journalists continue to blame neonics for bees’ non-existent “declines.” Go figure. The fact is, if pesticides are sometimes a problem, it’s not neonics. Study after study confirms that neonic residues in hives tends to be extremely low, and that the pesticide residues that are found in much greater amounts in beehives tend to be pesticides introduced by beekeepers themselves to control the invasive Varroa mite. Studies conducted in the field under realistic scenarios inevitably arrive at the same result: Neonics introduce no observable harmful effects on honeybees under field-realistic conditions. 5. Beekeepers are sometimes the bees’ worst enemy Studies show consistently that when honeybee colonies do meet an unnatural and untimely death, more often than not the cause is a parasite or disease. By far the biggest threat is the Varroa destructor mite, mentioned above. In second place is the Nosema ceranae gut fungus. These nasty pests have reached an epidemic scale in U.S. honeybee hives and are driving the bulk of honeybee-hive losses over the winter months, forcing beekeepers to split more hives in the spring to maintain their numbers. There’s a human factor as well. The prime culprit in the rapid spread of disease is the beekeepers’ annual cross-country journey to California’s Central Valley for the almond crop pollination. About 60% of the nation’s bee hives are trucked in from as far away as Florida for this this event, which takes place between January and March. That’s worth repeating. Well over half of all the bee hives in the U.S. are put on trucks every year and hauled across the continental United States to service one crop: almonds. The bees, which have barely emerged from their winter cluster, are often stressed to the breaking point. Then they all mix with one another, ensuring that a disease that surfaces in one part of the country soon spreads to the rest. Once a hive is infected with one of these parasites, it may be a challenge for even a skilled beekeeper to salvage the situation. Under these stressful conditions, untrained beekeepers might fail to act in time, leading to higher losses, or they might use too much of the wrong pesticide inside the hive to bring the mites under control. The result in both cases is a dead colony. Beekeepers who don’t want to acknowledge their mistakes find convenient scapegoats like neonics. Such mishaps are becoming more and more common as amateurs take up beekeeping as a hobby to do their part to “save the bees.” They don’t realize that if they don’t put in the time and effort to do it right, they become the Typhoid Mary of the industry, spreading diseases fatal to their, and other, hives. 6. Bees are responsible for one-fourteenth of our food, not one-third Pretty much every claim the activists make is bogus, even the statement that one-third of crops would not exist without bee pollination. That chestnut is endlessly repeated in news articles, and even some scientific journals. As the Genetic Literacy Project reported, the figure is based on a flawed analysis buried in a 1976 report on pollination. Here’s why it’s wrong. The majority of crops we consume, including corn, rice and wheat, are self-pollinated. While a third of other crops do benefit from bee pollination, they are not fully dependent on it. Some crops see a “moderate” benefit from bees, while others are “highly dependent” upon it. A 2000 Cornell study more carefully apportioned the value of bees to each crop and arrived at a $15 billion valuation for the service of bees to agriculture. That compares to U.S. agriculture’s production of $197 billion worth of food in the year studied, which means the bees were only responsible for 7.4%, or one-fourteenth, of our food supply. In any case, honeybees aren’t the only, or even the most important, pollinators. There are some 4,000 native bee species in the U.S., and repeated studies have shown them to be doing fine (the major exceptions are some bumblebee species that were infected by disease from commercial beekeeping operations). A 2015 study published in Nature Communications found that only 2% of wild bee species are responsible for almost 80% of the crop pollination performed by wild bees, and that these bees are thriving. (And note that these wild bees would have the most extensive contact with neonics–more proof that those insecticides aren’t a problem.) Moreover, bees aren’t the only pollinators. Other important animal pollinators include butterflies, moths, bats, beetles, flies and hummingbirds. Even cockroaches and termites can sometimes act as pollinators, though these cases appear limited. And, of course, there’s also the wind. Don’t be stung by misinformation about bees. Keep in mind the six facts above the next time anyone—whether an activist, bureaucrat or “journalist” who can’t be bothered to check his facts—tries to scare you with fables about the woes of bees. The friendly pollinators, and the food supply they help to grow, are flourishing.

#### Warming irreversible – only corporatism solves through CCS and a bridge to renewables

Graciela 9/1/16 – Professor of Economics and of Statistics at Columbia University and Visiting Professor at Stanford University, and was the architect of the Kyoto Protocol carbon market (being interviewed by Marcus Rolle, freelance journalist specializing in environmental issues and global affairs, “Reversing Climate Change: Interview with Graciela Chichilnisky,” http://www.globalpolicyjournal.com/blog/01/09/2016/reversing-climate-change-interview-graciela-chichilnisky)//cmr

GC: Green capitalism is a new economic system that values the natural resources on which human survival depends. It fosters a harmonious relationship with our planet, its resources and the many species it harbors. It is a new type of market economics that addresses both equity and efficiency. Using carbon negative technology™ it helps reduce carbon in the atmosphere while fostering economic development in rich and developing nations, for example in the U S., EU, China and India. How does this work? In a nutshell Green Capitalism requires the creation of global limits or property rights nation by nation for the use of the atmosphere, the bodies of water and the planet’s biodiversity, and the creation of new markets to trade these rights from which new economic values and a new concept of economic progress emerges updating GDP as is now generally agreed is needed. Green Capitalism is needed now to help avert climate change and achieve the goals of the 2015 UN Paris Agreement, which are very ambitious and universally supported but have no way to be realized within the Agreement itself. The Carbon Market and its CDM play critical roles in the foundation of Green Capitalism, creating values to redefine GDP. These are needed to remain within the world’s “CO2 budget” and avoid catastrophic climate change. As I see it, the building blocks for Green Capitalism are then as follows; (1) Global limits nation by nation in the use of the planet’s atmosphere, its water bodies and biodiversity - these are global public goods. (2) New global markets to trade these limits, based on equity and efficiency. These markets are relatives of the Carbon Market and the SO2 market. The new market create new measures of economic values and update the concept of GDP. (3) Efficient use of Carbon Negative Technologies to avert catastrophic climate change by providing a smooth transition to clean energy and ensuring economic prosperity in rich and poor nations. These building blocks have immediate practical implications in reversing climate change and can assist the ambitious aims of Paris COP21 become a reality. MR: What is the greatest advantage of the new generation technologies that can capture CO2 from the air? GC: These technologies build carbon negative power plants, such as Global Thermostat, that clean the atmosphere of CO2 while producing electricity. Global Thermostat is a firm that is commercializing a technology that takes CO2 out of air and uses mostly low cost residual heat rather than electricity to drive the capture process, making the entire process of capturing CO2 from the atmosphere very inexpensive. There is enough residua heat in a coal power plant that it can be used to capture twice as much CO2 as the plant emits, thus transforming the power plant into a “carbon sink.” For example, a 400 MW coal plant that emits 1 million tons of CO2 per year can become a carbon sink absorbing a net amount of 1 million tons of CO2 instead. Carbon capture from air can be done anywhere and at any time, and so inexpensively that the CO2 can be sold for industrial or commercial uses such as plastics, food and beverages, greenhouses, bio-fertilizers, building materials and even enhanced oil recovery, all examples of large global markets and profitable opportunities. Carbon capture is powered mostly by low (85°C) residual heat that is inexpensive, and any source will do. In particular, renewable (solar) technology can power the process of carbon capture. This can help advance solar technology and make it more cost-efficient. This means more energy, more jobs, and it also means economic growth in developing nations, all of this while cleaning the CO2 in the atmosphere. Carbon negative technologies can literally transform the world economy. MR: One final question. You distinguish between long-run and short-run strategies in the effort to reverse climate change. Would carbon negative technologies be part of a short-run strategy? GC: Long-run strategies are quite different from strategies for the short-run. Often long-run strategies do not work in the short run and different policies and economic incentives are needed. In the long run the best climate change policy is to replace fossil fuel sources of energy that by themselves cause 45% of the global emissions, and to plant trees to restore if possible the natural sources and sinks of CO2. But the fossil fuel power plant infrastructure is about 87% of the power plant infrastructure and about $45-55 trillion globally. This infrastructure cannot be replaced quickly, certainly not in the short time period in which we need to take action to avert catastrophic climate change. The issue is that CO2 once emitted remains hundreds of years in the atmosphere and we have emitted so much that unless we actually remove the CO2 that is already there, we cannot remain long within the carbon budget, which is the concentration of CO2 beyond which we fear catastrophic climate change. In the short run, therefore, we face significant time pressure. The IPCC indicates in its 2014 5th Assessment Report that we must actually remove the carbon that is already in the atmosphere and do so in massive quantities, this century (p. 191 of 5th Assessment Report). This is what I called a carbon negative approach, which works for the short run. Renewable energy is the long run solution. Renewable energy is too slow for a short run resolution since replacing a $45-55 trillion power plant infrastructure with renewable plants could take decades. We need action sooner than that. For the short run we need carbon negative technologies that capture more carbon than what is emitted. Trees do that and they must be conserved to help preserve biodiversity. Biochar does that. But trees and other natural sinks are too slow for what we need today. Therefore, negative carbon is needed now as part of a blueprint for transformation. It must be part of the blueprint for Sustainable Development and its short term manifestation that I call Green Capitalism, while in the long run renewable sources of energy suffice, including Wind, Biofuels, Nuclear, Geothermal, and Hydroelectric energy. These are in limited supply and cannot replace fossil fuels. Global energy today is roughly divided as follows: 87% is fossil, namely natural gas, coal, oil; 10% is nuclear, geothermal, and hydroelectric, and less than 1% is solar power — photovoltaic and solar thermal. Nuclear fuel is scarce and nuclear technology is generally considered dangerous as tragically experienced by the Fukushima Daichi nuclear disaster in Japan, and it seems unrealistic to seek a solution in the nuclear direction. Only solar energy can be a long term solution: Less than 1% of the solar energy we receive on earth can be transformed into 10 times the fossil fuel energy used in the world today. Yet we need a short-term strategy that accelerates long run renewable energy, or we will defeat long-term goals. In the short term as the IPCC validates, we need carbon negative technology, carbon removals. The short run is the next 20 or 30 years. There is no time in this period of time to transform the entire fossil infrastructure — it costs $45-55 trillion (IEA) to replace and it is slow to build. We need to directly reduce carbon in the atmosphere now. We cannot use traditional methods to remove CO2 from smokestacks (called often Carbon Capture and Sequestration, CSS) because they are not carbon negative as is required. CSS works but does not suffice because it only captures what power plants currently emit. Any level of emissions adds to the stable and high concentration we have today and CO2 remains in the atmosphere for years. We need to remove the CO2 that is already in the atmosphere, namely air capture of CO2 also called carbon removals. The solution is to combine air capture of CO2 with storage of CO2 into stable materials such as biochar, cement, polymers, and carbon fibers that replace a number of other construction materials such as metals. The most recent BMW automobile model uses only carbon fibers rather than metals. It is also possible to combine CO2 to produce renewable gasoline, namely gasoline produced from air and water. CO2 can be separated from air and hydrogen separated from water, and their combination is a well-known industrial process to produce gasoline. Is this therefore too expensive? There are new technologies using algae that make synthetic fuel commercially feasible at competitive rates. Other policies would involve combining air capture with solar thermal electricity using the residual solar thermal heat to drive the carbon capture process. This can make a solar plant more productive and efficient so it can out-compete coal as a source of energy. In summary, the blueprint offered here is a private/public approach, based on new industrial technology and financial markets, self-funded and using profitable greenmarkets, with securities that utilize carbon credits as the “underlying” asset, based on the KP CDM, as well as new markets for biodiversity and water providing abundant clean energy to stave off impending and actual energy crisis in developing nations, fostering mutually beneficial cooperation for industrial and developing nations. The blueprint proposed provides the two sides of the coin, equity and efficiency, and can assign a critical role for women as stewards for human survival and sustainable development. My vision is a carbon negative economy that represents green capitalism in resolving the Global Climate negotiations and the North–South Divide. Carbon negative power plants and capture of CO2 from air and ensure a clean atmosphere together innovation and more jobs and exports: the more you produce and create jobs the cleaner becomes the atmosphere. In practice, Green Capitalism means economic growth that is harmonious with the Earth resources.

#### Regrowth is inevitable, but they doom renewables

Damir Tokic, 12, ((Damir, PhD in international finance, professor of finance @ University of Monaco. "The economic and financial dimensions of degrowth," Ecological Economics. Volume 84, December 2012, Pages 49–56. Science Daily.)

Following (or ideally during) the economic implosion (which happens quickly), we would logically expect a fiscal and monetary policy intervention as explained by Bernanke (2002). As a result, assuming that Bernanke is correct, the extraordinary monetary policy intervention would eventually create positive inflation and stabilize the economy and asset prices. Consequently, given pent-up consumer demand during the crisis and the lean inventories following the deflationary “scare”, we would expect a new long-term cycle of positive economic growth to resume. Thus, our key argument is that a gradual long-term negative GDP growth (as illustrated in Fig. 1) is unsustainable and not possible to achieve in a market economy. Rather, we argue that it is more likely that the economy would quickly adjust to long term negative GDP growth expectations, or implode, which would be followed by another long-term growth cycle, given the policy intervention during the implosion. In a broader sense, it is unlikely that even ecological concerns can be addressed by degrowth as illustrated in Fig. 1. First, the environmental issues would be less important during the economic implosion, which could delay the development of sustainable alternative energy. Second, while the environmental picture could temporarily improve during the economic implosion, the carrying capacity will eventually be exceeded yet again as the economic growth resumes, as we illustrate in Fig. 2. Third, given that crude oil is an investable asset, it is likely that the price of crude oil would correct during the implosion due to deleveraging, deflation, and the decrease in demand for energy, which are likely to be only temporarily positive for ecological concerns. However, the temporary lower crude oil prices would also put climate change issues on the backburner, and thus, limit the interest in development of alternative energy projects. Thus, in the long run, the economic implosion would be a net negative for ecological concerns. As soon as the economy rebounds, energy consumption growth would resume and eventually exceed the carrying capacity, this time perhaps even more damaging for the environment due to the significantly delayed development of effective alternative energy sources. To summarize our key argument, O'Neill (2012) illustrates degrowth in Fig. 1 as a sustainable transition phase, or a process, during which the size of the economy gradually declines to an environmentally sustainable level over a long period of time. However, our analysis suggests that the degrowth scenario would cause a shock to the overall economy. Thus, the degrowth phase would be very short and implosive, as illustrated in Fig. 2. We base our argument on the prediction that the stock market would crash if faced by a degrowth economic forecast, which would cause more deleveraging and reinforce the vicious cycle of deflation. Further, O'Neill (2012) suggests that the degrowth phase is likely to be followed by the SSE or a flat GDP growth within the environmental limits (Fig. 1). We suggest that the economic implosion caused by the degrowth scenario is likely to be followed by a new cycle of economic growth, which would eventually reach and exceed the environmental limits (Fig. 2). Thus, our key suggestion is that degrowth is unsustainable as an explicit economic policy.

#### Financialization impact empirically denied – growth sustainable

**Kaplan 17** [Steven N., Neubauer Family Professor of Entrepreneurship and Finance at the University of Chicago Booth School of Business, “Are U.S. Companies Too Short-Term Oriented? Some Thoughts,” May 2017, <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2972117>]

U.S. companies are frequently criticized for focusing too much on the short run and not enough on the long run. For example, Laurence Fink, the CEO of BlackRock, one of the largest money managers, wrote that “the effects of the short-termist phenomenon are troubling . . . more and more corporate leaders have responded with actions that can deliver immediate returns to shareholders, such as buybacks or dividend increases, while underinvesting in innovation, skilled workforces or essential capital expenditures necessary to sustain long-term growth.”1 The Report of the Commission on Inclusive Prosperity (co-chaired by Larry Summers) similarly weighed in, “An additional reason for the absence of inclusive prosperity is the changing nature of corporate behavior. Business leaders, government officials and academics have pointed out that corporations have shifted their traditional focus on long-term profit maximization to maximizing short-term stock-market valuations. One reason that economists have advanced for this transition to corporate short- termism is the overwhelming shift to stock-market-based compensation for CEOs and other highly compensated executives at publicly traded corporations.”2 In other words, these critics argue that US companies as a group destroy value by not investing for the long run. More formally, the short-term argument can be summarized as follows. U.S companies as a group underinvest in capital expenditures as well as research and development. According to the argument, this benefits the companies in the short- term, but harms the companies in the long run where the short-term is usually defined as the current quarter or, perhaps, current year or two, while the long-term would be more than five years out. Poor corporate governance and overly generous pay plans for CEOs that reward short-term behavior are often cited as accomplices to short-termism.3 The critics also point to empirical evidence to support their positions. For example, Graham et al. (2005) survey 401 financial executives and find that 78 percent would sacrifice long-term value to smooth earnings. Others point to corporate dividends and buybacks. Lazonick (2014) shows that S&P 500 companies paid out over 90% of their net income in dividends and share repurchases, leaving little available for investment in the long-term. Lazonick and others contend that companies buy back their own stock to boost their share prices in the short run, regardless of the long-term impact. These criticisms, however, are not new. They have been raised, prominently, in some form or another since the late 1970s. In this paper, I present those historical criticisms. I then consider the implications of sustained short-termism for corporate profits, venture capital investment and returns, private equity investment and returns, and corporate valuations. In fact, there is **very little long-term evidence** that is consistent with the predictions of the short-term critics.4 1. Some Short-termist History The criticism that US companies are plagued by short-termism and poor governance has a long history. In 1980, Harvard Business School’s Robert H. Hayes and William J. Abernathy wrote an influential article criticizing American companies for being too short-term oriented: “By their preference for servicing existing markets rather than creating new ones and by their devotion to short-term returns and management by the numbers, many of them have effectively forsworn long-term technological superiority as a competitive weapon. In consequence, they have abdicated their strategic responsibilities.” Similarly, Marty Lipton wrote in 1979: “It would not be unfair to pose the policy issue as: Whether the long-term interests of the nation’s corporate system and economy should be jeopardized in order to benefit speculators interested . . . only in a quick profit . . . ?” In 1992, Harvard’s Michael E. Porter repeated the argument: “The U.S. system of allocating investment capital is failing, putting American companies at a serious disadvantage and threatening the long-term growth of the nation's economy… Many American companies invest too little, particularly in those intangible assets and capabilities required for competitiveness – R&D, employee training and skills development … The U.S. system, first and foremost advances the goals of shareholders at the expense of the long-term performance of American companies. In global competition, where investment increasingly determines a company's capacity to upgrade and innovate, the U.S. system does not measure up.” And the short-term argument is being repeated today by the likes of Laurence Fink and Larry Summers. While some, like Fink, focus on public companies, the arguments of Abernathy and Hayes, Porter, Summers refer to the overall U.S. economy. 2. U.S. Corporate Profits It is clear from the previous section that critiques of U.S. businesses as overly short-term oriented have been with us for at least 35 years. And the criticisms have not changed much, if at all, in their basic tenor. But, this has **very strong implications** for the short-term argument. It’s been more than 35 years since the publication of the Hayes and Abernathy article, and 25 years since the appearance of Porter’s. By any measure, today is the long-term that U.S. companies supposedly have underinvested in since the 1980s. Accordingly, the short-term logic implies that U.S. business should be performing poorly today. But **that is unequivocally not the case**. Figure 1 reports U.S. corporate profits before tax as a fraction of GDP since 1951. Today, corporate profits are near all-time highs (over that post-war period). The uptrend began just around the time of the Hayes and Abernathy article, and has continued since. The early 1980s is precisely the time that many observers believe finance and the goal of shareholder value maximization became ascendant. It is also the time that Wall Street and the financial sector began to grow substantially—both in the US and internationally. The early 1980s also coincided with the rise of management consultants who spread techniques across US firms and across the world.5 In 1980, consulting firms were relatively new and relatively small. Today, McKinsey & Company has offices in more than 60 countries; the Boston Consulting Group has offices in more than 40. And the early 1980s also coincided with an explosion in information technology and globalization. Consistent with the increase in corporate profits, both Autor et al. (2017) and Burkai (2016) explore explanations for the strong corporate profitability and, concomitant, weak labor share of GDP. Whatever its source, the strong profitability of U.S. corporations is difficult for the short-termists to explain. It is obviously not consistent with poor corporate performance over the long-term. Nevertheless, short-termists continue to repeat the criticisms of the 1980s and 1990s. It is worth adding that the strong corporate performance also is inconsistent with poor corporate governance overall, suggesting that criticisms of U.S. corporate governance also are overstated. This is arguably the type of example that the quote by John Stuart Mill that begins this paper had in mind.

#### Tech solves resources

Alex Epstein 14, Director of the Center for Industrial Progress, "Alex Epstein: The sustainability myth," 12/24/14, news.nationalpost.com/2014/12/24/alex-epstein-the-sustainability-myth/

Modified for gendered language – insertions bracketed

But nature gives us very few directly usable machine energy resources. Resources are not taken from nature, but created; from nature. What applies to the raw materials of coal, oil, and gas also applies to every raw material in nature — they are all potential resources, with unlimited potential to be rendered valuable by the human mind.

Ultimately, a resource is just matter and energy transformed via human ingenuity to meet human needs. Well, the planet we live on is 100% matter and energy, 100% potential resource for energy and anything else we would want. To say we’ve only scratched the surface is to significantly understate how little of this planet’s potential we’ve unlocked. We already know that we have enough of a combination of fossil fuels and nuclear power to last thousands and thousands of years, and by then, hopefully, we’ll have fusion (a potential, far superior form of nuclear power) or even some hyper-efficient form of solar power.

The amount of raw matter and energy on this planet is so incomprehensibly vast that it is nonsensical to speculate about running out of it. Telling us that there is only so much matter and energy to create resources from is like telling us that there is only so much galaxy to visit for the first time. True, but irrelevant.

Sustainability is not a clearly defined term. According to the United Nations, it has over a thousand interpretations, but the basic idea is “indefinitely repeatable.” For example, the idea of renewability, which is usually synonymous with sustainability in the realm of energy, is that the fuel source keeps replenishing itself over and over without the need to do anything different.

But why is this an ideal? In most realms, we accept and desire constant change. For example, you want the best phone with the best materials, regardless of whether those materials will be there in 200 years and regardless of whether it would be more “renewable” to use two cups and a string.

Why should we want to use solar panels or windmills over and over (leaving aside the fact that they quickly deteriorate and thus require a continuous series of mass-mining projects) if they keep giving us expensive, unreliable energy? Why not use the best, the most progressive form of energy at any given time, recognizing that this will change as we advance and the best becomes better?

At the beginning of this book, we observed that human beings survive by using ingenuity to transform nature to meet their needs — i.e., to produce and consume resources. And we observed that the motive power of transformation, the amplifier of human ability, the resource behind every other resource, is energy — which, for the foreseeable future, means largely fossil fuel energy. There is no inherent limit to energy resources — we just need human ingenuity to be free to discover ways to turn unusable energy into usable energy. This opens up a thrilling possibility: the endless potential for improving life through ever-growing energy resources helping create ever-growing resources of every kind. This is the principle that explains the strong correlation between fossil fuel use and life expectancy, fossil fuel use and income, fossil fuel use and pretty much anything good: human ingenuity transforming potential resources into actual resources — including the most fundamental resource, energy.

Growth is not unsustainable. With freedom, including the freedom to produce energy, it is practically inevitable. We are not eating the last slice of pizza in the box or scraping the bottom of the barrel; we are standing on the tip of an endless iceberg.

#### Massive opposition prevents a transition.

Martin WEISS AND Claudio CATTANEO 17. \*\*European Commission – Joint Research Centre, Directorate C – Energy, Transport and Climate, Sustainable Transport Unit. \*\*Autonomous University of Barcelona. “Degrowth – Taking Stock and Reviewing an Emerging Academic Paradigm.” *Ecological Economics* 137(July): 220-30. Emory Libraries.

5.1.5. Implementation of Degrowth

The global cultural and institutional heritage suggests that degrowth transitions will likewise be diverse (Buch-Hansen, 2014), resulting in hybrid systems that comprise both elements of degrowth and the historically prevailing order (Boonstra and Joosse, 2013). While governance will arguably be critical to manage degrowth transitions (Borowy, 2013), the definition of verifiable targets might be equally important: By how much and until when will certain activities have to degrow so that persisting sustainability shortfalls can be addressed? The answer to such a question will likely be case-specific and subject to normative considerations. Yet, once clarified, implementation strategies for concrete policies could be devised.

Fotopoulos (2010a, 2010b) and Trainer (2010, 2014) emphasize the incompatibility of degrowth and the market economy but elaborate little on concrete policy scenarios to foster a large-scale transition towards more equitable societies. A reduction in working time (e.g., van den Bergh, 2011; Alcott, 2013; Knight et al., 2013; Andreoni and Galmarini, 2014; Fitzgerald et al., 2015) represents a concrete proposal that has received broader attention and could indeed find wide-spread support.

The implementation of dedicated policies may depend on the communication of degrowth objectives and practices to a wider audience. The importance of advertisement and nudging is touched by, e.g., van den Bergh (2011) and Spangenberg (2014); yet analyses on the effectiveness of information channels, including the aforementioned social media, to change consumer behavior and social norms are yet missing. Anecdotal evidence suggests that policies hampering business activity and consumption (van den Bergh, 2011) through taxation, cost internalization, environmental and labor standards without providing clear benefits to a larger group of stakeholders will face severe political opposition.

A limited number of case-studies has analyzed grass-root projects such as housing communities, eco-villages, rurban squats and concrete historical recessions cases (e.g., Cattaneo and Gavaldà, 2010; Lietaert, 2010; Nierling, 2012; Boillat et al., 2012; Canavan, 2013; Xue, 2014). As the findings of Xue (2014) suggest, spatial decentralization in eco-villages may come with negative social and environmental impacts. We see important knowledge gaps in the monitoring of existing degrowth implementations and the assessment of direct and indirect sustainability impacts, which can then lead to an adaptation of practices.

#### Pursuit is inevitable

Barry R. Posen 13, the Ford International Professor of Political Science and Director of the Security Studies Program at the Massachusetts Institute of Technology, Jan/Feb 2013, “Pull Back: The Case for a Less Activist Foreign Policy,” Foreign Affairs, [http://www.foreignaffairs.com/articles/138466/barry-r-posen/pull-back?page=show#](http://www.foreignaffairs.com/articles/138466/barry-r-posen/pull-back?page=show)

Despite a decade of costly and indecisive warfare and mounting fiscal pressures, the long-standing consensus among American policymakers about U.S. grand strategy has remained remarkably intact. As the presidential campaign made clear, Republicans and Democrats may quibble over foreign policy at the margins, but they agree on the big picture: that the United States should dominate the world militarily, economically, and politically, as it has since the final years of the Cold War, a strategy of liberal hegemony. The country, they hold, needs to preserve its massive lead in the global balance of power, consolidate its economic preeminence, enlarge the community of market democracies, and maintain its outsized influence in the international institutions it helped create. ¶ To this end, the U.S. government has expanded its sprawling Cold War-era network of security commitments and military bases. It has reinforced its existing alliances, adding new members to NATO and enhancing its security agreement with Japan. In the Persian Gulf, it has sought to protect the flow of oil with a full panoply of air, sea, and land forces, a goal that consumes at least 15 percent of the U.S. defense budget. Washington has put China on a watch list, ringing it in with a network of alliances, less formal relationships, and military bases.

### Adv---Modeling

### Adv---Democracy

### CP---Econ advantage

### CP---Multilat advantage

### CP---Inequality advantage