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#### The aff is based on neoliberal exploitation, which makes monopolies and violence inevitable ⁠— only the alt solves

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One of these is the inexorable tendency of competition to lead to monopoly under capitalism. Competition means winners and losers. By definition, not everyone can win when competing. Competition means rivalry for supremacy. Thousands compete in the Olympics, for example, but only a select few (“winners”) go home with a gold medal.[1] It is no accident that the economy, media, and politics are heavily monopolized by a handful of billionaires while billions of people who actually produce the wealth in society and run society remain marginalized and disempowered. This brutal reality cannot be reversed or overcome with the utterance of a few platitudes, the passage of some policies, or the creation of some agencies that claim to be able to fix the outdated economic system, especially when all of the above come from billionaires themselves. On July 9, 2021, President Joe Biden issued an Executive Order on Promoting Competition in the American Economy (https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/). The order is about 7,000 words long and full of anticonscious statements. Disinformation pervades the entire order. The opening paragraph begins with the following disinformation: By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to promote the interests of American workers, businesses, and consumers, it is hereby ordered…. Here, “American workers, businesses, and consumers” are casually misequated and no mention is made of citizens or humans. The implication is that consumerism is normal, healthy, and desirable, and that workers and big business somehow have the same aims, world outlook, and interests. This conceals the fact that owners of capital and workers have antagonistic irreconcilable interests and that people exist as humans and citizens, not just utilitarian consumers and shoppers in a taken-for-granted system based on chaos, anarchy, and violence.

Disinformation is further escalated in the next paragraph:

A fair, open, and competitive marketplace has long been a cornerstone of the American economy, while excessive market concentration threatens basic economic liberties, democratic accountability, and the welfare of workers, farmers, small businesses, startups, and consumers. “Market concentration” has been the norm for generations. Monopolies, cartels, and oligopolies have been around since the late 1800s. Mergers and acquisitions have been taking place non-stop for decades. The so-called “free market” largely disappeared long ago. Objectively, there can be no fairness in a system rooted in wage-slavery and empire-building. Wage-slavery is the precondition for the tendency of the rich to get richer and the poor poorer. It is not a recipe for prosperity and security for all. This is also why inequality, tyranny, violence, and surveillance have been growing over the years. Moreover, what “threatens basic economic liberties, democratic accountability, and the welfare of workers, farmers, small businesses, startups, and consumers” is the ongoing political and economic exclusion of people from control over the economy and their lives by the financial oligarchy. There can be no liberty, accountability, and welfare when most people are deprived of real decision-making power and major owners of capital make all the decisions. Problems would not constantly worsen if people had control over their lives. The “best allocation of resources” cannot be made when the economy is carved up, fractured, and controlled by competing owners of capital. Although recurring economic crises for well over a century have repeatedly discredited “free market” ideology, the 7,000-word executive order is saturated with the language of “choice,” “competition,” and “consumers.” This is the same worn-out language used by privatizers of all hues at home and abroad. Further, while the executive order gives many examples of “economic consolidation” in numerous sectors, the government is not interested in creating a self-reliant vibrant diverse economy that meets the needs of all. It is not committed to reversing “the harmful effects of monopoly and monopsony.” Numerous antitrust laws have not stopped either. Big mergers and acquisitions have been going on for years. Rather, the executive order is an attempt to restructure economic and political arrangements among different factions of the wealthy elite; it reflects a new stage or form of inter-capitalist rivalry for even greater domination of the economy by fewer owners of capital. In other words, moving forward, the economy will remain monopolized by a few monopolies. Wealth is only going to become more concentrated in fewer hands in the years ahead. Mountains of data from hundreds of sources document growing wealth and income inequality every year. The bulk of the executive order is filled with endless directives, strategies, rules, and suggestions for how to curb “unfair practices” and promote “fairness” and “competition.” But these all ring hollow given concrete realities and past experience. Today, governments at all levels have been taken over by global private monopoly interests and have become instruments of decisions made on a supranational basis. There is a fine-tuned revolving door between officials from government and the private sector; they have become synonymous for all essential purposes. The same people who run major corporations also serve in high-level government positions where they advance the narrow interests of the private sector and then they leave government and return to their high-level corporate positions. There is a reason why the majority of members of Congress are millionaires. The Executive Branch in the United States, especially the President’s Office, is a major tool for the expression of the will of the most powerful monopolies. This is why billions of dollars are spent every few years to select the President of the country. A modern economy must be controlled and directed by workers themselves. Only such an economy can provide for the needs of all and avoid endless economic distortions. Uneven economic development, “unfair” arrangements, “market concentration,” monopolies, oligopolies, and recurring crises cannot be avoided so long as those who actually produce the social product have no control over the social product. Workers have first claim to the wealth they produce and have the right to decide how, where, and when that wealth is used. Major owners of capital are historically superfluous and a big block to progress. They are not needed for a healthy vibrant self-reliant economy that meets the needs of all.

#### Competition necessitates racism and antiblackness; all capitalism is racial capitalism ⁠— the system of competition the aff perpetuates cannot sustain itself without theft of indigenous land, super-exploitation of black labor, imperial extraction, and racist devaluation of ‘disposable populations’

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\*2 point font and paragraph merging for readability

\*Footnote 14 is inserted below the paragraph it’s cited in, other footnotes excluded for readability

Drawing on the intellectual production of twentieth-century Black anticapitalists, I theorize modern U.S. racial capitalism as a racially hierarchical political economy constituting war and militarism, imperialist accumulation, expropriation by domination, and labor superexploitation.14 The racial here specifically refers to Blackness, defined as African descendants’ relationship to the capitalist mode of production—their structural location—and the condition, status, and material realities emanating therefrom.15 It is out of this structural location that the irresolvable contradiction of value minus worth arises. Stated differently, Blackness is a capacious category of surplus value extraction essential to an array of political-economic functions, including accumulation, disaccumulation, debt, planned obsolescence, and absorption of the burdens of economic crises.16 At the same time, Blackness is the quintessential condition of disposability, expendability, and devalorization.

[Footnote 14]: Another feature of modern U.S. racial capitalism is property by dispossession. In Theft Is Property! Dispossession and Critical Theory, Robert Nichols draws on the experience of Indigenous peoples in the United States, Canada, and New Zealand to theorize how the “system of landed property” was fundamentally predicated on violent dispossession. While the Anglo-derived legal-political regimes differed in these localities, the “intertwined and co-constitutive” material effects converged in the legalized theft of indigenous territory amounting in “approximately 6 percent of the total land on the surface of Earth.” Such dispossession, Nichols notes, is recursive: “In a standard formulation one would assume that ‘property’ is logically, chronologically, and normatively prior to ‘theft.’ However, in this (colonial) context, theft is the mechanism and means by which property is generated: hence its recursivity. Recursive dispossession is effectively a form of property-generating theft.” As such, theft and dispossession, through property regimes, are an ongoing feature of the Indigenous reality of modern U.S. racial capitalism. Robert Nichols, Theft Is Property! Dispossession and Critical Theory (Durham: Duke University Press, 2020), 50–51.

My operationalization of capitalism follows Oliver Cromwell Cox’s explication in Capitalism and American Leadership.17 Modern U.S. racial capitalism arose in the context of the First World War, when, as Cox explains, the United States took advantage of the conflict to capture the markets of South America, Asia, and Africa for its “over-expanded capacity.”18 Cox further expounds upon this auspicious moment of ascendant modern U.S. racial capitalism thus: By 1914, the United States had brought its superb natural resources within reach of intensive exploitation. Under the stimulus of its foreign-trade outlets, the financial assistance of the older capitalist nations, and a flexible system of protective tariffs, the nation developed a magnificent work of transportation and communication so that its mines, factories, and farms became integrated into an effectively producing organism having easy access to its seaports.… [Likewise,] further internal expansion depended upon far greater emphasis on an ever widening foreign commerce.… Major entrepreneurs of the United States proceeded to step up their campaign for expansion abroad. The war accentuated this movement. It accelerated the growth of [modern] American [racial] capitalism and impressed upon its leaders as nothing had before the need for external markets.19 Relatedly, Peter James Hudson argues that the First World War fundamentally changed the terms of order of international finance, allowing New York to compete with London, Paris, and Berlin for the first time in the realm of global banking. This was not least because the Great War “drastically reordered global credit flows,” with the United States transforming from a debtor into a creditor nation.20 In addition to Latin American and Caribbean nations and businesses turning to the United States for financing and credit, domestic saving and investment patterns were altered to the benefit of imperial financial institutions like the City Bank.21 Although the United States is, to use Cox’s terminology, more a “lusty child of an already highly developed capitalism” than an exceptional capitalist power, the nation perfected its techniques of accumulation through its vast natural wealth, large domestic market, imbalance of Northern and Southern economies, and, importantly, through its lack of concern for the political and economic welfare of the overwhelming masses of its population, least of all the descendants of the enslaved.22 Modern U.S. racial capitalism is thus sustained by military expenditure, the maintenance of an extremely low standard of living in “dependent” countries, and the domestic superexploitation of Black toilers and laborers. Cox notes that Black labor has been the “chief human factor” in wealth production; as such, “the dominant economic class has always been at the motivating center of the spreads of racial antagonism. This is to be expected since the economic content of the antagonism, especially at its proliferating source in the South, has been precisely that of labor-capital relations.”23 In a general sense, racial capitalism in the United States constitutes “a peculiar variant of capitalist production” in which Blackness expresses a structural location at the bottom of the labor hierarchy characterized by depressed wages, working conditions, job opportunities, and widespread exclusion from labor unions.24 Furthermore, modern U.S. racial capitalism is rooted in the imbrication of anti-Blackness and antiradicalism. Anti-Blackness describes the reduction of Blackness to a category of abjection and subjection through narrations of absolute biological or cultural difference; ruling-class monopolization of political power; negative and derogatory mass media propaganda; the ascent of discriminatory legislation that maintains and reinscribes inequality, not least various modes of segregation; and social relations in which distrust and antipathy toward those racialized as Black is normalized and in which “interracial mass behavior involving violence assumes a continuously potential danger.”25 Anti-Blackness thus conceals the inherent contradiction of Blackness—value minus worth—obscuring and distorting its structural location by, as Ralph and Singhal remark, contorting it into only a “debilitated condition.”26 Antiradicalism can be understood as the physical and discursive repression and condemnation of anticapitalist and/or left-leaning ideas, politics, practices, and modes of organizing that are construed as subversive, seditious, and otherwise threatening to capitalist society. These include, but are not limited to, internationalism, anti-imperialism, anticolonialism, peace activism, and antisexism. Anti-Blackness and antiradicalism function as the legitimating architecture of modern U.S. racial capitalism, which includes rationalizing discourses, cultural narratives, technologies of repression, legal structures, and social practices that inform and are informed by racial capitalism’s political economy.27 Throughout the twentieth century, anti-Blackness propelled the “Black Scare,” defined as the specter of racial, social, and economic domination of superior whites by inferior Black populations. Antiradicalism, in turn, was enunciated through the “Red Scare,” understood as the threat of communist takeover, infiltration, and disruption of the American way of life.28 For example, in the 1919 Justice Department Report, Radicalism and Sedition Among the Negroes, As Reflected in Their Publications, it was asserted that the radical antigovernment stance of a certain class of Negroes was manifested in their “ill-governed reaction toward race rioting,” “threat of retaliatory measures in connection with lynching,” open demand for social equality, identification with the Industrial Workers of the World (IWW), and “outspoken advocacy of the Bolshevik or Soviet doctrine.”29 Here, anti-Blackness, articulated through the fear of the “assertion of race consciousness,” was attached to the IWW and Bolshevism—in other words, to anticapitalism—to make it appear even more subversive and dangerous. Likewise, antiradicalism, expressed through the denigration of the IWW and Soviet Doctrine, was made to seem all the more threatening and antithetical to the social order in its linkage with Black insistence on equality and self-defense against racial terrorism. In this way, “defiance and insolently race-centered condemnation of the white race” and “the Negro seeing red” came to be understood as seditious in the context of modern U.S. racial capitalism. The link between my theory of modern U.S. racial capitalism and Robinson’s catholic theory of racial capitalism, beyond his “suggest[ion] that it was there,” is vivified through the prison abolitionist and scholar Ruth Wilson Gilmore, who writes: “Capitalism…[is] never not racial.… Racial capitalism: a mode of production developed in agriculture, improved by enclosure in the Old World, and captive land and labor in the Americas, perfected in slavery’s time-motion, field factory choreography, its imperative forged on the anvils of imperial war-making monarchs.”30 Racial capitalism, she continues, “requires all kinds of scheming, including hard work by elites and their compradors in the overlapping and interlocking space-economies of the planet’s surface. They build and dismantle and reconfigure states, moving capacity into and out of the public realm. And they think very hard about money on the move.”31 Perhaps more than Gilmore, though, my approach aligns with that of Neville Alexander as described by Hudson.32 Like Alexander, who focused on South Africa, I offer a particularistic understanding of racial capitalism, mine being rooted in the political economy of Blackness and the legitimating architectures of anti-Blackness and antiradicalism in the United States. Gilmore qua Robinson offers a more universalist and transhistorical conception. Like Alexander, my theory of modern U.S. racial capitalism is primarily rooted in (Black) Marxist-Leninists and fellow travelers. This is an important epistemological distinction: whereas Robinson finds Marxism-Leninism to be, at best, inattentive to race, my theory of modern U.S. racial capitalism is rooted in the work of Black freedom fighters who, as Marxist-Leninists, were able to offer potent and enduring analyses and critiques of the conjunctural entanglements of racialism, white supremacy, and anti-Blackness, on the one hand, and capitalist exploitation and class antagonism on the other hand.33 Although Robinson draws on scholars like Fernand Braudel, Henri Pirenne, David Brion Davis, and Eli Heckscher to understand European history, socialist theory, and the European working class, the work of Black Marxists like James Ford, Walter Rodney, Amílcar Cabral, and Paul Robeson offer me those same intellectual, historical, and theoretical resources. Finally, I agree with Alexander that the resolution to racial capitalism is antiracist socialism, not a cultural-metaphysical Black radical tradition. In what remains of this essay, I will draw on the work of Black Marxist-Leninists and anticapitalists to explicate the defining features of modern U.S. racial capitalism—war and militarism, imperialist accumulation, expropriation by domination, labor superexploitation, and property by dispossession. In this, I demonstrate that their critiques and analyses offer a blueprint for theorizing modern U.S. racial capitalism. War and militarism facilitate the endless drive for profit. Military conflicts between imperial powers result in the reapportioning of boundaries, possessions, and spheres of influence that often exacerbate racial and spatial economic subjection. War and militarism also perpetuate the endless construction of “threats,” primarily in racialized and socialist states, against which to defend progress, prosperity, freedom, and security. The manufacturing of conflict legitimates the mobilization of extraordinary violence to expropriate untold resources that produce relations of underdevelopment, dependency, extraversion, and disarticulation in the Global South. Moreover, the ruling elite and labor aristocracy in imperialist countries, not least the United States, wage perpetual war to defend their way of life and standard of living against the racialized majority who, because they would benefit most from the redistribution of the world’s wealth and resources, represent a perpetual threat. Here, Du Bois’s 1915 essay, “The African Roots of War,” is instructive.34 Though he does not directly analyze the United States, he nonetheless demonstrates how racism, white supremacy, and the plunder of Africa underpinned the capitalist imperialist war that engulfed the world from July 1914 to November 1918—a war that catapulted the United States into the center of the capitalist world system. Using Du Bois’s own words, Hubert Harrison, the father of Harlem radicalism, makes the direct link: But since every industrial nation is seeking the same outlet for its products, clashes are inevitable and in these clashes beaks and claws—armies and navies—must come into play. Hence beaks and claws must be provided beforehand against the day of conflict, and hence the exploitation of white men in Europe and America becomes the reason for the exploitation of black and brown and yellow men in African and Asia. And, therefore, it is hypocritical and absurd to pretend that the capitalist nations can ever intend to abolish wars.… For white folk to insist upon the right to manage their own ancestral lands, free from the domination of tyrants, domestic and foreign, is variously described as “democracy” and “self-determination.” For Negroes, Egyptians and Hindus to seek the same thing is impudence.… Truly has it been said that “the problem of the 20th century is the problem of the ‘Color Line.'” And wars are not likely to end; in fact, they are likely to be wider and more terrible—so long as this theory of white domination seeks to hold down the majority of the world’s people under the iron heel of racial oppression.35 For Du Bois, the imperialist rivalry for the booty on offer in Africa drove Berlin’s efforts to consolidate its place in the sun by displacing London in particular. While Vladimir Lenin understood that “the war [was] a product of half a century of development of world capitalism and of billions of threads and connections,” Du Bois expanded this analysis by providing a critique of the racial foundations of capitalist expansion.36 He held that the struggle to the death during the Great War for African resources and labor had begun to “pay dividends” centuries earlier through the enslavement of African peoples, the subsequent conflation of color and inferiority, and the reduction of what was routinely referred to as the “Dark Continent” to a space of backwardness ideally suited for dispossession. He further noted that “with the waning possibility of Big Fortune…at home, arose more magnificently the dream of exploitation abroad,” especially in Africa—a dream shared by white labor and the ruling class.37 In other words, this “democratic despotism” allowed for the white working class to “share the spoil of exploiting ‘chinks and niggers,'” and facilitated the creation of “a new democratic nation composed of united capital and labor” that perpetuated racial capitalism across class lines.38 Moreover, this national unity was strengthened through the disrespect and dehumanization of the racialized toilers and peasants in the plundered colonies that mitigated the exploitation and impoverishment of the white working class in imperial countries. This superexploitation allowed white workers to get a share, however pitiful, of “wealth, power, and luxury…on a scale the world never saw before” and to benefit from the “new wealth” accumulated from the “darker nations of the world” through cross-class consent “for governance by white folk and economic subjection to them”—a consensus solidified through the doctrine of “the natural inferiority of most men to the few.”39 Given the entanglement of racialization and capitalist exploitation, Du Bois averred, “Racial slander must go. Racial prejudice will follow…the domination of one people by another without the other’s consent, be the subject people black or white, must stop. The doctrine of forcible economic expansion over subject people must go.” Insofar as this admonishment applied as much to the United States as to European imperialists, beyond the international proletariat, it was the darker peoples and nations of the world who would challenge racial capitalism, not least “the twenty-five million grandchildren of the European slave trade…and first of all the ten million black folk in the United States.”40

Imperialist accumulation denotes the rapacious conscription of resources and labor for the purpose of superprofits through violent means that are generally reserved for populations deemed racially inferior. On the precipice of the Great Depression, the prominent Black communist James Ford beautifully explicated imperialist accumulation. In his 1929 report on the Second World Congress of the League Against Imperialism, he explained that the extant political economy constituted the consolidation of Africa’s partition and the “complete enslavement of its people”; the arresting of its industrialization, which hindered the development of the “toiling masses”; and the relegation of the continent to a source of raw material, a market for European goods, and a dumping ground for accumulated surplus capital. In the U.S. South, the Black poor were dehumanized by Wall Street, “white big business,” and the “rising Negro bourgeoisie” whose condition of possibility was the subjection of the Black working class. This oppression was exacerbated by rigid racial barriers, disenfranchisement, and lynching. Ford further argued that the West Indies, subjected to U.S. militarism and occupation on behalf of Wall Street, were largely transformed into a marketplace for U.S. goods. Moreover, throughout Africa, the U.S. South, and the Caribbean, Black workers were impressed into forced labor, laying railroads, building roads and bridges, and working in mines; were entrapped on plantations through peonage; and were subjected to convict leasing. In addition, they suffered intolerable working conditions and routinized violence.41 Expropriation by domination designates the seizure and confiscation of land, assets, property, bodies, and other sources of material wealth set to work by relations of economic dependence. This relationship exists both between nations and between groups. A quintessential enunciation of expropriation by domination between groups is We Charge Genocide: The Historic Petition to the United Nations for Relief from a Crime of the United States Government Against the Negro People, edited by the Black Communist William Patterson (with significant help from his wife and comrade Louise Thompson Patterson) and submitted to the United Nations by the Civil Rights Congress in 1951.42 The petition meticulously documented the past and present expropriation of Black people by the ruling class of modern U.S. racial capitalism through consistent and persistent discrimination in employment, unfair wages, forced ghettoization, inequitable and inferior accommodation and services, and the denial of justice in the courts. It further argued that this process was sustained by genocidal terror, white supremacist law, and the drive of monopoly capitalists for superprofits. Importantly, We Charge Genocide noted that, for primarily economic reasons, the historical and geographical locus of anti-Black genocide was the “Black Belt” of the Southern United States, a region expropriated by the Northern industrial capitalists and by Southern landowners alike. This was due in large part to plantation systems of sharecropping and peonage—legacies of slavery—in which Black political and economic rights were virtually nonexistent, Black laborers were inexorably tied to the land through debt, and the threat of violence and death precluded demands for justice. For Patterson, such expropriation by domination was the basis of “racist contamination that has spread throughout the United States.”43 We Charge Genocide further conveyed that expropriation by domination, a central element of modern U.S. racial capitalism, was more than a domestic concern because such practices “at home must inevitably create racist commodities for export abroad—must inevitably tend toward war.”44 Labor superexploitation can be understood as an economic relationship in which the intensity, form, and racial basis of exploitation differs little from slavery. Its effects are so extreme that it pushes racialized, particularly Black, labor effectively below the level of sheer physical subsistence. As Harrison explained, in the context of modern U.S. racial capitalism, Black workers “form a group that is more essentially proletarian than any other American group” because enslaved Africans were brought to the “new world” to be ruthlessly exploited. This reality fixed their social status as the most despised group, which in turn intensified their subjection.45 Likewise, organizations like the American Negro Labor Congress and the Anti-Imperialist League analyzed that the racial capitalist superexploitation of Black nations like Haiti in the first quarter of the twentieth century for the purposes of consolidating Wall Street control over land, commercial relations, and production was accompanied by the brutalization of Black labor, the export of Jim Crow practices, military occupation, and political repression.46 In effect, superexploitation results from the conjuncture of white supremacy, racialization, and the “badge of slavery,” which exacerbates the conditions of exploitation to which white working classes are subjected. As the Black Marxist Harry Haywood argued in 1948, “the stifling effects of the race factor are most strikingly illustrated by the drastic differences in the economic and cultural status of Negroes and whites.… Beyond all doubt, the oppression of the Negro, which is the basis of the degradation of the ‘poor whites,’ is of separate character demanding a special approach.”47 Superexploitation, he explained further, constitutes a combination of direct exploitation, outright robbery, physical violence, legal coercion, and perpetual indebtedness. It stifles “the free economic and cultural development” of the Black masses “through racist persecution as a basic condition for maintaining” virtual enslavement.48 The entrapment of Black women in domestic labor throughout the twentieth century—a function of their “triple oppression”—is perhaps the most glaring example of labor superexploitation under modern U.S. racial capitalism. In 1936, the lifelong Black radical Louise Thompson explained that Black women’s superexploitation in the capitalist mode of production was based on their race, sex, and subordination in the labor market.49 That same year, Black militants Marvel Cooke and Ella Baker published an article titled “The Bronx Slave Market” in which they studied triple oppression as it related to Black domestic workers. Cooke and Baker explained that the entanglements of racism, sex-based labor subordination, and structural poverty were deeply intensified by the Great Depression and forced Black domestic workers to pauperize their labor for the abysmal wage of less than thirty cents an hour. This form of labor exploitation was unique to the female sex because domestic work was conventional “women’s work,” and it was racialized insofar as the denigration of Black people fitted this group of women for low-wage, unprotected, and contingent labor.50

#### Reject the aff and critically interrogate neoliberal discourse ⁠— resisting capitalist pedagogy in educational spaces is a prerequisite towards anti-capitalist political projects; COVID-19 provides a unique transition opportunity

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As educators, it is crucial for us to examine how we talk, teach, and write about inequality as an object of critique in an age of precarity, uncertainty and the current pandemic crisis. This is especially true at a time when a growing number of authoritarian regimes around the globe substitute replace thoughtful dialogue and critical engagement with the suppression of dissent and a culture of forgetting r. How do we situate our analysis of education as part of a broader discourse and mode of analysis that interrogates the promises, ideals, and claims of a substantive democracy? How do we fight against iniquitous relations of power and wealth that empty power of its emancipatory possibilities, and as Hannah Arendt has argued, “makes most people superfluous as human beings”? How might we understand how neoliberal ideology, with its appropriation of market-based values, regressive notions of freedom and agency, uses language to infiltrate daily life? How does a pandemic pedagogy in the service of neoliberalism produce identities defined by market values, and normalize a notion of responsibility and individuality that convinces people that whatever problem they face they have no one to blame but themselves? Repeated endlessly on right-wing media platforms, the underlying conditions that disproportionately produce chronic illness among poor people of color disappear among a public distracted, if not persuaded, by a pandemic pedagogy that celebrates unchecked self-interest, disdains social responsibility, and turns away from the reality of a society with deep-seated institutional rot and unravelling of social connections and the social contract. Pandemic pedagogy thrives on inequality and becomes a militarized and heartless normalizing tool to convince the broader public that the lives of the elderly, sick, and vulnerable should be valued according to how much they contribute to the economy. And if they are willing to die in order not to be a drain on the economy, all well and good. Nothing escapes the cruel logic of neoliberalism with its arrogance and hubris on full display as it bathes in the glow of right-wing populism, ultra-nationalism, and neofascism. Its accoutrements of dictatorship are everywhere and can be seen in the swagger of militia that storm state capitals, in police who punch and pepper spray protesters and push elderly men to the ground, and in military forces on the streets without badges reinforcing a climate of fear, repression, and unaccountability. There is more at work here than a lack of humanity on the part of the Trump administration. As the Irish journalist Fintan O’Toole observes, there is also the deepening grip of a culture of cruelty and dehumanization. He writes: “As a society the American people are being habituated into accepting cruelty on a wide scale. Americans are being taught by Trump and his administration not to see other people as human beings whose lives are as important as their own. Once that line has been crossed – and it is not just Trump and the people around him, but many of Trump’s supporters as well – then we know where that all leads, what the ultimate destination is. There is no mystery about it. We know what happens when a government and its leaders dehumanize large numbers of people.”

Depoliticization and the Authoritarian Turn

Neoliberalism is not only an economic system, it is also an ideological apparatus that relentlessly attempts to structure consciousness, values, desires, and modes of identification in ways that align individuals with its governing structures. Central to this pedagogical project is the attempt to prevent individuals from translating private issues and troubles into broader systemic considerations. By doing this, it becomes difficult for individuals to grasp the historical, social, economic, and political forces at work in shaping a social order as a human activity deeply immersed in specific relations of power. Neoliberalism’s attempt to erase or rewrite historical and social forces makes it difficult for individuals to imagine alternative notions of society, with themselves as collective actors, or view their problems as more than the limitations of faulty character, moral failure, or a problem of personal responsibility. Reducing individuals to isolated, discrete, hermetically-sealed human beings whose lives are shaped only by notions of self-reliance and self-sufficiency is a pedagogical strategy that utterly depoliticizes people, leading them to believe that however a society is shaped, it is part of a natural order. President Trump echoed this “no alternative” narrative when asked about celebrities and rich people having special access to being tested for the coronavirus while few others had access. He replied, “Perhaps that’s been the story of life.” This individualization of the social with its mounting privatization, gated communities, and social atomization undermines collective action, any viable notion of solidarity, and weakens the notion of global connectivity. The philosopher Byung-Chul Han has rightly argued that contemporary neoliberal society is shaped by a dysfunctional notion of solitude and hermitically-sealed notions of agency, all of which undermine the values and social connections vital to a democracy. He writes: “Those subject to the neoliberal economy do not constitute a we that is capable of collective action. The mounting egoization and atomization of society is making the space for collective action shrink… The general collapse of the collective and the communal has engulfed it. Solidarity is vanishing. Privatization now reaches into the depths of the soul itself. The erosion of the communal is making all collective efforts more and more unlikely.” This panoptical nature of hyper-individualism is more aligned with shared fears than shared responsibilities. Under such circumstances, trust and the notion that all life is related become difficult to grasp as the myopic language of private self-interest inures individuals to wider social problems such as extreme inequality. There is no understanding in this discourse of the damage fanatical entrepreneurialism does to our embodied collectivity. Nor is there any value attributed to the important responsibilities, social values, and notion of the common good that exceeds who we are as individuals, or how we have been shaped by diverse social forces in particular ways. It should be clear that questions of economic and social justice cannot be addressed by a neoliberal pedagogy that enshrines self-interest and privatization while converting every social problem into individualized market solutions or regressive matters of personal responsibility. Under neoliberalism’s disimagination machine, individual responsibility is coupled with an ethos of greed, avarice, and personal gain. One consequence is the tearing up of social solidarities, public values, and an almost pathological disdain for democracy. This radical form of privatization is also a powerful force for the rise of fascist politics because it depoliticizes individuals, immerses them in the logic of social Darwinism, and makes them susceptible to the dehumanization of those considered a threat or disposable. Just as the spread of the pandemic virus in the United States was not an innocent act of nature, neither is the rise and pervasive grip of inequality. What is clear is that neoliberal support for unbridled individualism has weakened democratic pressures and eroded democracy and equality as governing principles. Moreover, as a mode of public pedagogy, it has undercut social provisions, the social contract, and support for public goods such as education, public health, essential infrastructure, public transportation, and the most basic elements of the welfare state. As a form of pedagogical practice, neoliberalism has morphed into a form of pandemic pedagogy that sacrifices social needs and human life in the name of an economic rationality that values reviving economic growth over human rights. As a lived system of meaning and values, self-reliance and rugged individualism are the only categories available for shaping how individuals view themselves, and their relationship to others and to the planet. The individualization of everyone and the reduction of social problems to private troubles is paralleled by sanctioning a world marked by borders, walls, racism, hate, and a rejection of government intervention in the interest of the common good. Most importantly, neoliberal individualization personalizes power, creating a depoliticized subject whose only obligation as a citizen is defined by consuming and living in a world free from ethical and social responsibilities. In many ways, it does not just empty politics of any substance, it destroys its emancipatory prospects. The neoliberal strategists use education not only to mask their abuses and the effects of their criminogenic policies, they also – in a time of crisis, when dissatisfaction of the masses might lead to chaos, revolts, and dangerous levels of resistance – move dangerously close to creating the conditions for a fascist politics. The noted theologian Frei Betto is right in stating that under such conditions, “…they cover up the causes of social ills and cover up their effects with ideologies that, by obscuring causes, fuel mood in the face of the effects. That’s why neoliberalism is now showing its authoritarian face – building walls that divide countries and ethnic groups, executive power over legislature and judiciary, disinformation about digital networks, the cult of the homeland, the brazen offensive against human rights.” Neoliberalism and its regressive notion of individualism and individual responsibility has undermined the belief that human beings both make the world and can change it. The pandemic has ushered in a crisis that undermines that belief and opens the door for rethinking what kind of society and notion of politics will be faithful to the creation of a socialist democracy that speaks to the core values of justice, equality and solidarity. Under such circumstances, private resistance must give way to collective resistance, and personal and political rights must include economic rights. If inequality is to be defeated, the social state must replace the corporate state and social rights must be guaranteed for all. There can be no adequate struggle for economic justice and social equality unless economic inequality on a global level is addressed along with a movement for climate justice, the elimination of systemic racism and a halt to the spiraling militarism that has resulted in endless wars. This can only take place if the anti-democratic ideology of neoliberalism, with its collapse of the public into the private and its institutional structures of domination, are fully addressed and discredited. Étienne Balibar is right in stating that the triumph of neoliberalism has resulted in the “death zones of humanity.” Following Balibar, what must be made clear is that neoliberal capitalism is itself a pandemic and a dangerous harbinger of an updated fascist politics.

Overcoming Pandemic Pedagogy

The kind of societies that will emerge after the pandemic is up for grabs. In some cases, the crisis will give way to authoritarian regimes such as Chile, Hungary and Turkey, all of which have used the urgency of COVID-19 as an excuse to impose more state control and surveillance, squelch dissent, eliminate civil liberties and concentrate power in the hands of an authoritarian political class. As is well documented, history in a time of crisis also has the potential to change dominant ideologies, rethink the meaning of governance, and enlarge the sphere of justice and equality through a vision that fights for a more generous and inclusive politics. It is crucial to rethink the project of politics in order to imagine forms of resistance that are collective, inclusive and global, capable of producing new democratic arrangements for social life, more radical values and a “global economy which will no longer be at the mercy of market mechanisms.” This is a politics that must move beyond siloed identities and fractured political factions in order to build transnational solidarities in the service of an alternative radically democratic society. Making the pedagogical more political means challenging those forms of pandemic pedagogy that turn politics into theater, a favorite tactic of Trump. In this case, the performance works to suspend disbelief, hold power accountable and unravel one’s sense of critical agency. Pandemic pedagogy does more than undermine critical thinking and informed judgments, it dissolves the line between the truth and lies, fantasy and reality, and in doing so, destroys the foundation for understanding, engaging and promoting that social and economic justice. The endgame under the rubric of a pandemic pedagogy is not simply the destruction of the truth, but the elimination of democracy itself. Central to developing an alternative democratic vision is development of a language that refuses to look away and be commodified. Such a language should be able to break through the continuity and consensus of common sense and appeals to the natural order of things. At stake here is the need to reclaim both critical and redemptive elements of a radical democracy in order to address the full spectrum of violence that structures institutions and everyday life in the United States. This is a language connected to the acquisition of civic literacy, and it demands a different regime of desires and identifications to enable us to move from “shock and stunned silence toward a coherent visceral speech, one as strong as the force that is charging at us.” Of course, there is more at stake here than a struggle over meaning; there is also the struggle over power, over the need to create a formative culture that will produce informed critical agents who will fight for and contribute to a broad social movement that will translate meaning into a fierce struggle for economic, political and social justice. Agency in this sense must be connected to a notion of possibility and education in the service of radical change. Reimagining the future only becomes meaningful when it is rooted in a fierce struggle against the horrors and totalitarian practices of a pandemic pedagogy that falsely claims that it exists outside of history. Václav Havel, the late Czech political dissident-turned-politician, once argued that politics follows culture, by which he meant that changing consciousness is the first step toward building mass movements of resistance. What is crucial here in the age of multiple crises is a thorough grasp of the notion that critical and engaged forms of agency are a product of emancipatory education. Moreover, at the heart of any viable notion of politics is the recognition that politics begins with attempts to change the way people think, act and feel with respect to both how they view themselves and their relations to others. There is more to agency than the neoliberal emphasis on the “empire of the self,” with its unchecked belief in the virtues of a form of self-interest that despises the bonds of sociality, solidarity and community. The U.S. is in the midst of a political and pedagogical crisis. This is a crisis defined not only by a brutalizing racism and massive inequality, but also a constitutional crisis produced by a growing authoritarianism that has been in the making for some time. The recent attacks by the police on journalists, peaceful protesters and even elderly people marching for racial justice echoes the violence of the Brownshirts in the 1930s. Let’s stop the futile debate about whether or not the U.S. is in the midst of a fascist state and shift the register to the more serious question of how to resist it and restore a semblance of real democracy. Under such circumstances, education should be viewed as central to politics, and it plays a crucial role in producing informed judgments, actions, morality and social responsibility at the forefront not only of agency, but politics itself. In this scenario, truth and politics mutually inform each other to erupt in a pedagogical awakening at the moment when the rules are broken. Taking risks becomes a necessity, self-reflection narrates its capacity for critically engaged agency and thinking the impossible is not an option, but a necessity. Without an informed and educated citizenry, democracy can lead to tyranny, even fascism. Trump represents the malignant presence of a fascism that never dies and is ready to remerge at different times in different context in sometimes not-so-recognizable forms. The COVID-19 crisis and the pandemic of inequality and racism have revealed elements of a fascist politics that are more than abstractions. The struggle against a fascist politics is now visible in the rebellions taking place across the United States. While there are no political guarantees for a victory, there is a new sense that the future can be changed in the image of a just and sustainable society. There is a new energy for reform taking place in the aftermath of the killing of George Floyd. Massive protests for racial, economic and social justice are emerging all over the globe. As I have argued in The Terror of the Unforeseen, at stake here is the need for these protests to transition from a pedagogical moment and collective outburst of moral anger to a progressive international movement that is well organized and unified. Such a movement must build solidarity among different groups, imagine new forms of social life, make the impossible possible, and produce a revolutionary project in defense of equality, social justice and popular sovereignty. The racial, class, ecological and public health crisis facing the globe can only be understood as part of a comprehensive crisis of the totality. Immediate solutions such as defunding the police and improving community services are important, but they do not deal with the larger issue of eliminating a neoliberal system structured in massive racial and economic inequalities. David Harvey is right in arguing that the “immediate task is nothing more nor less than the self-conscious construction of a new political framework for approaching the question of inequality, through a deep and profound critique of our economic and social system.” This is a crisis in which different threads of oppression must be understood as part of the general crisis of capitalism. The various protests now evolving internationally at the popular level offer the promise of new global anti-fascist and anti-capitalist movements. In the current moment, democracy may be under a severe threat and appear frighteningly vulnerable, but with young people and others rising up across the globe — inspired, energized and marching in the streets — the future of a radical democracy is waiting to breathe again.

### 1NC

Horse-trading DA:

#### Antitrust only passes after it’s horse-traded with Republicans for censorship prohibitions

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.

#### That allows the GOP to successfully weaponize misinformation---triggers epistemic decay and cements a perma-GOP government

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.

#### Disinformation undermines collective responses to existential threats

Roston 21, citing Bak-Coleman, PhD, postdoctoral fellow at the University of Washington Center for an Informed Public (Eric, “As Climate Change Fries the World, Social Media Is Frying Our Brains,” *Bloomberg News*, <https://www.bloomberg.com/news/articles/2021-06-29/as-climate-change-fries-the-world-social-media-is-frying-our-brains>)

Amid emergency heat, flooding, and famine, it’s even more critical that people recognize and agree at least on the big picture. And yet, as recent history has shown us time and again, they don’t. Much of that can be blamed on the pandemic of misinformation—concerning climate change, Covid-19, vaccines, and so much more— now running rampant on social media. It reminds Joseph Bak-Coleman of fish. Bak-Coleman is the lead author of a provocative new article in Proceedings of the National Academy of Sciences about scientists’ inability thus far to adequately inform policymakers about how digital technology is impeding efforts to solve climate change and other collective-behavior problems. Individual fish swimming in a school intuit each other so rapidly and clearly that they can instantaneously and in unison pivot away from whatever dangers they encounter. Insofar as that is true, they have a limited error margin for passing along bad information. “It costs energy when you get scared for no reason, and it also costs life if you don’t get scared when you should,” said Bak-Coleman, a University of Washington postdoctoral scholar with expertise in neuroscience and evolutionary biology. “Animal groups are highly tuned to do these really fantastic feats of behavior. But it’s all quite fragile.” The development of digital communications has eroded or vaporized community protections developed over millennia to ensure at least a minimally healthy flow of information, which leads to healthy decision-making. That loss, Bak-Coleman and his co-authors write, “combined with rapid distribution of falsehood, may present one of the larger threats to human well-being.” Think of it like this. If you wanted to make the most obvious statement in the world, you could do worse than: “Technology now allows people to communicate instantaneously and across great distances.” Yet if you wanted to elicit the most tortured answer in the world, you might ask something incredibly similar: “What happens when people can communicate instantaneously and across great distances?” The tension between the obvious statement and the unanswerable question—which holds within it just about all of the world’s large-scale problems, including climate change—is so great, Bak-Coleman and his colleagues propose a whole new academic discipline just to try to understand it. As physiology has medicine and climate science has emissions-mitigation and adaptation–planning, they argue, the digital-misinformation pandemic requires an applied science—or as they call it, a “crisis discipline.” The need for such a discipline is also urgent, they argue, because “given that algorithms and companies are already altering our global patterns of behavior for financial reasons, there is no safe hands-off approach.” Despite the many joys and productive uses of digital communication, it routinely conveys so many falsehoods, so quickly, that many people are left either unable to see or unwilling to fix existential dilemmas, leaving humanity overall in a precarious condition.

### 1NC

Single Payer CP:

#### The United States federal government should:

#### ⁠1---establish single payer health insurance and care

#### 2---increase funding for disease management and innovation

#### Solves Opioids and Innovation

Jain and Alam 3-7-17 - King's College London, School of Medicine, London, UK

\*Vageesh, \*\*Azeem, Redefining universal health coverage in the age of global health security, BMJ Global Health, http://gh.bmj.com/content/2/2/e000255

Universal health coverage (UHC) has received a great deal of attention over the past decade, with the WHO spearheading the global advocacy effort. Studies have demonstrated the ability of UHC to reduce mortality, and overcome existing health inequalities to create more equitable systems.1 ,2¶ However, the role of UHC in preventing, detecting and responding to disease outbreaks as per International Health Regulations (IHR), particularly during public health emergencies of international concern (PHEIC), is less clear. Past epidemics, including Ebola or H1N1 influenza, have not provided the opportunity to assess the impact that UHC may have on global health security. In the Ebola outbreak, the virus was largely limited to the West African region, among countries that all had poorly functioning health systems. The H1N1 virus proved to be too feeble to allow an analysis of how resilient different health systems were (based on UHC), in combating the 2009 pandemic.¶ UHC, in its existing form, has the potential to improve global health security through various mechanisms. First, low financial barriers can stimulate demand for health services and facilitate early case detection,3 one of the foremost factors in dictating the course of an outbreak. Second, UHC may protect people from financial catastrophe. High healthcare expenditures push people into poverty, further increasing their long-term risk of ill health, particularly through communicable disease. Third, UHC protects against economic downturn, with unemployment associated with a lower mortality in UHC countries compared with those without.2 This is important in the context of epidemics, as seen in the recent Ebola outbreak, where the World Bank estimates $1.6 billion were foregone in GDP in 2015, due to the economic impact of the outbreak.4 Aside from the clinical and economic benefits, there also lies a societal benefit in creating a more equitable and just system of health whereby the poor do not bear a disproportionate burden of disease.¶ The high death toll inflicted by Ebola has reinvigorated health system strengthening efforts, to which UHC is fundamental.5 ,6 But what exactly should UHC involve, to improve global health security? The ongoing Zika virus outbreak, raging through the Americas, provides an opportunity to examine the complex relationship between UHC and infectious disease control.

### 1NC

Food and Opioid CP:

#### Text: The United States federal government should

#### 1---fund health and social service infrastructure in rural communities

#### 2---fund incentivize programs to attract farmers to communities

#### 3---promote increased food production and export food globally

#### Plank 1 solves the opioid internal link

CBHA 2020 [KU RED] ("Small Towns and Rural Areas Hit Hard by Opioid Crisis," August 2020, <https://www.cbha.org/about-us/cbha-blog/2020/august/small-towns-and-rural-areas-hit-hard-by-opioid-c/>, DoA 10/16/2021, DVOG) Top of Form

Not according to the [U.S. Centers for Disease Control and Prevention (CDC](https://www.cdc.gov/drugoverdose/epidemic/index.html)). In fact, over the last decade, issues once associated with city life have slowly creeped into rural areas. **Opioid misuse, often perceived as a problem of urban areas, has found its way into America’s small towns. Now, these communities are faced with the resulting loss, crime, and destruction that accompanies misuse of opioid** prescription drugs such as OxyContin, Oxycodone, Vicodin, Fentanyl, and of the illegal counterpart, heroin. A report by the CDC reveals that **drug overdose deaths are rising in rural areas across the U.S. In 2015, the overdose death rate for rural areas surpassed the death rate for urban or suburban areas and people living in rural areas were four times more likely to die from overdoses in 2015 than they were in 1999.** In 2015 alone, opioids were involved in more than 33,000 deaths; four times the number of opioid-involved deaths than in 2000. The epidemic impact reaches others, too: [a recent University of Michigan study that found rates of babies born with opioid withdrawal symptoms rising much faster in rural areas than in urban areas](https://labblog.uofmhealth.org/industry-dx/study-rural-communities-see-steep-increase-babies-born-opioid-withdrawal). A Landscape of Prescription Painkillers So what’s happened? How is it that these idyllic small towns, once rich with multi-generational small businesses, farms and ranches, have been reduced to main-drag strips fraught with dealers and dotted with big box stores and fast food chains? For a culture that marks time by the seasons, the opioid crisis is a perfect storm of circumstances. **Some speculate that the recession of 2008 is a factor, as many rural areas still have not rebounded. Unemployment, falling incomes, businesses closing down and dwindling community resources have made it all but impossible to improve living conditions**. Fear, stress, and emotional distress over living conditions and financial stability are often major contributors to substance abuse. To understand the opioid epidemic, it’s important to see that it has come in three waves, each building on the one before it; magnifying its traction. A Perfect Storm for a Health Crisis The Great Recession that began in 2007 is partly to blame. **Over the last decade these towns have seen a significant drop in unemployment and they still haven’t recovered. Slowly, family-owned businesses have dissolved and the chance to earn a good living has been replaced by limited and poorly-compensated service jobs. Readily available opioids have become “drugs of solace” that mask physical and emotional pain** in a world offering little hope that conditions will improve. Labor-Intensive Jobs + Overprescribing = Addiction **Many people in rural areas work jobs in mining, manufacturing, and agriculture which often lead to chronic pain or injuries. These jobs are often physical and sometimes dangerous**. As a result, **chronic pain and injuries are more common, and the cost of taking time off from work to heal is so great that many have come to rely on opioid pain medications just to keep working and functioning. What starts as a legitimate prescription for pain can often lead to an addiction to opioids.** Rural doctors are often overworked, and treatments for chronic pain, such as physical or occupational therapy, are limited. Some say opioid prescriptions became the go-to for rural physicians and the beginning of an addiction for some patients. Small Town Strong - Social and Kinship Networks Family relations, family life, and community ties are the fabric of small town support systems and social lives. People work hard, look people in the eye, and know each other’s business. These social and kinship networks operate on trust for each other. The community is built on trust, reciprocity, and cooperation. Friends and neighbors help each other out, share resources, and work together. So it’s not uncommon to sustain an injury on the job, receive a prescription for an opioid, and then share or sell the prescriptions among each other. According to the National Institute of Drug Abuse, people often share their unused pain relievers, unaware of the dangers of nonmedical opioid use. Most adolescents who misuse prescription pain relievers are given them by a friend or relative. Healthcare Access Compounds the Problem **Stigma and judgement, not knowing what pain-management questions to ask a physician, lack of local treatment facilities, and an absence of health insurance are just a handful of the challenges that patients with an addiction face in rural communities**. In these depressed communities, comprehensive substance abuse treatment services are limited at best and absent most often. Lack of resources and funding lead to a limited health and social service infrastructure. Not having access to evidence-based treatment such as Medication Assisted Treatment (MAT) or support services for long-term recovery coupled with shortages of mental health providers only serve to fail these vulnerable populations. The absence of treatment services locally results in patients having to travel long distances to receive the proper care they need. It’s been shown that having to travel long distances to receive substance abuse treatment often results in lower completion rates of substance abuse treatment programs. The ultimate challenge is figuring out how to get rid of these barriers to treatment, so these rural communities can become strong again.

#### Planks 2 and 3 solve exports

Castellaw 17 [KU RED]—(National Security Lecturer at the University of Tennessee, Retired Lieutenant General in the United States Marine Corps). John Castellaw. “Food Security Strategy Is Essential to Our National Security”. Agri-Pulse. 5/1/2017. <https://www.agri-pulse.com/articles/9203-opinion-food-security-strategy-is-essential-to-our-national-security>. Accessed 6/28/21.

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

### 1NC

#### USFG is the “United States Fidelity & Guarantee”

FreeDictionary No Date, (TheFreeDictionary, No Date, "USFG," https://acronyms.thefreedictionary.com/USFG)

USFG United States Fidelity & Guarantee Company

USFG United States Federal Government

USFG United States Financial Group, Inc

USFG United States Faceter's Guild

### 1NC

AMR CP:

#### The United States federal government should

#### 1---increase funding for pandemic preparation

#### 2---regulate over use of antibiotics

#### 3---fund and increase investment new drug and vaccine development

#### 4---pass the PASTEUR Act

#### Solves disease and AMR

Davies 6-4 [KU RED] (Professor Dame Sally Davies is UK Special Envoy on Antimicrobial Resistance; Thomas Cueni is Director General of the International Federation of Pharmaceutical Manufacturers and Associations (IFPMA), 6-4-2021, accessed on 6-11-2021, The Telegraph, "The silent pandemic of superbugs could be far deadlier than Covid-19 – we must fix it", https://www.telegraph.co.uk/global-health/science-and-disease/silent-pandemic-superbugs-could-far-deadlier-covid-19-must/)

\*Says PASTEUR Acts could solve \*\*Claims we need global action In 2016, the United States National Security Council drew up a playbook on fighting pandemics so that the next response to an epidemic was better handled than the response to the spread of Ebola. The same year, the G7 put tackling antimicrobial resistance (AMR) on the agenda. Today, the twin global health security threats of viruses and bacteria are very real. Every corner of our health system depends on antibiotics. It’s thanks to antibiotics that illnesses such as pneumonia, meningitis and TB are now treatable. They are used for caesarean sections, routine operations such as arthroscopic knee surgery, and cancer chemotherapy. Worryingly, bacteria mutate, just as viruses do. As a result, increasingly people are dying of diseases where the existing antibiotics did not work. Since 2016, over 3.5 million people have died of a drug-resistant infection. Overuse of antibiotics and declining investment in research for new and novel drugs are the causes of this pandemic hidden in plain sight. Without urgent action, 10 million people globally could die annually as a result of AMR by 2050. The question is, how to make sure that one goes from policy papers, dire projections and simulations to action? In the case of Covid-19, against the odds and in record time, we already have a range of vaccines to protect against the SARS-CoV-2 virus. The speed of the response is thanks to decades of research on vaccine technologies. In contrast, research for new antibiotics that could stave off the worst of AMR has been stuck in the doldrums. And whilst there are exciting signs at the early end of the pipeline, this innovation is primarily happening in small companies without the infrastructure to take a promising product all the way to market. Between 2018 and 2020, four companies that had brought new antibiotics to market declared bankruptcy or put themselves up for sale, despite having survived the perilous, decade-long process of development and testing to get a new drug approved. To give a boost to the antibiotics pipeline, the AMR Action Fund has been created to develop two to four new antibiotics by 2030, thanks to close to $US 1 billion from pharmaceutical companies, topped up with support from the European Investment Bank and the Wellcome Trust. To ensure there is a healthy pipeline of antibiotics that keep up with bacteria’s natural evolution to build resistance, we need more than a fund to boost innovation. Once new antibiotics are approved, they need to be used sparingly to preserve effectiveness and slow the development of further resistance. While this makes sense for public health, it doesn’t support the level of investment needed to maintain a robust antibiotic pipeline. Despite the huge societal costs of AMR, our health care systems are not currently designed to recognise the value of new antibiotics. We need adapted market-based policy reforms, including reimbursement reform and new ‘pull’ incentives to create market conditions that enable sustainable investment in antibiotic R&D. We need industry to fully recognise the insurance value that antibiotics provide them. We need healthcare systems to pay their ‘fair share’ for innovation. And most of all, we need governments, researchers and life sciences companies to work together, to put patient needs at the forefront. Some governments have started to take decisive action to revitalise the antibiotics market. The United Kingdom NHS’s ‘Netflix’ model to value antibiotics differently and pay for them by subscription rather than per pill has been designed to empower the health service in England to keep watch over antibiotic use whilst also encouraging investment in developing the new treatments we all need. It is a positive example of what can emerge from collaborative dialogue between government, clinicians and industry. In the United States, the PASTEUR Act that is currently before Congress should create a predictable path to rewarding new antibiotics for their value to society via a subscription contract (valued at $750m to $3bn) that prepays for all US federal use of the drug. This would be a delinked pull incentive that is large enough to move the R&D needle, with powerful support for antibiotic stewardship. More generally, the global community is also moving to take action on AMR – 135 countries have finalised national action plans, but they must be fully funded and implemented. These are good actions and are pointing us in the right direction. But, if Covid-19 has taught us something, it is that global health security, as the name implies, needs to be truly global. As the G7 Health Ministers meet, it is crucial that they give AMR a last push and agree global action to strengthen research and development for new antibiotics, once and for all. Let us not fall into the trap of tunnel vision and squander the opportunity that we have been building up to over the past seven years, to fix this silent pandemic of AMR, which otherwise could have consequences far more deadly than Covid-19.

## COST

### 1NC---Turn

#### Growth is unsustainable---pursuit causes extinction and turns war.

Trainer 20, PhD from University of Sydney. Conjoint Lecturer in the School of Social Sciences, University of New South Wales (Ted, The Simpler Way: Collected Writings of Ted Trainer, *The Simplicity Institute*, pp. 3-6)

1. Unsustainability

The way of life we have in rich countries is grossly unsustainable. There is no possibility of all people on Earth ever rising to rich world per capita levels of consumption of energy, minerals, timber, water, food, phosphorous etc. These rates of consumption are generating numer-ous alarming global problems, now threatening our survival and the survival of other species. Most people have no idea of the magnitude of the overshoot – of how far we are beyond sustainable levels of re-source use and environmental impact. If all the estimated 9.8 billion people living on earth in 2050 were to consume resources at the pres-ent per capita rate in rich countries, world annual resource production rates would have to be about eight times as great as they are now.

For instance, the ‘Ecological Footprint’ analysis indicates that the amount of productive land required to provide one person in Australia with food, water, energy and settlement area is about 6.6 ha (Global Footprint Network, 2019). If 9.8 billion people were to live as Australians do, approximately 65 billion ha of productive land would be required. However, the total amount of productive land available is only 12 billion ha. If we assume one third of this should be set aside for nature (see, e.g., Baillie Yang, 2018) the amount available for humans might be about 8 billion ha. In other words, our rich world per capita footprint is about eight times as big as it would ever be possible for all of the world’s people to sustainably share.

Figures for some other items indicate much worse ratios. For instance, the top 10 nations consuming iron ore and bauxite (from which we ob-tain aluminium and steel) have per capita use rates that are respectively around 65 and 90 times the rates for all the other nations (Wiedmann et al., 2015). Mineral ore grades are falling. All people could not rise to present rich world levels of mineral use. The same case can be made with respect to just about all other resources and ecosystem services, such as agricultural land, forests, fisheries, water and biomass.

These simple figures clearly demonstrate the impossibility of all people ever having the material ‘living standards’ we have taken for granted in rich countries like Australia. We are not just a little beyond sustainable levels of resource demand and ecological impact – we are far beyond sustainable levels. Rich world practices, systems and ‘living standards’ are grossly unsustainable, and can never be extended to all the world’s people. Again, few people seem to grasp the magnitude of the over-shoot. We must face up to dramatic reductions in our present per capita levels of production and consumption.

1.1. Now add the absurd commitment to economic growth

The main worry is not the present level of resource use and ecological impact discussed above, it is the level we will rise to given the obsession with constantly increasing the amount of production and consumption. The supreme goal in all countries is to raise incomes, ‘living standards’ and GDP as much as possible, constantly and without any idea of a limit. That is, the most important goal is economic growth.

Consider the implications. If we assume a) a 3% p.a. economic growth, b) a population of 9.8 billion, c) all the world’s people rising to the living standards we in the rich world would have in 2050 given 3% p.a. growth – in that scenario, the total volume of world economic output would be 20 times as great as it is now and doubling every 23 years thereafter.

So even though the present levels of production and consumption are grossly unsustainable, the determination to have continual increase in income and economic output will multiply these towards absurd and impossible levels in coming decades.

Why analyse in terms of 9.8 billion rising to rich world levels? Because a) it is not morally acceptable to assume that they remain much poorer than we are, and b) that’s what everyone aspires to, so we had better think about whether it is viable.

1.2 But what about technical advance?

When confronted by global sustainability problems most people just assume that technical advance and ‘green growth’ will solve them, enabling us to go on living with ever-increasing levels of affluence. They do not realise that the magnitude of the problems rules this out.

The core ‘tech-fix’ faith is that resource demand and environmental impacts can be ‘decoupled’ from economic growth, i.e., that produc-tion and consumption can go on increasing while resource demand is sufficiently reduced. This is extremely implausible (see Part Three of this anthology for more detail). How likely is it that the world’s amount of production could be multiplied by 20 while resource use and environmental impacts are reduced by, say, 50% – i.e., a factor 40 reduction? None of the thirty or more reports over the last 20 years show any global reduction at all; they all show that as GDP rises so do the impacts. The recent review essay by Hickel and Kallis (2019) pro-vides a powerful critique of ‘green growth’ (see also Ward et al., 2016).

1.3 Global problems should be seen in terms of ‘limits to growth’

The ‘limits to growth’ perspective (Meadows et al., 1972) is essential if we are to understand the most serious global problems facing us:

The environmental problem is basically due to the fact that far too much producing and consuming is going on, taking too many resources rom nature and dumping too many wastes back into nature. We are eliminating species mainly because we are taking or ruining so much habitat. The environmental problems cannot be solved in an economy that is geared to providing ever-rising production, con-sumption, ‘living standards’ and GDP (see the next essay, ‘Why this economy must be scrapped’, for more detail).

Third World poverty and underdevelopment are inevitable if a few living in rich countries insist on taking far more of the world’s re-sources than all could have. The Third World can never develop to rich world levels of consumption, because there are far too few re-sources for that. (For more detail on this issue, see the essay ‘Third World development’ in Part Two.)

Conflict and war are inevitable if all aspire to rich world rates of consumption, and if rich countries insist on limitless growth on a planet with limited resources. Rich countries now have to support repressive regimes willing to establish policies that enable our cor-porations to ship out cheap resources, use Third World land for export crops, exploit cheap labour etc. This means we must be ready to get rid of regimes and to invade and run countries that threaten to follow policies contrary to our First World interests. Our rich world living standards could not be as high as they are if a great deal of repression and violence was not taking place, and rich countries contribute significantly to this. If we are determined to remain affluent, we should remain heavily armed! (This issue is developed in the essay in part Two called ‘If you want affluence, prepare for war’.)

Social cohesion is deteriorating and quality of life is being damaged. This is so even in the richest nations, because the supreme goals are raising business turnover, incomes and the GDP, not meet-ing needs, building community and improving the quality of life. (Some details of this decline in quality of life and the benefits of an alternative way to live are discussed in Part Four.)

#### Warming causes extinction and makes economic decline and war inevitable.

Spratt et al. 20, David Spratt: Research Director for Breakthrough National Centre for Climate Restoration and co-author of What Lies Beneath: The understatement of existential climate risk and Climate Code Red: The case for emergency action. Alia Armstead: Research Coordinator for Breakthrough. Ian Dunlop: co-author of What Lies Beneath and of the Club of Rome’s Climate Emergency Plan. He is a senior member of the Breakthrough Advisory Board (How Economics Has Underestimated Climate Damage and Encouraged Inaction, *Breakthrough - National Centre for Climate Restoration*, Accessible: https://www.breakthroughonline.org.au/publications)

THREE DEGREES OF WARMING Cost–benefit analysis, the mainstay of climate change economics, requires dollar numbers to be put on the costs of acting to reduce the level of future warming as compared to the damage caused by not acting, for various emissions scenarios. The first requirement is that these numbers can be reasonably estimated. Recent work from the University of Melbourne has shown that on current global emission patterns, a conservative estimate of costs of inaction for Australia would be $A584.5 billion by 2030, $A762 billion by 2050, and more than $A5 trillion in cumulative damages from now until 2100. On the other hand, the cost of effective emissions reduction is estimated to be $A35.5 billion up to 2030, or 0.14% of cumulative GDP (Kompas et al. 2019). The estimated costs in the report and the majority of economic analyses to date focus on infrastructure damage, agricultural and labour productivity losses, human health impacts and ecosystem losses, but this is just the tip of the iceberg. The costs of extreme weather events, pollution and ecosystem and biodiversity loss are not included. More importantly, neither are the economic damages that Australia will incur as 3°C of warming sweeps through Asia and the Pacific, devastating nations, disrupting major trading partners and supply chains, and likely turning the region — the “disaster alley” of global climate disruption — into one of social chaos and breakdown (Dunlop & Spratt 2017). Thirteen years ago, senior US national security analysts looked at the consequences of 3°C of warming and concluded that it would “give rise to massive nonlinear societal events. In this scenario, nations around the world will be overwhelmed by the scale of change and pernicious challenges… Armed conflict between nations over resources… is likely and nuclear war is possible. The social consequences range from increased religious fervor to outright chaos” (Campbell et al. 2007). A survey of the scientific literature on the likely impacts of 3°C paints a frightening picture (Spratt and Dunlop 2019). In such a world, it is likely that the structures of societies will be severely tested, and some will crash. The poorest nations will suffer first and most deeply from climate change, but no region will escape. Water availability will decrease sharply in the lowerlatitude dry tropics and subtropics, and affect almost two billion people worldwide. Agriculture will become nonviable in the dry subtropics. The Sahara will jump the Mediterranean as Europeans begin a long trek north. Water flows into the great rivers of Asia will be reduced by the loss of more than one-half, and perhaps much more, of the Himalayan ice sheet. Aridification will emerge over more than 30% of the world’s land surface, most severely in southern Africa, the southern Mediterranean, west Asia, the Middle East, rural Australia and across the southwestern United States. Most regions in the world will experience a significant drop in food production and increasing numbers of extreme weather events, including heat waves, floods and storms. Food production will be inadequate to feed the global population and food prices will skyrocket, as a consequence of a one-fifth decline in crop yields, a decline in the nutritional content of food crops, a catastrophic decline in insect populations, aridification, monsoon failure and chronic water shortages, and conditions too hot for human summer habitation in significant food-growing regions. The lower reaches of the agriculturally-important river deltas such as the Mekong, Ganges and Nile will be inundated, and significant sectors of some of the world’s most populous cities — including Kolkata, Mumbai, Jakarta, Guangzhou, Tianjin, Hong Kong, Ho Chi Minh City, Shanghai, Lagos, Bangkok and Miami — abandoned. Deadly heat conditions will persist for more than 100 days per year in West Africa, Central America, the Middle East and South-East Asia, which together with land degradation, aridification, conflicts over land and water, and rising sea levels will contribute up to a billion people being displaced. Refugee conventions may give way to walls and blockades. One of the most recent and detailed cost-benefit analyses to be published uses detailed country-specific damage calculations. It finds that losses from climate damages for the higher emission scenarios will be up to 42% of global GDP by 2100. This is ten times the figure suggested by Nordhaus in his Nobel oration. Even so, the authors acknowledge that they do not account for “possible amplifications, for example, due to a potential destabilization of societies” (Ueckerdt et al. 2019). UNDERESTIMATING DAMAGE Economic analysis of climate change has systematically underestimated the impacts of future damage, and in particular failed to account for non-linear changes in the climate system. A recent report (see page 12), describes the problem of missing risks in economic assessments of climate change impacts. Do we have a realistic measure of the economic costs from future climate damages? “In a word, no,” is the answer from Prof. Tom Kompas, who says projections for economic damages under different global warming scenarios “are difficult to come by, save for simple, highly aggregated measures drawn from basic computational models… which can often be very misleading given their extreme and implicit tendency to average effects” (Kompas 2020). This deficiency in analysis is not restricted to IAMs. It is a broader methodological problem. Stated most bluntly, in the sphere of economics, there is no robust methodology for understanding the full range of economic consequences of climate disruption. Such a methodology may not be possible because it would require a systems-level analysis of global interactions in the physical, economic and sociopolitical spheres. There are also profound challenges in understanding how physical impacts translate into economic and social consequences. Economic analysis of climate change impacts falls into two broad categories: estimates of climate-warming-related economic damage; and cost–benefit analysis of various mitigation and technological paths, using IAMs. In both cases, there are big grey areas because such work requires understanding of: • Cumulative greenhouse gas emissions for the period under consideration; • How that affects atmospheric greenhouse gas levels; • The direct physical climate consequences for temperature and precipitation patterns, the range of extreme events, and impacts on major climate system elements such as the cryosphere, sea levels, carbon stores, ocean and atmospheric circulations; • How these physical changes impact the biosphere, agricultural land and water resources, and hence the impact on human societies and their ability to fulfil their basic needs for food, water and shelter; • How this impacts social and political relationships, and hence stability at local, regional and global levels; and • How climate-induced disruptions in one human system, for example the financial system, interact and feedback on other human system elements to act as climate and economic disruption impact multipliers. There are significant uncertainties in moving through these steps. What is the climate sensitivity value — the relationship between changes in greenhouse gas levels and temperature? How do changes in the basic physical system affect agriculture, tourism, labour productivity and human health, let alone more complex issues such as where we live and social organisation? How can accounting be made for non-linear climate system changes given the basic unpredictability of such events? How do the more immediate socio-economic impacts become translated into national and human security consequences: the breakdown of society, forced migration and conflict? How can disruptions in one or several systems affect other systems? Australia’s 2019-2020 megafires are a good case study, in which impacts spread across various systems: housing, infrastructure and communications, local economies, banking services, water and food security, agriculture and tourism, as well as the losses of biodiversity and ecosystems. The problem of analysis can also be seen in the very wide range of estimates of the damage caused by the mega fires, from $A4 billion up to $A100 billion. All these difficult-to-analyse and quantify possibilities mean that, particularly at the higher end of the range of projected warming, the uncertainties are such that no credible estimates in dollar terms can be made. And it is foolish to try and reduce devastating social and human security consequences to a monetary figure. What is the value of a human life? What is the value of the lives lost in the Syrian war, where climate impacts (drought and desertification) became an accelerant to instability? There are big issues concerning the underestimation of physical impacts, and the failure to account for non-linear changes, system thresholds and mutually reinforcing processes. Risk analysis has been poor, and there is scant recognition within the academic literature that “high-end” outcomes may eventuate and produce economic damage beyond quantification. The reports of the IPCC have exhibited a preference for conservative projections and scholarly reticence (Spratt & Dunlop 2018). MISSING RISKS • Economic assessments of the potential future risks of climate change have been omitting or grossly underestimating many of the most serious consequences for lives and livelihoods because these risks are difficult to quantify precisely and lie outside of human experience. • Scientists are growing in confidence about the evidence for the largest potential impacts of climate change and the rising probability that major thresholds in the Earth’s climate system will be breached as global mean surface temperature rises, particularly if warming exceeds 2°C above the preindustrial level. • Many of these impacts will grow and occur concurrently across the world as global temperature climbs. • Some of these impacts involve thresholds in the climate system beyond which major impacts accelerate, or become irreversible and unstoppable. • When a threshold is breached, it might cause one or more other thresholds to be exceeded as well, leading to a cascade of impacts. • Many of these impacts could exceed the capacity of human populations to adapt, and would significantly affect and disrupt the lives and livelihoods of hundreds of millions, if not billions, of people worldwide. • These impacts would also undermine economic growth and development, exacerbate poverty and destabilise communities. • Economic assessments fail to take account of the potential for large concurrent impacts across the world that would cause mass migration, displacement and conflict, with huge loss of life. • Economic assessments that are expressed solely in terms of effects on output (e.g. gross domestic product), or that only extrapolate from past experience, or that use inappropriate discounting, do not provide a clear indication of the potential risks to lives and livelihoods. • It is likely that there are additional risks that we are not yet anticipating simply because scientists have not yet detected their possibility, as we have entered a period of climate change that is unprecedented in human history. • The lack of firm quantifications is not a reason to ignore these risks, and when the missing risks are taken into account, the case for strong and urgent action to reduce greenhouse gas emissions becomes even more compelling. From: “The missing economic risks in assessments of climate change impacts” (DeFries et al. 2019). This scientific reticence is one basis for economic reticence. Naomi Oreskes and Nicholas Stern say that since climate scientists have been underestimating the rate of climate change and the severity of its effects, “then economists will necessarily underestimate their costs” (Oreskes & Stern 2019). When the climate conditions change sufficiently for experience to no longer be a reliable guide to the future, then economic estimates become more and more uncertain. In many cases, modellers: simply omit it from the model, assessment or discussion. In economic assessments of climate change, some of the largest factors, like thresholds in the climate system, when a tiny change could tip the system catastrophically, and possible limits to the human capacity to adapt, are omitted for this reason. In effect, economists have assigned them a value of zero, when the risks are decidedly not (Oreskes & Stern 2019). The consequence of ignoring the “missing risks” is that a stark reality is overlooked: the damage caused by climate change may be infinite, beyond all equations, models and cost-benefit analysis (see Beyond quantification, page 6). An IMF Working Paper notes a growing agreement between economists and scientists “that risk of catastrophic and irreversible disaster is rising, implying potentially infinite costs of unmitigated climate change, including, in the extreme, human extinction” (Krogstrup & Oman 2019).

#### A second recession during COVID guarantees a successful transition — it both forces degrowth policies and makes them more popular.

Kallis et al. 20, ICREA Professor at the Institute of Environmental Science and Technology, Autonomous University of Barcelona, With: Susan Paulson, Giacomo D’Alisa, Federico Demaria (Giorgios, “The case for degrowth in a time of pandemic,” *openDemocracy*, 5/14/2020, <https://www.opendemocracy.net/en/oureconomy/case-degrowth-time-pandemic/>)

The pandemic has lain bare the fragility of existing economic systems. Wealthy nations have more than enough resources to cover public health and basic needs during a crisis, and could weather declines in non-essential parts of the economy by reallocating work and resources to essential ones. Yet the way current economic systems are organized around constant circulation, any decline in market activity threatens systemic collapse, provoking generalized unemployment and impoverishment. It doesn’t have to be this way. To be more resilient to crises – pandemic, climatic, financial, or political – we need to build systems capable of scaling back production in ways that do not cause loss of livelihood or life. We make the case for degrowth. Conservative outlets such as [Forbes](https://www.forbes.com/sites/wlf/2020/04/29/still-against-degrowth/), the [Financial Times](https://www.ft.com/content/0b171892-8afd-11ea-9dcb-fe6871f4145a), or the [Spectator](https://www.spectator.co.uk/article/the-coronavirus-crisis-reveals-the-misery-of-degrowth-), have been pronouncing that the coronavirus crisis reveals “the misery of degrowth”. But what is happening during the pandemic [is not degrowth](https://twitter.com/DegrowthMemes/status/1255783275987177473). Degrowth is a project of living meaningfully, enjoying simple pleasures, commoning, sharing and relating more with others, and working less, in more equal societies. The goal of degrowth is to purposefully slow things down in order to minimize harm to humans and earth systems and to reduce exploitation. The current situation is terrible, not because carbon emissions are declining, which is good, but because many lives are lost; it is terrible not because GDPs are going down, to which we are indifferent, but because processes in place to protect livelihoods when growth falters are grossly insufficient and unjust. We would like to see societies become slower by design, not disaster. This pandemic is a growth-induced disaster, harbinger of more to come. Drives for growth have accelerated global flows of material and money, paving the way for lightning-fast circulation of bodies and diseases. The economic policies and social arrangements proposed by degrowth offer ways to make such situations more liveable and just, to emerge stronger and better post-crisis, and to reorient practices and politics towards care and community solidarity. The end of growth will not necessarily involve a smooth transition. It may very well be unplanned, unwilled, and messy, in conditions not of our own choosing. Conditions like the ones we are living through now. History often evolves with punctuations; periods of seeming paralysis can reach a tipping point, when unexpected events open new possibilities and violently close others. The COVID-19 pandemic is such an event. Suddenly, things take radical new directions, and the unthinkable becomes thinkable, for better or for worse. Severe economic depression led to Roosevelt’s New Deal, and also to Hitler’s Third Reich. What are the possibilities and dangers now? Amid this pandemic, many scientific, political, and moral authorities are communicating the message that caring for people’s health and wellbeing should come before profit, and that is great. A resurgence of a care ethic that we advocate in our forthcoming book [The Case for Degrowth](https://politybooks.com/bookdetail/?isbn=9781509535620) is evident in the willingness of people to stay home to protect their elders, and in the spirit of duty and sacrifice among care and health workers. Of course, many stay home also because they fear the virus and worry about themselves, or to avoid police fines. And many care workers go to work because they must earn a living. Acting collectively against crises, pandemic, or climate change requires such combinations of sacrifice and solidarity, self and collective interest, government interventions and people’s participation. Deep inequalities are coming into play in new ways. Residents of some countries are suffering different, and sometimes more severe, hardships than those of others, as are those who are deprived of full citizenship in prisons, migrant labor camps, and refugee settlements. Within each country, actors differentiated by gender, racial, socioeconomic, and occupational positions suffer different vulnerabilities in the face of the disease, and of the economic downturns that follow. Data from countries around the world show that [COVID tends to be much more severe and deadly in men](https://www.livescience.com/why-covid-19-more-severe-men.html) than in women. US Centers for Disease Control and Prevention show a disproportionate burden of illness and death among [racial and ethnic minority groups](https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html). Nurses, health aids, and caretakers, positions in which women prevail, are especially vulnerable to infection. As are millions of men working in essential jobs including sanitation, trucking, taxi-driving, and meat packing. These jobs, in very large majority performed by men, were already among the most dangerous occupations before adding exposure to coronavirus. While some have the luxury of sheltering at home, others must choose between unemployment without an adequate safety net and working at jobs that expose them to the coronavirus. Yet, unless whole populations are protected, not even the wealthiest are fully safe from contagion. In this crisis, like others before, [people have mobilized and self-organized](https://www.theguardian.com/commentisfree/2020/mar/31/virus-neighbours-covid-19) where businesses and governments have failed to provide for their needs – from mutual aid groups delivering food and medicines for elders, to groups of doctors, engineers, and hackers collaborating to 3-D print components for oxygen ventilators, to students babysitting the children of doctors and nurses. The proliferation of caring and commoning endeavors, which form the bedrock of the degrowth societies we envision, are all the more commendable given the contagious nature of the virus. After the pandemic is over, and the difficult path of economic reconstruction starts, this resurgent dynamism of commoning and care will be vital. Positive impulses among individuals and grassroots networks are necessary but not sufficient for sustained change. We need governments to secure healthcare for all, protect the environment, and provide economic safety nets. [The degrowth-supporting policies](https://www.greeneuropeanjournal.eu/can-we-prosper-without-growth-10-policy-proposals/) we advocate were necessary before the pandemic, and are more so during and after: a Green New Deal and public investment program, work-sharing, a basic care income, universal public services, and support for community economies. So is the reorganization of public finance through measures including carbon fees, caps on wealth and high incomes, taxes on natural resource use, and pollution. Whereas degrowth debates have traditionally focused on demobilizing resource-intensive and ecologically damaging aspects of current economies, [pandemic responses](https://tribunemag.co.uk/2020/03/the-anti-wartime-economy) deal with demobilizing those aspects not immediately essential for sustaining life. We coincide in facing the fundamental challenge of managing political economies without growth during and after the pandemic: how to demobilize parts of the capitalist economy while securing the provisioning of basic goods and services, experimenting with resource-light ways of enjoying ourselves, and finding collective meanings in life. Radical proposals are already being considered and selectively adopted across the political spectrum as they provide concrete solutions amid the pandemic. Companies and governments have reduced working hours and implemented work-sharing; different forms of basic income are being debated; financial measures have been instituted to subsidize workers in the quarantine period and after businesses close; an international campaign for [care income](https://globalwomenstrike.net/) has been launched; governments have engaged the productive apparatus to secure vital supplies and services; and moratoriums are being considered or imposed on rent, mortgage, and debt payments. There is growing understanding that vast government spending will be required. The world will change after the pandemic, and there will be struggles over which paths to take. People will have to fight to direct change toward more equitable and resilient societies that have gentler impacts on humans and natural environments. Powerful actors will try to reconstitute status quo arrangements, and to shift costs to those with less power. It takes organizing and a confluence of alliances and circumstances to ensure that it won’t be the environment and the workers who pay the bill, but those who profited most from the growth that preceded this disaster. [Degrowth is not forced deprivation](https://vocabulary.degrowth.org/), but an aspiration to secure enough for everyone to live with dignity and without fear; to experience friendship, love, and health; to be able to give and receive care; to enjoy leisure and nature, and to legitimize a life that it is also an experience of interdependence and vulnerability. This goal will not be met by subsidizing fossil fuel companies, airlines, cruise ships, hotels, and tourism mega-businesses. Instead, states need to finance Green New Deals and rebuild their health and care infrastructures, creating jobs in a just transition to economies that are less environmentally damaging. As oil prices fall, fossil fuels should be taxed heavily, raising funds to support green and social investments, and to provide tax breaks and dividends to working people. Rather than using public money to bail out corporations and banks, we urge the establishment of a [basic care income](https://comune-info.net/reddito-di-cura/) that will help people and communities to reconstruct their lives and livelihoods. These fundamental questions related to the strategies for socio-ecological transformation will be at the center of the [international Vienna degrowth conference](https://www.degrowthvienna2020.org/en/landing-page/) taking place as an online event in late May 2020. A good starting point are the principles for the recovery of the economy and the basis of creating a just society contained in the open letter [‘Degrowth: New Roots for the Economy’](https://www.opendemocracy.net/en/oureconomy/degrowth-new-roots-economy/). This crisis arguably opens up more dangers than it does possibilities. We worry about the politics of fear that the coronavirus pandemic engenders, the intensification of surveillance and control of peoples’ movements, xenophobia and blame of others, as well as home isolation that curbs commoning and political organizing. Once measures such as curfews, quarantines, rule-by-decree, border controls, or election postponements are taken, they can easily become part of the arsenal of political possibility, opening dystopian horizons. To counter these risks, degrowth motivates and guides us to re-found societies on the commons of mutual aid and care, orienting collective pursuits away from growth and toward wellbeing and equity. These are not just lofty aspirations; in our forthcoming book [The Case for Degrowth](https://politybooks.com/bookdetail/?isbn=9781509535620) we identify everyday practices and concrete policies to start building the world we want today, together with political strategies to support synergy among these efforts in the construction of equitable and low-impact societies. This book is unlike any other on degrowth, in that it is the first to try to address the hard question of ‘how to’ in the current political conjuncture. Before the pandemic, we had to work hard to convince people of the case for degrowth. Our job may be somewhat easier now amid such tangible evidence that the current system is crumbling under its own weight. As we embark on the second major global economic crisis in a dozen years, perhaps some of us will be more willing to question the wisdom of producing and consuming more and more, just to keep the system going. The time is ripe for us to refocus on what really matters: not GDP, but the health and wellbeing of our people and our planet.

#### Economic decline will be peaceful ---COVID proves.

Walt 20, Belfer professor of international relations at Harvard University. (Stephen, May 13th, “Will a Global Depression Trigger Another World War?” *Foreign Policy*, <https://foreignpolicy.com/2020/05/13/coronavirus-pandemic-depression-economy-world-war/>, Accessed 04-20-2021)

For these reasons, the pandemic itself may be conducive to peace. But what about the relationship between broader economic conditions and the likelihood of war? Might a few leaders still convince themselves that provoking a crisis and going to war could still advance either long-term national interests or their own political fortunes? Are the other paths by which a deep and sustained economic downturn might make serious global conflict more likely?

One familiar argument is the so-called diversionary (or “scapegoat”) theory of war. It suggests that leaders who are worried about their popularity at home will try to divert attention from their failures by provoking a crisis with a foreign power and maybe even using force against it. Drawing on this logic, some Americans now worry that President Donald Trump will decide to attack a country like Iran or Venezuela in the run-up to the presidential election and especially if he thinks he’s likely to lose.

This outcome strikes me as unlikely, even if one ignores the logical and empirical flaws in the theory itself. War is always a gamble, and should things go badly—even a little bit—it would hammer the last nail in the coffin of Trump’s declining fortunes. Moreover, none of the countries Trump might consider going after pose an imminent threat to U.S. security, and even his staunchest supporters may wonder why he is wasting time and money going after Iran or Venezuela at a moment when thousands of Americans are dying preventable deaths at home. Even a successful military action won’t put Americans back to work, create the sort of testing-and-tracing regime that competent governments around the world have been able to implement already, or hasten the development of a vaccine. The same logic is likely to guide the decisions of other world leaders too.

Another familiar folk theory is “military Keynesianism.” War generates a lot of economic demand, and it can sometimes lift depressed economies out of the doldrums and back toward prosperity and full employment. The obvious case in point here is World War II, which did help the U.S economy finally escape the quicksand of the Great Depression. Those who are convinced that great powers go to war primarily to keep Big Business (or the arms industry) happy are naturally drawn to this sort of argument, and they might worry that governments looking at bleak economic forecasts will try to restart their economies through some sort of military adventure.

I doubt it. It takes a really big war to generate a significant stimulus, and it is hard to imagine any country launching a large-scale war—with all its attendant risks—at a moment when debt levels are already soaring. More importantly, there are lots of easier and more direct ways to stimulate the economy—infrastructure spending, unemployment insurance, even “helicopter payments”—and launching a war has to be one of the least efficient methods available. The threat of war usually spooks investors too, which any politician with their eye on the stock market would be loath to do.

Economic downturns can encourage war in some special circumstances, especially when a war would enable a country facing severe hardships to capture something of immediate and significant value. Saddam Hussein’s decision to seize Kuwait in 1990 fits this model perfectly: The Iraqi economy was in terrible shape after its long war with Iran; unemployment was threatening Saddam’s domestic position; Kuwait’s vast oil riches were a considerable prize; and seizing the lightly armed emirate was exceedingly easy to do. Iraq also owed Kuwait a lot of money, and a hostile takeover by Baghdad would wipe those debts off the books overnight. In this case, Iraq’s parlous economic condition clearly made war more likely.

Yet I cannot think of any country in similar circumstances today. Now is hardly the time for Russia to try to grab more of Ukraine—if it even wanted to—or for China to make a play for Taiwan, because the costs of doing so would clearly outweigh the economic benefits. Even conquering an oil-rich country—the sort of greedy acquisitiveness that Trump occasionally hints at—doesn’t look attractive when there’s a vast glut on the market. I might be worried if some weak and defenseless country somehow came to possess the entire global stock of a successful coronavirus vaccine, but that scenario is not even remotely possible.

If one takes a longer-term perspective, however, a sustained economic depression could make war more likely by strengthening fascist or xenophobic political movements, fueling protectionism and hypernationalism, and making it more difficult for countries to reach mutually acceptable bargains with each other. The history of the 1930s shows where such trends can lead, although the economic effects of the Depression are hardly the only reason world politics took such a deadly turn in the 1930s. Nationalism, xenophobia, and authoritarian rule were making a comeback well before COVID-19 struck, but the economic misery now occurring in every corner of the world could intensify these trends and leave us in a more war-prone condition when fear of the virus has diminished.

On balance, however, I do not think that even the extraordinary economic conditions we are witnessing today are going to have much impact on the likelihood of war. Why? First of all, if depressions were a powerful cause of war, there would be a lot more of the latter. To take one example, the United States has suffered 40 or more recessions since the country was founded, yet it has fought perhaps 20 interstate wars, most of them unrelated to the state of the economy. To paraphrase the economist Paul Samuelson’s famous quip about the stock market, if recessions were a powerful cause of war, they would have predicted “nine out of the last five (or fewer).”

Second, states do not start wars unless they believe they will win a quick and relatively cheap victory. As John Mearsheimer showed in his classic book Conventional Deterrence, national leaders avoid war when they are convinced it will be long, bloody, costly, and uncertain. To choose war, political leaders have to convince themselves they can either win a quick, cheap, and decisive victory or achieve some limited objective at low cost. Europe went to war in 1914 with each side believing it would win a rapid and easy victory, and Nazi Germany developed the strategy of blitzkrieg in order to subdue its foes as quickly and cheaply as possible. Iraq attacked Iran in 1980 because Saddam believed the Islamic Republic was in disarray and would be easy to defeat, and George W. Bush invaded Iraq in 2003 convinced the war would be short, successful, and pay for itself.

The fact that each of these leaders miscalculated badly does not alter the main point: No matter what a country’s economic condition might be, its leaders will not go to war unless they think they can do so quickly, cheaply, and with a reasonable probability of success.

Third, and most important, the primary motivation for most wars is the desire for security, not economic gain. For this reason, the odds of war increase when states believe the long-term balance of power may be shifting against them, when they are convinced that adversaries are unalterably hostile and cannot be accommodated, and when they are confident they can reverse the unfavorable trends and establish a secure position if they act now. The historian A.J.P. Taylor once observed that “every war between Great Powers [between 1848 and 1918] … started as a preventive war, not as a war of conquest,” and that remains true of most wars fought since then.

The bottom line: Economic conditions (i.e., a depression) may affect the broader political environment in which decisions for war or peace are made, but they are only one factor among many and rarely the most significant. Even if the COVID-19 pandemic has large, lasting, and negative effects on the world economy—as seems quite likely—it is not likely to affect the probability of war very much, especially in the short term.

#### Growth-driven tech innovation proliferates and advances the technology necessary to conduct bioterrorism.

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Whatever the actual potential of these technologies, it is clear that a powerful technological imaginary exists among policy makers, technologists, and economists that contributes to an unshakeable faith in innovation and human ingenuity to solve the decoupling challenge. Degrowth proponents have so far mainly challenged this optimism by emphasizing the limited potential of renewable energy due to its intermittency and high land and raw material demands (e.g. Kallis, 2018). However, this may downplay the (at least theoretical) potential for convergent breakthroughs in nanotechnology, synthetic biology, and AI to vastly improve renewable energy efficiency and storage systems while designing new materials to substitute for depleting minerals (Diamandis and Kotler, 2014). More broadly, while degrowthers have to some extent considered individual FIR technologies (particularly AI and biotechnology) (e.g. Kallis, 2018; Kerschner et al., 2018), they have yet to address their convergent and mutually amplifying character, which leaves them vulnerable to the arguments of techno-optimists. Of course, the revolutionary promise of these technologies may fail to materialize, and, given the magnitude of the decoupling challenge, degrowth advocates are right to be skeptical. However, due to irreducible uncertainty combined with the ‘exponential’ and ‘revolutionary’ potential of the FIR (Schwab, 2017), even more rigorous critical assessments would always be insufficient in the eyes of the techno-optimists. Therefore, an alternative line of response should also be pursued: what if the FIR does succeed in decoupling economic growth from total environmental impact? What unintended consequences then might this give rise to?3 Dual-use technologies and the democratization of violence First, we must consider that all these are ‘dual-use technologies’, or technologies with potential both for economic productivity and violence. As Blum and Wittes (2015, p. 2) explain, these technologies are driving a trend referred to as the ‘democratization of violence’ in which the ‘destructive power once reserved to states is now the potential province of individuals’. Rather than simply a matter of creating new individual weapons, Blum and Wittes (2015, pp. 39, 7-8) emphasize that convergent FIR technologies are generating ‘whole technological fields – a series of breakthroughs in basic science and engineering’ that ‘generate creativity in their users to build and invent new things, new weapons, and new modes of attack’. And to compound the problem, while FIR technologies empower individuals to kill and provoke systemic chaos unlike any other time in history, they also empower states to monitor the minute details of private and public life and potentially constrict individual and collective freedoms, while the unprecedented threats enabled by these same technologies will likely reinforce governmental efforts to intensify securitization as deeply as is technologically feasible. Blum and Wittes summarize the emerging predicament as follows: How should we think about the relationship between liberty and security when we both rely on governments to protect us from radically empowered fellow citizens around the globe and also fear the power those same technologies give to governments? (Blum and Wittes, 2015, p. 13) Blum and Wittes do not consider how the earth system crisis will intersect with these threats, either as a positive or negative feedback. But it should be clear that, in a world of FIR-driven sustainability solutions, they would inevitably intensify, and it is thus necessary to consider what new problems and governmental responses they would engender.4 Without claiming to exhaustively describe the security risks created by the FIR, I will focus on three emerging areas of concern: biosecurity, cybersecurity, and state securitization, and will then discuss how they may collectively generate a spiral of insecurity and securitization. Biotechnology and the emerging terrain of biosecurity To begin with biosecurity, both the promise and peril of biotechnology – particularly the still nascent field of synthetic biology – is its immense creative potential. As a recent report from the National Academies of Sciences (NAS) describes: synthetic biology is expected to (1) expand the range of what could be produced, including making bacteria and viruses more harmful; (2) decrease the amount of time required to engineer such organisms; and (3) expand the range of actors who could undertake such efforts. (NAS, 2018, p. 4) For example, manipulating DNA structures in microorganisms can make certain agents more virulent, improve their resistance to antibiotics and vaccines, make them less detectable by already limited surveillance systems, transform harmless microorganisms into deadly ones, and make pathogens more resilient to diverse atmospheric conditions, thus increasing their lifespan (Charlet, 2018; NAS, 2018). At present these capabilities remain limited and dependent on highly advanced techniques and laboratory equipment, which is why most experts believe there have to date been no mass casualty bioterror attacks (NAS, 2018). However, the NAS notes that improvements in synthesis technology have followed a ‘Moore’s Law–like’ curve for both reductions in costs and increases in the length of constructs that are attainable’, and that ‘these trends are likely to continue’ (NAS, 2018, pp. 18–19). Moreover, automated DNA synthesis techniques remove much of the time-consuming and technically difficult aspects of manipulating DNA, further reducing barriers to access (Wintle et al., 2017). And in the future, experts warn that ‘convergent capabilities’ between synthetic biology, information technology, nanotechnology, and 3D printing may enable ‘sudden’ breakthroughs in bioweaponization (e.g. by improving bio-agent stability and delivery, providing advance[d]s aerosolization capability, and accelerating the ‘Design-and-Build’ cycle) (NAS, 2018, p. 87). The possibilities of bio-weaponization will expand as these techniques diffuse, which are already enabling the formation of a ‘DIYbio’ movement in which amateur scientists, inventors, and others are increasingly ‘capable of doing at home what just a few years ago was only possible in the most advanced university, government or industry laboratories’ (Bennett et al., 2009, p. 1109). The new CRIPSR/Cas9 gene editing technique further expands the range of genomic tinkering available to individuals, which has been widely embraced by the DIYbio community as a powerful tool that ‘makes it easy, cheap, and fast to move genes around – any genes, in any living thing’ (Maxmen, 2015). The capacities of DIY biohackers remain limited in important ways, though the trends described above suggests they will continue to increase as barriers to advanced bio-weaponization fall (NAS, 2018). And while the risks are evident, the democratization of these techniques may also facilitate the diffusion and customization of local solutions to environmental and health challenges while enhancing popular participation in the direction of biotechnological evolution away from transnational corporate dominance (Bennett et al., 2009). We can therefore say that these emerging technologies pose a unique kind of ‘security dilemma’: while their development and diffusion may strengthen local and global capacities to solve environmental challenges, they may also imperil global security by unleashing uniquely powerful and complex violence capabilities. Synthetic biology is only in its early stages, and governments from the UK to China aim to ‘accelerate [its] industrialization and commercialization’ in order ‘to drive economic growth’ and ‘develop solutions to key challenges across the bioeconomy, spanning health, chemicals, advanced materials, energy, food, security and environmental protection’ (Synthetic Biology Leadership Council, 2016, pp. 13, 4). If calls for emergency action to exponentially expand the green economy indeed accelerate these trends (Falk et al., 2018), then by 2030 (and more so by 2040) we will live in a world where genetically engineered biofuels dramatically increase, genetic tinkering with crop varieties is normalized to enhance agricultural resilience, and gene drives are deployed to control old and new disease vectors intensified by climate change (among other potential applications), which would exponentially expand the number of individuals with biotech expertise and access to the needed equipment. Therefore, while we have yet to experience a catastrophic bioterror attack, rapid advances in synthetic biology are nonetheless creating a ‘black swan waiting to happen’ (Bennett et al., 2009, p. 1110), and the risk is that such black swans could become increasingly ‘normal’ if this technology becomes a key engine of economic growth and green technological innovation.

## INNOVATION

### 1NC---Turn

#### Pandemics solve environment and income inequality --- they’re also inevitable. BUT --- they don’t cause extinction because of genetic immunity AND isolated populations

**Vince 13**. (Gaia Vince – freelance British environmental journalist, broadcaster and non-fiction author. Her Adventures in the Anthropocene: A Journey to the Heart of the Planet We Made won the 2015 Royal Society Winton Prize for Science Books. "Global transformers: What if a pandemic strikes?," BBC. July 11, 2013. DOA: 4/2/19. http://www.bbc.com/future/story/20130711-what-if-a-pandemic-strikes)

Over the past century, humans have been transforming the planet so profoundly that we are pushing it into a new geological era, the Anthropocene (the Age of Man). But how will the Anthropocene unfold? Will we continue on a path of global climate change, land-use change, resource depletion, biodiversity loss and population expansion? Or will something happen to push us off this trajectory – perhaps back into Holocene-like conditions? As I mentioned before, over the next few columns I’ll be looking at technologies or events that have the potential to radically alter our planet. The first one is a pessimistic one for humans: what if our species were hit by a global pandemic? In the Anthropocene we are encroaching on wild lands, bringing us closer to monkeys and apes, for example, which are traded internationally for bushmeat and pets. We are also living in close proximity to domestic creatures like pigs, chickens and ducks. It means that diseases that infect animals have an unprecedented chance to jump across species to us. Humans are so genetically alike that pathogens easily spread between individuals and across populations. And because we are living in greater numbers and densities than ever before, and because so many of us travel internationally – and so much faster – there’s a greater opportunity for pathogens to spread. If a virus can infect someone in one part of the world, it is unlikely to be contained. Few places are truly remote in the Anthropocene. Epidemics are certainly not new or unpredictable. A new strain of influenza virus occurs every 1-2 years, for example. But the sudden global explosion of an epidemic that infects a large number of the population – a pandemic – is harder to predict. We know a pandemic has occurred every 10-50 years for the past few centuries, and the last one was in 1968, so we're overdue one. Epidemiologists do not talk of whether there will be a new pandemic, but of when it will occur. Pandemics, which kill a significant proportion of the population have acute and lasting effects on society. The Black Death, a bubonic plague during the Middle Ages caused by the bacterium Yersinia pestis, killed 30%-60% of Europeans (80% of people in the south of France and Spain) and reduced global population from 450 million to around 350 million. In a single province of China, more than 4 million people died (90% of the population) in 1334 alone. Such a toll was socially transformative. Entire cities were depopulated, world trade declined, but so did wars. In some countries witch hunts rooting out the unknown cause of the plague resulted in minority groups being massacred, including lepers and Jews. For plague survivors life generally improved, especially for those at the bottom of the ladder. Peasants benefited from the scarcity of labour to gain better wages (often through revolt), and their crops and cattle spread into unoccupied land giving most people a richer diet. The Black Death also had an environmental impact – loss of agricultural activity allowed forests to regrow, and their photosynthetic activity sucked so much carbon from the air it contributed to the regional cooling event known as the Little Ice Age. Economic slump More recently, the Spanish Flu of 1918 killed one in five of those infected, some 40-50 million people worldwide, which was more than the guns of World War I. The impacts of this pandemic should have been especially severe because unusually, more than half of those who died were young working-age adults, aged 20-40 (most flu outbreaks kill the very old and young first). However, the global economic slump that resulted from incapacitation or deaths among the workforce melded into the dramatic effects of the war. The HIV/Aids epidemic, which also disproportionately effects young, working age men and women, can give some idea of economic impact – in hard-hit sub-Saharan African countries the economies were estimated to be on average 22% smaller in 2010, due to the virus's effects. So what would be the result of a global pandemic in the 21st Century? The world’s population in the Middle Ages was just a few hundred million; in 1918, it was 1.8 billion – now it is more than 7 billion. The numbers of people infected and killed could run into the hundreds of millions. Industry, food production, and the trappings of our modern world economy would all suffer, but this could be to the benefit of the environment. Poverty in HIV-hit southern Africa means it has the lowest per capita greenhouse gas emissions on the planet. During the global financial crisis that began in 2008, annual emissions from the energy sector fell from 29.3GT to 29GT. Fewer people would mean less production of everything from food to plastics. That could mean fewer industrial emissions, agricultural and residential land reverting back to forest perhaps, few polluting journeys, and less freshwater extractions. But what if the pandemic was really severe – killing 80%-90% of our species? Aside from a few people with immunity, densely populated cities would be worst hit – small remote islands may be spared through quarantine. It could mean an end to our advanced human civilization for a time, at least. Our species impact on the planet would diminish substantially as a result of our few numbers and global capability. Although greenhouse gas emissions may drop suddenly, the effect on temperature would take centuries to perceive because of how long carbon dioxide persists in the air. Nevertheless, temperatures would fall. Biodiversity would recover in many cases, due to reduced human encroachment on habitats, hunting and pollution.

#### Turns conflict

Posen 20, Ford International Professor of Political Science at MIT, Director Emeritus of the MIT Security Studies Program (Barry Posen, 4-23-2020, "Do Pandemics Promote Peace?," Foreign Affairs, https://www.foreignaffairs.com/articles/china/2020-04-23/do-pandemics-promote-peace?utm\_source=twitter\_posts&utm\_medium=social&utm\_campaign=tw\_daily\_soc)

As the novel coronavirus infects the globe, states compete for scientific and medical supplies and blame one another for the pandemic’s spread. Policy analysts have started asking whether such tensions could eventually erupt into military conflict. Has the pandemic increased or decreased the motive and opportunity of states to wage war? War is a risky business, with potentially very high costs. The historian Geoffrey Blainey argued in The Causes of War that most wars share a common characteristic at their outset: optimism. The belligerents usually start out sanguine about their odds of military success. When elites on both or all sides are confident, they are more willing to take the plunge—and less likely to negotiate, because they think they will come out better by fighting. Peace, by contrast, is served by pessimism. Even one party’s pessimism can be helpful: that party will be more inclined to negotiate and even accept an unfavorable bargain in order to avoid war. When one side gains a sudden and pronounced advantage, however, this de-escalatory logic can break down: the optimistic side will increase its demands faster than the pessimistic side can appease. Some analysts worry that something like this could happen in U.S.-Chinese relations as a result of the new coronavirus. The United States is experiencing a moment of domestic crisis. China, some fear, might see the pandemic as playing to its advantage and be tempted to throw its military weight around in the western Pacific. What these analysts miss is that COVID-19, the disease caused by the coronavirus, is weakening all of the great and middle powers more or less equally. None is likely to gain a meaningful advantage over the others. All will have ample reason to be pessimistic about their military capabilities and their overall readiness for war. For the duration of the pandemic, at least, and probably for years afterward, the odds of a war between major powers will go down,

#### MARKED

not up.

PAX EPIDEMIA?

A cursory survey of the scholarly literature on war and disease appears to confirm Blainey’s observation that pessimism is conducive to peace. Scholars have documented again and again how war creates permissive conditions for disease—in armies as well as civilians in the fought-over territories. But one seldom finds any discussion of epidemics causing wars or of wars deliberately started in the middle of widespread outbreaks of infectious disease. (The diseases that European colonists carried to the New World did weaken indigenous populations to the point that they were more vulnerable to conquest; in addition, some localized conflicts were fought during the influenza pandemic of 1919–21, but these were occasioned by major shifts in regional balances of power following the destruction of four empires in World War I.) That sickness slows the march to war is partly due to the fact that war depends on people. When people fall ill, they can’t be counted on to perform well in combat. Military medicine made enormous strides in the years leading up to World War I, prior to which armies suffered higher numbers of casualties from disease than from combat. But pandemics still threaten military units, as those onboard U.S. and French aircraft carriers, hundreds of whom tested positive for COVID-19, know well. Sailors and soldiers in the field are among the most vulnerable because they are packed together. But even airmen are at risk, since they must take refuge from air attacks in bunkers, where the virus could also spread rapidly. Ground campaigns in urban areas pose still greater dangers in pandemic times. Much recent ground combat has been in cities in poor countries with few or no public health resources, environments highly favorable to illness. Ground combat also usually produces prisoners, any of whom can be infected. A vaccine may eventually solve these problems, but an abundance of caution is likely to persist for some time after it comes into use. The most important reason disease inhibits war is economic. Major outbreaks damage national economies, which are the source of military power. COVID-19 is a pandemic—by definition a worldwide phenomenon. All great and middle powers appear to be adversely affected, and all have reason to be pessimistic about their military prospects. Their economies are shrinking fast, and there is great uncertainty about when and how quickly they will start growing again. Even China, which has slowed the spread of the disease and begun to reopen its economy, will be hurting for years to come. It took an enormous hit to GDP in the first quarter of 2020, ending 40 years of steady growth. And its trading partners, burned by their dependence on China for much of the equipment needed to fight COVID-19, will surely scale back their imports. An export-dependent China will have to rely more on its domestic market, something it has been attempting for years with only limited success. It is little wonder, then, that the International Monetary Fund forecasts slower growth in China this year than at any time since the 1970s. Even after a vaccine is developed and made widely available, economic troubles may linger for years. States will emerge from this crisis with enormous debts. They will spend years paying for the bailout and stimulus packages they used to protect citizens and businesses from the economic consequences of social distancing. Drained treasuries will give them one more reason to be pessimistic about their military might.

### 1NC---Defense

#### No extinction from pandemics.

Barratt 17, PhD in Pure Mathematics, Lecturer in Mathematics at Oxford, Research Associate at the Future of Humanity Institute. (Owen Cotton-Barratt et al, “Existential Risk: Diplomacy and Governance”, pg. 9, <https://www.fhi.ox.ac.uk/wp-content/uploads/Existential-Risks-2017-01-23.pdf>)

1.1.3 Engineered pandemics For most of human history, natural pandemics have posed the greatest risk of mass global fatalities.37 However, there are some reasons to believe that natural pandemics are very unlikely to cause human extinction. Analysis of the International Union for Conservation of Nature (IUCN) red list database has shown that of the 833 recorded plant and animal species extinctions known to have occurred since 1500, less than 4% (31 species) were ascribed to infectious disease.38 None of the mammals and amphibians on this list were globally dispersed, and other factors aside from infectious disease also contributed to their extinction. It therefore seems that our own species, which is very numerous, globally dispersed, and capable of a rational response to problems, is very unlikely to be killed off by a natural pandemic. One underlying explanation for this is that highly lethal pathogens can kill their hosts before they have a chance to spread, so there is a selective pressure for pathogens not to be highly lethal. Therefore, pathogens are likely to co-evolve with their hosts rather than kill all possible hosts.39

#### \*ABR is gradual, slow, and will be addressed---reject scary-sounding headlines

Smith 16, PhD molecular biologist, former R&D director at MicroPhage and SomaLogic. (Drew, 6-14-16, “The Myth Of The Post-Antibiotic Era”, <https://www.forbes.com/sites/quora/2016/06/14/the-myth-of-the-post-antibiotic-era/#db027696fa83>)

Right now, drug resistant infections are mainly a threat to those that are already sick and/or in medical facilities. But, if we continue down this path, mundane infections in the otherwise healthy could someday morph into life-threatening ordeals, and simple medical procedures and surgeries may be skipped to avoid risk of infection. However, while this threat is real, it’s important to keep in mind that this is an ongoing, gradual challenge; it’s extremely unlikely that a single event will herald with complete certainty the abrupt end of modern medicine as we know it. In this context, those scary headlines are inappropriate, if not numbing and counterproductive. In May, Ars wrote about some alarmist and inaccurate news stories dealing with a newly identified type of drug resistance—one that makes bacteria resistant to a last-resort antibiotic called colistin and can spread between bacteria easily. The headlines blared that it was the “first” time such a dastardly microbe had seeped into the US—which is not true. And they suggested that it would certainly mark the end of antibiotics—also not true. This week, scientists provided updates on tracking that type of resistance, and of course some alarmist headlines followed. Yet, the new data actually suggests that a tempering of concerns about this particular resistance may be in order. It turns out that this “dreaded,” “scary,” “nightmare” of a drug-resistant microbe has been in the US for more than a year and elsewhere in the world since as far back as 2005—it’s just that nobody noticed it. And nobody noticed it because so far it hasn’t been the dreaded, scary nightmare some have feared. “It’s not a huge cause for concern,” Mariana Castanheira, lead author of one of this week’s resistance updates, told Ars. Castanheira is the director for Molecular and Microbiology at JMI Laboratories, a private company that monitors drug resistance microbes in hospitals and medical settings. They and others are finding this new type of resistance now simply because they’re looking for it, she said. Castanheira explains that people initially started digging for this new type of drug resistance—a gene called mcr-1—out of concern that it makes bacteria resistant to the antibiotic colistin, which is a relatively toxic drug used only when nearly all others have failed against a multi-drug resistant infection. Bacteria have shown up with colistin resistance before—in fact, many times in the US and elsewhere around the world. But in those cases, the genes were embedded in the bacteria’s chromosomes and generally passed down through generations. The mcr-1 resistance gene, on the other hand, seems to always sit on a plasmid, a small loop of DNA that bacteria can readily pass around to neighbors. If colistin-resistant bacteria shared their mcr-1 plasmid with others that are already resistant to lots of antibiotics, they could create a long-feared invincible germ—a “pan-resistant” bacteria. “Doesn’t scare me” So far that doesn’t seem to be happening, though, Castanheira said. In more than a decade of skulking around, mcr-1 has made its way into bacteria in animals, people, and soil all over the world. Yet, all of the mcr-1 carrying microbes examined have been susceptible to at least one antibiotic—and often several.

## OPIOIDS

### 1NC---Defense

#### Food insecurity doesn’t cause war.

Vestby et al 18, \*Jonas, Doctoral Researcher at the Peace Research Institute Oslo, \*\*Ida Rudolfsen, doctoral researcher at the Department of Peace and Conflict Research at Uppsala University and PRIO, and \*\*\*Halvard Buhaug, Research Professor at the Peace Research Institute Oslo (PRIO); Professor of Political Science at the Norwegian University of Science and Technology (NTNU); and Associate Editor of the Journal of Peace Research and Political Geography. (5/18/18, “Does hunger cause conflict?”, *Climate & Conflict Blog*, <https://blogs.prio.org/ClimateAndConflict/2018/05/does-hunger-cause-conflict/>)

It is perhaps surprising, then, that there is little scholarly merit in the notion that a short-term reduction in access to food increases the probability that conflict will break out. This is because to start or participate in violent conflict requires people to have both the means and the will. Most people on the brink of starvation are not in the position to resort to violence, whether against the government or other social groups. In fact, the urban middle classes tend to be the most likely to protest against rises in food prices, since they often have the best opportunities, the most energy, and the best skills to coordinate and participate in protests.

Accordingly, there is a widespread misapprehension that social unrest in periods of high food prices relates primarily to food shortages. In reality, the sources of discontent are considerably more complex – linked to political structures, land ownership, corruption, the desire for democratic reforms and general economic problems – where the price of food is seen in the context of general increases in the cost of living. Research has shown that while the international media have a tendency to seek simple resource-related explanations – such as drought or famine – for conflicts in the Global South, debates in the local media are permeated by more complex political relationships.

#### US supply isn’t key to global ag.

Charles 13, NPR’s food and agriculture correspondent. Citing Margaret Mellon, a scientist with the environmental advocacy group Union of Concerned Scientists. (Dan, 9/17/13, “American Farmers Say They Feed The World, But Do They?”, *NPR*, https://www.npr.org/sections/thesalt/2013/09/17/221376803/american-farmers-say-they-feed-the-world-but-do-they)

And this is why the words “feed the world” grate on the nerves of people who believe that large-scale, technology-driven agriculture is bad for the environment and often bad for people. Margaret Mellon, a scientist with the environmental advocacy group Union of Concerned Scientists, recently wrote an essay in which she confessed to developing an allergy to that phrase. “If there’s a controversy, the show-stopper is supposed to be, ‘We have to use pesticides, or we won’t be able to feed the world!’ “ she says. Mellon says it’s time to set that idea aside. It doesn’t answer the concerns that people have about modern agriculture — and it’s not even true. American-style farming doesn’t really grow food for hungry people, she says. Forty percent of the biggest crop — corn — goes into fuel for cars. Most of the second-biggest crop — soybeans — is fed to animals. Growing more grain isn’t the solution to hunger anyway, she says. If you’re really trying to solve that problem, there’s a long list of other steps that are much more important. “We need to empower women; we need to raise incomes; we need infrastructure in the developing world; we need the ability to get food to market without spoiling.”

#### COVID thumps food security.

Rudolfsen 20, doctoral researcher at the Department of Peace and Conflict Research at Uppsala University and PRIO. (Ida, 7/27/20, "COVID-19, Food Access, and Social Upheaval", *Climate & Conflict*, https://blogs.prio.org/ClimateAndConflict/2020/07/covid-19-food-access-and-social-upheaval/)

According to the World Food Program’s (WFP) latest report, the COVID-19 pandemic will lead to an 82 percent increase in global food insecurity, affecting around 270 million people by the end of the year. On June 29, the organization announced it is undertaking its largest humanitarian effort to assist an increasing number of food-insecure low- and middle-income countries. In a statement about the plan, WFP Executive Director David Beasley said that “until the day we have a medical vaccine, food is the best vaccine against chaos. Without it, we could see increased social unrest and protests, a rise in migration, deepening conflict, and widespread under-nutrition among populations that were previously immune from hunger.”

Why is the pandemic leading to more food insecurity? And why is David Beasley talking about social unrest and protest in connection with food?

As COVID-19 spreads around the world, fears are mounting of how the pandemic might impact and disrupt food distribution channels (e.g., transport disruptions) and disruption in the production of staple foods (e.g., labor shortages due to quarantine measures).

So far, food supply chains have been defined as essential by governments, exempting them from most lockdown measures. Thus, the impact on supply chains has been indirect, mainly caused by reduced income and remittances. A loss of income makes it harder for poor people to access affordable food but also impacts food systems by making it more difficult for producers to sell foodstuffs, since consumer’s ability to buy food declines. Governments, especially in low- and middle-income countries, will therefore have to implement policies that avoid supply chain disruptions and higher food prices.

But what do food insecurity and food prices have to do with protest and violence? The answer: it’s complicated.

The pandemic is spreading at a time when the number of severely food insecure people in the world had already increased—by more than 820 million people before the pandemic started—adding stress to areas already hardly hit by extreme weather events, armed conflict, and low economic development. However, most of these areas have not seen widespread unrest.

#### Food prices don’t cause conflict---reject their bad studies.

Demarest 15—PhD Researcher at the Centre for Research on Peace and Development [Leila, “Food price rises and political instability: Problematizing a complex relationship,” *The European Journal of Development Research*, Vol. 27, No. 5, p. 650-671, Emory Libraries]

6. Conclusions and Way Forward

While some progress has been made in improving our understanding of the linkages between rising food prices and conflict, several important gaps remain. Firstly, notions of conflict and political instability are often used interchangeably, while these concepts and the relationships between them remain to some extent vague. The ‘food riot’ concept in particular leads to confusion. Although it is popularly seen as a violent rise of the masses, in reality, many peaceful events are gathered under this term, while violence is often committed by the state rather than by hungry consumers. The term also presupposes that food is the central issue at hand, which does not necessarily have to be the case. Many misunderstanding arise from the second gap identified in this paper: the uncritical data gathering based on international news reports. Not only are these remarkably inconsistent, they also make use of classifications which are not scientifically investigated. Finally, causal mechanisms in the relationship between rising food prices and conflict often remain assumptions in the literature and lack empirical foundation. Three crosscutting avenues for improvement therefore exist: better concept definitions, better data gathering, and more focus on contexts.

Clearly defined concepts and categorizations of conflict and instability are a necessary foundation for research on the linkages between rising food prices and conflict. For (food) protests in particular, purposeful categorizations require an enhanced insight in the events that took place on the ground. Local news sources for data gathering can prove to be more reliable than Western (English) media to accomplish this. Event descriptions are also likely to be more detailed in local sources, which allows for a first-hand qualitative analysis of causes and context.

As international food prices are likely to remain high, improving our understanding of the causal mechanisms which can lead to conflict remains crucial. We can draw important lessons from the literature on poverty and conflict, resource scarcity and conflict, and regime transition in Africa. The causal role of economic factors alone has continuously been questioned, and ‘context’ or prevailing political, economic, and social factors play a crucial role in the conflict outcome. The argument that adverse economic shocks seem more of a trigger to conflict rather than an important cause is not particularly remarkable in itself. Yet while many authors acknowledge this, the focus often remains on the trigger. Resource scarcity, climate change, population growth, or food insecurity often remain the starting point of analyses, with researchers consequently tracing the divergent (theoretical) possibilities for conflict. In the end, most admit that these factors do not automatically lead to conflict everywhere, and stress the importance of context. Because the theoretical possibilities for conflict are so large, however, the context factor remains rather understudied with as most agreed upon notions that elements of ‘grievance’ and ‘collective action’ are required.

It is hence important to focus more on the ‘contexts’ that can lead to conflict and, in doing so, to make the distinction between different forms of conflict. This also implies a data collection exercise. Contextual data are currently collected at the aggregate, national level, and only on a yearly basis, which can lead to spurious relations. While the use of these variables is increasingly questioned in civil war studies, we can also doubt their strength in the study of highly localized, one-time events such as riots. I particularly make the case for ‘bringing politics back in’. The policies taken by the government are crucial in the violent escalation of social conflict (e.g. accommodation versus repression), but the only variable currently in use to explain state behaviour seems to be the country-level regime type variable (Polity IV or Freedom House), which is also used with regards to highly localized conflicts. Other ways in which politics matter, can be the strength of the political opposition. The Muslim Brotherhood in Egypt, for example, was probably better organized than other opposition groups to make use of economic unrest.

# 2NC

## CP ⁠— AMR

## Economy

### O/V ⁠— 2NC

#### Only warming kills everyone.

McDonald ‘19 (Samuel Miller McDonald is a writer and geography PhD student at University of Oxford studying the intersection of grassroots movements and energy transition; 1/4/19; “Deathly Salvation”; *The Trouble*; https://www.the-trouble.com/content/2019/1/4/deathly-salvation)

A devastating fact of climate collapse is that there may be a silver lining to the mushroom cloud. First, it should be noted that a nuclear exchange does not inevitably result in apocalyptic loss of life. Nuclear winter—the idea that firestorms would make the earth uninhabitable—is based on shaky science. There’s no reliable model that can determine how many megatons would decimate agriculture or make humans extinct. Nations have already detonated 2,476 nuclear devices. An exchange that shuts down the global economy but stops short of human extinction may be the only blade realistically likely to cut the carbon knot we’re trapped within. It would decimate existing infrastructures, providing an opportunity to build new energy infrastructure and intervene in the current investments and subsidies keeping fossil fuels alive. In the near term, emissions would almost certainly rise as militaries are some of the world’s largest emitters. Given what we know of human history, though, conflict may be the only way to build the mass social cohesion necessary for undertaking the kind of huge, collective action needed for global sequestration and energy transition. Like the 20th century’s world wars, a nuclear exchange could serve as an economic leveler. It could provide justification for nationalizing energy industries with the interest of shuttering fossil fuel plants and transitioning to renewables and, uh, nuclear energy. It could shock us into reimagining a less ~~suicidal~~ civilization, one that dethrones the death-cult zealots who are currently in power. And it may toss particulates into the atmosphere sufficient to block out some of the solar heat helping to drive global warming. Or it may have the opposite effects. Who knows? What we do know is that humans can survive and recover from war, probably even a nuclear one. Humans cannot recover from runaway climate change. Nuclear war is not an inevitable extinction event; six degrees of warming is.

#### Decoupling causes synthetic biotech, which causes breakthroughs in bioterror ⁠— that’s [Albert] ⁠— dropped

#### Extinction — non-state actors will deploy.

Barratt et al. ‘17 (Owen Cotton-Barratt et al; PhD in Pure Mathematics, Lecturer in Mathematics at Oxford, Research Associate at the Future of Humanity Institute; “Existential Risk: Diplomacy and Governance”; pg. 9; <https://www.fhi.ox.ac.uk/wp-content/uploads/Existential-Risks-2017-01-23.pdf>)

Recent developments in biotechnology may, however, give people the capability to design pathogens which overcome this trade-off. Some gain-of-function research has demonstrated the feasibility of altering pathogens to create strains with dangerous new features, such as vaccine-resistant smallpox40 and human-transmissible avian flu,41 with the potential to kill millions or even billions of people. For an engineered pathogen to derail humanity’s long-term future, it would probably have to have extremely high fatality rates or destroy reproductive capability (so that it killed or prevented reproduction by all or nearly all of its victims), be extremely infectious (so that it had global reach), and have delayed onset of symptoms (so that we would fail to notice the problem and mount a response in time).42 Making such a pathogen would be close to impossible at present. However, the cost of the technology is falling rapidly,43 and adequate expertise and modern laboratories are becoming more available. Consequently, states and perhaps even terrorist groups could eventually gain the capacity to create pathogens which could deliberately or accidentally cause an existential catastrophe.

### Impact Run — 2NC

#### Growth makes catastrophic disease inevitable — extinction.

Morand & Walther 20 (\*Serge Morand; PhD, disease ecologist @ Kasetsart University; \*\*Bruno A. Walther; DPhil, Taipei Medical University; 4/20/20; “The accelerated infectious disease risk in the Anthropocene: more outbreaks and wider global spread”; pg. 3-4; Accessible at: <https://doi.org/10.1101/2020.04.20.049866>) \*”to” added to preserve grammatical integrity, brackets denote a change

We here want to draw attention to another important and noteworthy feature of the Anthropocene which greatly affects public health, human well-being, and economic performance. These findings are especially pertinent as the world reels from the health, social and economic impact of the current SARS-CoV-2 pandemic (El Zowalaty and Järhult, 2020; Ghebreyesus and Swaminathan, 2020; Lorusso et al., 2020). The increasing connectivity of human populations due to international trade and travel (Guimerà et al., 2005; Colizza et al., 2006; Brockmann and Helbing, 2013; Gabrielli et al., 2019), the rapid growth of the transport of wild and domesticated animals worldwide (Rosen and Smith, 2010; Schneider, 2012; Rohr et al., 2019; Levitt, 2020), and other factors such as the increasing encroachment of human populations on hitherto isolated wild animal populations through loss and fragmentation of wild habitats (Patz et al., 2004; Despommier et al., 2006; Pongsiri et al., 2009; Myers et al., 2013) have led to a great acceleration of infectious disease risks, e.g., the increase in emerging infectious diseases and drug-resistant microbes since 1940 (Jones et al., 2008) and the increase in the number of disease outbreaks since 1980 (Smith et al., 2014). To expand the previous analysis (Smith et al., 2014) to the beginning of the Anthropocene, we investigated whether the number of disease outbreaks has increased since the Second World War. In addition, we examined whether the global pattern of infectious disease outbreaks changed possibly due [to] the increasing connectivity of human populations. In other words, have the disease outbreaks become more globalized in the sense that these outbreaks are increasingly shared by countries worldwide? To investigate these questions, we used a the most complete, reliable, and up-to-date global dataset (GIDEON Informatics, 2020) which had already been used in the previous analysis (Smith et al., 2014). This dataset can be used to enumerated the recorded annual number of disease outbreaks. To investigate the changing global patterns of disease outbreaks, we used this dataset to calculate two measures which have been recently introduced into ecological and parasitological studies. These two measures, namely modularity and centrality, quantify the connectivity of bipartite networks. Modularity is defined as the extent to which nodes (specifically, sites and species for presenceabsence matrices) in a compartment are more likely to be connected to each other than to other nodes of the network (Thébault, 2013). The calculation of a modularity measure is useful for global phenomena because it allows the overall level of compartmentalization (or fragmentation) into compartments (or clusters, modules, subgroups, or subsets) of an entire dataset to be quantified. High modularity in a global network means that subgroups of countries and disease outbreaks interact more strongly among themselves (that is, within a compartment) than with the other subgroups (that is, among compartments) (Bordes et al., 2015). Centrality is defined as the degree of the connectedness of a node (e.g., a keystone species in ecological studies; Jordán, 2009; González et al., 2010). In the context of our study, centrality is the degree of the connectedness of a country and those countries connected to it. We estimated the countries which are the potential centres of disease outbreaks by investigating the eigenvector centrality of a given country in a network of countries which share disease outbreaks among each other. Eigenvector centrality is a generalization of degree centrality, which is the number of connections a country has to other countries in terms of sharing disease outbreaks. Eigenvector centrality considers countries to be highly central if the connected countries to them through shared outbreaks are connected to many other well-connected countries (Bonacich and Lloyd, 2001; Wells et al., 2020). Modularity and centrality analyses have been used to investigate various ecological, parasitological and epidemiological questions (e.g., Tylianakis et al., 2007; Jordán, 2009; González et al., 2010; Anderson and Sukhdeo, 2011; Bascompte and Jordano, 2014; Poisot et al., 2014; Bordes et al., 2015; Genrich et al., 2017). Using a widely used world dataset on infectious disease outbreaks, we here present results which demonstrate that the accelerated number of disease outbreaks and their increased global spread are two further threatening aspects of the accelerated infectious disease risk associated with the globalization process which characterizes the Anthropocene.

#### 2. Chemical emissions.

Julian Cribb 17, Fellow of the Australian Academy of Technological Sciences and Engineering, 2017, “The Poisoner,” in Surviving the 21st Century, p. 113-117

There are two essential points about the Earthwide chemical flood. First it is quite new. It began with the industrial revolution of the late nineteenth century, but expanded dramatically in the wake of the two world wars—where chemicals were extensively used in munitions—and has exploded in deadly earnest in the past 50 years, attaining a new crescendo in the early twenty-first century. It is something our ancestors never faced—and to which we, in consequence, lack any protective adaptations which might otherwise have evolved due to constant exposure to poisons. ¶ Second, the toxic flood is, for the most part, preventable. It is not compulsory—but is an unwanted by-product of economic growth. Though driven by powerful industries and interests, it still lies within the powers and rights of citizens, consumers and their governments to demand it be curtailed or ended and to encourage industry to safer, healthier products and production systems. ¶ The issue is whether, or not, a wise humanity would choose to continue poisoning our children, ourselves and our world. ¶ Regulatory Failure ¶ Despite the fact that around 2000 new chemicals are released onto world markets annually, most have not received proper health, safety or environmental screening—especially in terms of their impact on babies and small children. Regulation has so far failed to make any serious curtailment of this flood: only 21 out of 144,000 known chemicals have been banned internationally, and this has not eliminated their use. At such a rate of progress it will take us more than 50,000 years to identify and prohibit or restrict all the chemicals which do us harm. Even then, bans will only apply in a handful of well-regulated countries, and will not protect the Earth system nor humanity at large. Clearly, national regulation holds few answers to what is now an out-of-control global problem. ¶ Furthermore, the chemical industry is relocating from the developed world (where it is quite well regulated and observes its own ethical standards) and into developing countries, mainly in Asia, where it is largely beyond the reach of either ethics or the law. However, its toxic emissions return to citizens in well-regulated countries via wind, water, food, wildlife, consumer goods, industrial products and people. The bottom line is that it doesn’t matter how good your country’s regulations are: you and your family are still exposed to a growing global flood of toxins from which even a careful diet and sensible consumer choices cannot fully protect you. ¶ The wake-up call to the world about the risks of chemical contamination was issued by American biologist Rachel Carson when she published Silent Spring in 1962, in which she warned specifically about the impact of certain persistent pesticides used in agriculture. Since her book came out, the volume of pesticide use worldwide has increased 30-fold, to around four million tonnes a year in the mid-2010s. Since the modern chemical age began there has been a string of high-profile chemical disasters: Minamata, the Love Canal, Seveso, Bhopal, Flixborough, Oppau, Toulouse, Hinkley, Texas City, Jilin, Tianjin. Most of these display a familiar pattern of unproductive confrontation between angry citizens, industry and regulators, involving drawn-out legal battles that deliver justice to nobody. By their spectacular and local nature, such events serve to distract from the far larger, more insidious and ubiquitous, universal toxic flood. ¶ Chemists and chemical makers often claim that their products are ‘safe’ because individual exposure (e.g. in a given product, like a serve of food) is too low to result in a toxic dose, a theory first put forward by the mediaeval scholar Paracelsus in the sixteenth century. This ‘dose related’ argument is disingenuous, if not dishonest—as modern chemists well know—for the following reasons: Most chemicals target a receptor or receptors on certain of your body cells, to cause harm. There may be not one, but hundreds or even thousands of different chemicals all targeting the same receptor, so a particular substance may contribute an unknowable fraction to an overall toxic dose. That does not make it ‘safe’. Chemicals not known to be poisonous in small doses on their own can combine with other substances in water, air, food or your body to create a toxin. No manufacturer can truthfully assert this will not happen to their products. Chemical toxicity is a function of both dose and the length of time you are exposed to it. In the case of persistent chemicals and heavy metals, this exposure may occur over days, months, years, even a lifetime in some cases. Tiny doses may thus accumulate into toxic ones. Most chemical toxicity is still measured on the basis of an exposed adult male. Babies and children being smaller and using much more water, food and air for their bodyweight, are therefore more at risk of receiving a poisonous dose than are adults. ¶ Chemicals and minerals are valuable and extremely useful. They do great good, save many lives and much money. No-one is suggesting they should all be banned. But their value may be for nothing if the current uncontrolled, unmonitored, unregulated and unconscionable mass release and planetary saturation continues.¶ Chemical Extinction ¶ Two billion years ago, excessive production of one particular poisonous chemical by the inhabitants of Earth caused a colossal die-off and threatened the extermination of all life. That chemical was oxygen and it was excreted by the blue-green algae which then dominated the planet, as part of their photosynthetic processes. After several hundred million of years, the planet’s physical ability to soak up the surplus O2 in iron formations, oceans and sediments had reached saturation and the gas began to poison the existing life. This event was known as the ‘oxygen holocaust’, and is probably the nearest life on Earth has ever come to complete disaster before the present (Margulis and Sagan 1986). Since it developed slowly, over tens of millions of years, the poisonous atmosphere permitted some of these primitive organisms to evolve a tolerance to O2—and this in time led to the rise of oxygen-dependent species such as fish, mammals and eventually, us. The takehome learning from this brush with total annihilation is that it is possible for living creatures to pollute themselves into oblivion, if they don’t take care to avoid it or rapidly adapt to the new, toxic environment. It’s a message that humans, with our colossal planetary chemical impact, would do well to ponder. ¶ While it is unlikely that human chemical emissions alone could reach such a volume and toxic state as to directly threaten our entire species with extinction (other than through carbon emissions in a runaway global warming event) or even the collapse of civilization, it is likely they will emerge as a serious contributing factor during the twenty-first century in combination with other factors such as war, climate change, pandemic disease and ecosystem breakdown. Credible ways in which man-made chemicals might imperil the human future include: Undermining the immune systems, physical and mental health of the population through growing exposure to toxins Reducing the intelligence of current and future generations through the action of nerve poisons on the developing brains and central nervous systems of children, rendering humanity less able to solve its problems and adapt to major changes; and by increasing the level of violent crime and conflict in society, which is closely linked to lower IQ. Bringing down the economy through the massive healthcare costs of having to nurse, treat and maintain a growing proportion of the population disabled by lifelong chronic chemical exposure. By poisoning the ecosystem services—clean air, water, soil, plants, insects and wildlife—on which humanity depends for its own survival and thereby contributing to potential global ecosystem breakdown By augmenting the global arsenal of weapons of mass destruction and hence the risk of their use by nations or uncontrollable fanatics.

#### 3. Soil erosion causes extinction.

George Monbiot 15, author and investigative reporter, “We’re treating soil like dirt. It’s a fatal mistake, as our lives depend on it,” 3/25/15, https://www.theguardian.com/commentisfree/2015/mar/25/treating-soil-like-dirt-fatal-mistake-human-life

Imagine a wonderful world, a planet on which there was no threat of climate breakdown, no loss of freshwater, no antibiotic resistance, no obesity crisis, no terrorism, no war. Surely, then, we would be out of major danger? Sorry. Even if everything else were miraculously fixed, we’re finished if we don’t address an issue considered so marginal and irrelevant that you can go for months without seeing it in a newspaper.It’s literally and – it seems – metaphorically, beneath us. To judge by its absence from the media, most journalists consider it unworthy of consideration. But all human life depends on it. We knew this long ago, but somehow it has been forgotten. As a Sanskrit text written in about 1500BC noted: “Upon this handful of soil our survival depends. Husband it and it will grow our food, our fuel and our shelter and surround us with beauty. Abuse it and the soil will collapse and die, taking humanity with it.”The issue hasn’t changed, but we have. Landowners around the world are now engaged in an orgy of soil destruction so intense that, according to the UN’s Food and Agriculture Organisation, the world on average has just 60 more years of growing crops. Even in Britain, which is spared the tropical downpours that so quickly strip exposed soil from the land, Farmers Weekly reports, we have “only 100 harvests left”.To keep up with global food demand, the UN estimates, 6m hectares (14.8m acres) of new farmland will be needed every year. Instead, 12m hectares a year are lost through soil degradation. We wreck it, then move on, trashing rainforests and other precious habitats as we go. Soil is an almost magical substance, a living system that transforms the materials it encounters, making them available to plants. That handful the Vedic master showed his disciples contains more micro-organisms than all the people who have ever lived on Earth. Yet we treat it like, well, dirt.The techniques that were supposed to feed the world threaten us with starvation. A paper just published in the journal Anthropocene analyses the undisturbed sediments in an 11th-century French lake. It reveals that the intensification of farming over the past century has increased the rate of soil erosion sixtyfold.Another paper, by researchers in the UK, shows that soil in allotments – the small patches in towns and cities that people cultivate by hand – contains a third more organic carbon than agricultural soil and 25% more nitrogen. This is one of the reasons why allotment holders produce between four and 11 times more food per hectare than do farmers.Whenever I mention this issue, people ask: “But surely farmers have an interest in looking after their soil?” They do, and there are many excellent cultivators who seek to keep their soil on the land. There are also some terrible farmers, often absentees, who allow contractors to rip their fields to shreds for the sake of a quick profit. Even the good ones are hampered by an economic and political system that could scarcely be better designed to frustrate them.This is the International Year of Soils, but you wouldn’t know it. In January, the Westminster government published a new set of soil standards, marginally better than those they replaced, but wholly unmatched to the scale of the problem. There are no penalities for compromising our survival except a partial withholding of public subsidies. Yet even this pathetic guidance is considered intolerable by the National Farmers’ Union, which greeted them with bitter complaints. Sometimes the NFU seems to me to exist to champion bad practice and block any possibility of positive change.Few sights are as gruesome as the glee with which the NFU celebrated the death last year of the European soil framework directive, the only measure with the potential to arrest our soil-erosion crisis. The NFU, supported by successive British governments, fought for eight years to destroy it, then crowed like a shedful of cockerels when it won. Looking back on this episode, we will see it as a parable of our times.Soon after that, the business minister, Matthew Hancock, announced that he was putting “business in charge of driving reform”: trade associations would be able “to review enforcement of regulation in their sectors.” The NFU was one the first two bodies granted this privilege. Hancock explained that this “is all part of our unambiguously pro-business agenda to increase the financial security of the British people.” But it doesn’t increase our security, financial or otherwise. It undermines it.The government’s deregulation bill, which has now almost completed its passage through parliament, will force regulators – including those charged with protecting the fabric of the land – to “have regard to the desirability of promoting economic growth”. But short-term growth at the expense of public protection compromises long-term survival. This “unambiguously pro-business agenda” is deregulating us to death.There’s no longer even an appetite for studying the problem. Just one university – Aberdeen – now offers a degree in soil science. All the rest have been closed down.This is what topples civilisations. War and pestilence might kill large numbers of people, but in most cases the population recovers. But lose the soil and everything goes with it.Now, globalisation ensures that this disaster is reproduced everywhere. In its early stages, globalisation enhances resilience: people are no longer dependent on the vagaries of local production. But as it proceeds, spreading the same destructive processes to all corners of the Earth, it undermines resilience, as it threatens to bring down systems everywhere.Almost all other issues are superficial by comparison. What appear to be great crises are slight and evanescent when held up against the steady trickling away of our subsistence.

#### 4. Insect loss.

Robert Hunziker 18, MA in Economic History from DePaul University, environmental journalist for over fifty publications, 3/27/18, “Insect Decimation Upstages Global Warming,” https://www.transcend.org/tms/2018/04/insect-decimation-upstages-global-warming/

Everybody’s heard about global warming. It is one of the most advertised existential events of all time. Who isn’t aware? However, there’s a new kid on the block. An alarming loss of insects will likely take down humanity before global warming hits maximum velocity.¶ For the immediate future, the Paris Accord is riding the wrong horse, as global warming is a long-term project compared to the insect catastrophe happening right now! Where else is found 40% to 90% species devastation?¶ The worldwide loss of insects is simply staggering with some reports of 75% up to 90%, happening much faster than the paleoclimate record rate of the past five major extinction events. It is possible that some insect species may already be close to total extinction!¶ It’s established that species evolve and then go extinct over thousands and millions of years as part of nature’s course, but the current rate of devastation is simply “off the charts, and downright scary.”¶ Without any doubt, it is difficult to imagine how humanity survives without insects, which are dropping dead in bunches right before our eyes. For proof, how many insect splats do people clean off windshields nowadays? Not many…. How many fireflies do children chase at night? Not many….¶ Several naturalists and environmental writers believe the massive loss of insects has everything to do with three generations of industrialized farming and the vast tide of poisons pouring over the landscape year-after-year, especially since the end of WWII. Ours is the first-ever pesticide-based agricultural society. Dreadfully, it’s an experiment that is going dead wrong… all of a sudden!¶ Insects are basic to thousands of food chains; for example, the disappearance of Britain’s farmland birds by over 50% in 40 years. Additionally, North America and Europe species of birds like larks, swallows, and swifts that feast on flying insects have plummeted.¶ But, these are only a few of many, many recorded examples of massive numbers of wildlife dropping dead right before our eyes.¶ Significantly, insects are the primary source for ecosystem creation and support. The world literally crumbles apart without mischievous burrowing, forming new soil, aerating soil, pollinating food crops, etc. Nutrition for humans happens because insects pollinate.

#### 5. Deforestation

Dominik Goldstein 16, “Eliminating deforestation and forest degradation in order to prevent species from extinction, especially with regard to areas in Asia, Africa and South America,” <http://www.balmun.de/fileadmin/2016/Research_Reports/RR_EC_I_Deforestation.pdf>

Deforestation and forest degradation are undoubtedly part of the largest environmental problems our world is facing today. Of the 16 million square kilometers of forest that once covered the earth’s surface, only 6.2 million remain up to date. 2.3 million have been destroyed between 2000 and 2012 alone. Not only does this threaten the balance of local important environmental factors such as water cycles and greenhouse gas decomposition and harm the economy and society of affected areas, but it also endangers many different species, as 80% of all biodiversity is found in forests. The entire planet and its population rely on the fate of forests, it is vital that the issues of deforestation and forest degradation are tackled thoroughly, however, it can only be achieved through close cooperation amongst all UN member nations.

### Warming

#### No decoupling — data that accounts for offshoring and rebound effects prove energy efficiency is getting worse. Staying below 1.5° is biophysically impossible under growth.

Albert 20, M.D. @ John Hopkins. BA in Evolutionary Biology (Michael, April, The Dangers of Decoupling: Earth System Crisis and the ‘Fourth Industrial Revolution’, *Global Policy*, Volume 11, Issue 2, DOI: 10.1111/1758-5899.12791)

Unfortunately for the ecomodernists, degrowth scholars and ecological economists have begun to poke holes in their optimistic assessments. Their response can be summarized according to three key counter-arguments: (1) the evidence that ecomodernists provide for relative decoupling is flawed and limited at best; (2) their evidence for the possibility of absolute decoupling is even weaker; and (3) even if absolute decoupling was possible in principle, there is even weaker evidence that this could occur with the necessary speed to stabilize the earth system before reaching irreversible tipping points. First, claims that rich countries have seen relative or even absolute decoupling of economic growth from domestic material consumption have been shown to focus solely on correlations between national GDP and material throughput while ignoring the material-energetic costs embodied in imported consumer goods. For example, Thomas Wiedmann and colleagues show that while the EU, the US, and Japan have grown economically while stabilizing or even reducing domestic material consumption, a broader analysis of their material footprint embedded in their imports shows that it has kept pace with GDP growth. They conclude that ‘no decoupling has taken place over the past two decades for this group of developed countries’ (Wiedmann et al., 2015, p. 6273). Focusing on the global economy as a whole, Krausmann et al. show that its resource intensity improved over the course of the 20th century, though the early 21st century has seen a faster rate of growing resource consumption than global economic growth (cited in Hickel and Kallis, 2019). Thus, as Kallis and Hickel (Kallis and Hickel, 2019, p. 4; italics added) explain: ‘Global historical trends show relative decoupling but no evidence of absolute decoupling, and twenty-first century trends show not greater efficiency but rather worse efficiency, with re-coupling occurring’. Second, given the limited evidence for even relative decoupling, it is little surprise that the evidential basis on which claims for the possibility of absolute decoupling rest is even flimsier. In the most comprehensive summary of the modeling evidence to date, Hickel and Kallis (2019) show that even the most optimistic scenarios fail to prove the possibility of absolute decoupling. For example, a modeling study by Schandl et al. (2016) shows that in a ‘high efficiency’ scenario, one that combines a high and rising carbon price plus a doubling in the rate of material efficiency improvement, global resource use grows more slowly (about a quarter the rate of GDP growth) but steadily to reach 95 billion tons in 2050, while global energy use grows from 14,253 million tons of oil equivalent in 2010 to 26, 932 million in 2050. The authors therefore conclude: ‘While some relative decoupling can be achieved in some scenarios, none would lead to an absolute reduction in ... materials footprint’ (Schandl et al., 2016, p. 8). A high efficiency scenario modeled by the UNEP comes to even less optimistic conclusions (with global resource use rising to 132 billion tons in 2050), since it incorporates the ‘rebound effect’ in which efficiency improvements lead to increased consumption due to resulting price reductions (Hickel and Kallis, 2019). In short, as they conclude, these ‘models suggest that absolute decoupling is not feasible on a global scale in the context of continued economic growth’ (Hickel and Kallis, 2019, p. 6). Third, the critics show that even if absolute decoupling (from both emissions and total environmental impact) were possible in principle, this would need to occur fast enough to prevent transgression of ecological tipping points. Just focusing on the climate problem, the 2018 IPCC report claims that emissions must be reduced 7 per cent annually to reach net zero by 2050 in order to achieve the 1.5 C target, whereas they must reduce 4 per cent annually to reach net zero by 2075 for a shot at the 2 degree target (IPCC, 2018, p. 15). However, even under optimistic assumptions (e.g. a near-term implementation of a high and rising carbon price, alongside heroic carbon intensity improvements), studies suggest that annual declines of 3–4 per cent might be the fastest rate possible assuming continued economic growth (Hickel, 2019). Thus, it would most likely be impossible to meet the 1.5 C target in a context of continuous compound growth. While the 2 degree target might be feasible in this context (assuming implementation of a globally coordinated program starting in 2020), many argue that the IPCC’s estimates downplay the existence of positive feedbacks in the earth system (e.g. Steffen et al., 2018), and thus more rapid emissions cuts might be needed even for 2 degrees. On top of this, economic growth must also be decoupled from impacts on other ‘planetary boundaries’ that may have already been overshot, especially land-use change and biodiversity loss (Raworth, 2017). A number of ecologists believe that to bring humanity back into a ‘safe operating space’, total resource consumption should be reduced from roughly 70 to 50 gigatons per year (Hoekstra and Wiedmann, 2014), while a ‘half earth strategy’ should be implemented that protects 50 per cent of the planet’s surface from direct human interference (up from roughly 18 per cent today) (Wilson, 2017), possibly by 2050 to prevent tipping points in biodiversity loss and land-use change (Hickel and Kallis, 2019). Even if these claims are exaggerated, the magnitude of the overall decoupling challenge remains clear. It would mean that total resource consumption and land use needs to shrink, remain stable, or only increase moderately (depending on our assumptions regarding the further stress (if any) that planetary boundaries can handle) even as the total output of the global economy triples by 2060. It is thus not hyperbole to say, as Boris Frankel puts it, that this goal of absolute decoupling is ‘overwhelmingly staggering in its ambition and historical novelty’ (Frankel, 2018, p. 127).

#### Can’t solve warming ⁠— ignores regressions, outsourcing emissions, AND our ev assumes best-case scenarios

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Can Economies Grow as Carbon Emissions Fall?

All economic activity requires energy; to the extent, this energy comes from fossil fuels, the energy use results in emissions of CO2.8 This linkage implies that deep emissions reduction will constrain economic growth unless there is decoupling—meaning that drastic emission reductions are possible with little or no effect on growth. An instructive device for analyzing the linkage (or decoupling) of growth and CO2 emissions is the well-known Kaya identity (Kaya and Yokobori 1997), which decomposes global CO2 emissions (in million tonnes), denoted by C, into measurable “drivers” directly relevant to climate and energy policy: C=P×YP×CE×EY=P×y×c×e (1) where P = world population (billions of persons), Y = world GDP (in 2010 US$), E = total primary energy supply or TPES (in PJ), y = global per-capita income (in 2010 US$), c = C/E = carbon intensity of primary energy supply, or CO2 emissions per TPES, and e = E/Y = energy intensity of GDP. External factors influence the variables that make up the identity, and the variables interact with one another in various ways. Whatever the underlying causal mechanisms, the identity has to be satisfied ex-post. Carbon emissions rise, ceteris paribus when world population increases and/or when per-capita income rises. Emissions decline when energy intensity declines, for example, when higher energy prices cause firms to make energy efficiency investments that reduce the amount of energy needed to produce output. Carbon intensity declines when the share of renewable energy sources in electricity generation increases and the share of fossil-fuel energy goes down. In the growth-rate from the Kaya identity can be approximated by: Global carbon emissions growth is driven by population growth Pˆ, per-capita income growth yˆ, the growth of the carbon intensity of energy cˆ, and the growth of energy intensity of GDP eˆ. Table 1 shows the results of a decomposition of global CO2 emissions for the period 1971–2017 and our projection for the period 2017–2050, which satisfies Equation (2). We focus on CO2 emissions from the energy system which represent more than 70% of global GHG emissions in 2010.9 [Table 1 omitted] Let us first consider historical changes during 1971–2017 when global CO2 emissions increased by 1.88% yr−1. Growth in the population (at 1.52% yr−1) and in per capita real GDP (at 1.49% yr−1) exerted upward pressure on CO2 emissions, which was only partially offset by downward pressure from higher energy efficiency (energy intensity declined by 0.96% yr−1) and lower carbon intensity (which declined by 0.17% yr−1).10 These downward trends in energy and carbon intensity are still insufficient to delink economic growth and carbon emissions. Table 1 signals some improvement over time however, as energy intensity has begun to decline appreciably faster post-1990, recording a decline of 1.05% yr−1 during 1991–2017 as compared to 0.86% during 1971–1990. There is no similar sign of declining carbon intensity—the carbon intensity declined by 0.41% yr−1 during 1971–1990 but did not decline further during 1991–2017 Global average changes are the net outcomes of underlying regional changes. Table 2 shows the Kaya decomposition results for the OECD countries and the non-OECD countries, as well as separately for the U.S.A., the E.U.-28, China, India, and Indonesia, for the period 1971–2017. Country trajectories differ, but there are four general developments that are of critical importance to changes in emission trajectories. First, population growth has been lower during 1991-2017 compared to 1971-1990, leading to lower CO2 emissions growth; this declining trend will continue during the rest of this century. Second, all countries experienced negative energy intensity growth—in the OECD countries during 1991–2017, the improved energy efficiency more than offset the upward pressure on carbon emissions coming from per capita income growth. Third, the E.U.-28 and the U.S.A. exhibit negative carbon intensity growth, but somewhat worryingly, the rate of de-carbonization in the OECD has been slowing down during 1991–2017 compared to the years 1971–1990. The E.U. carbon intensity decline recorded during 1991–2017 is dominated by the growing share of (zero-carbon) renewables in total energy use, particularly due to Germany’s Energiewende (cf. Peters et al. 2017, 120). The non-OECD countries as a whole experienced somewhat lower carbon intensity growth during 1971–2017, as China, India, and Indonesia managed to substantially lower their (still high) carbon intensity growth rates. For instance, China brought down carbon intensity growth from 0.85% yr−1 during 1971–1990 to 0.27% yr−1 during 1991–2017, mostly because it reduced the share of fossil fuels in total energy use, and especially of coal (Grubb et al. 2015; Peters et al. 2017, 119; Guan et al. 2018). Finally, neither in the OECD nor in the non-OECD countries are the negative energy intensity growth and the declining carbon intensity growth large enough to ensure a decoupling of growth of CO2 emissions and growth of real GDP. The world as a whole has achieved only relative decoupling but no absolute decline in carbon emissions during 1971–1990 and 1991–2017. [Table 2 omitted] The greatest potential for drastic cuts in emissions lies in the deep de-carbonization of energy systems (Geels et al. 2017), which is exactly what emission scenarios consistent with COP21 indicate (Peters et al. 2017). The potential is largest in the non-OECD countries, where “low-hanging fruit” could be harvested by means of a rapid phasing out of coal, an equally rapid “phasing in” of renewable energies, enhancing the biosphere and carbon sinks, and the large-scale deployment of CCS. But most models cannot identify emission pathways consistent with the 66% “below 2 °C” goal without a large-scale ramp-up of CCS facilities (Peters et al. 2017, 121). It should be obvious that past and current trends in energy and carbon intensity are woefully inconsistent with future pathways that would stabilize the climate at temperature rises well below 2 °C—continuing with business-as-usual will irreversibly put the Earth System onto a “Hothouse Earth” pathway (Steffen et al. 2018). “The challenge that humanity faces,” write Steffen et al. (2018, 3), “is to create a “Stabilized Earth” pathway that steers the Earth System away from its current trajectory toward the threshold beyond which is Hothouse Earth.” The key issue is what the deep emissions reductions will mean for economic growth. Can we stabilize the climate system while growing the economy? A tentative growth projection for the period 2017–2050 is provided in the last two columns of Table 1. We use the transparent Kaya identity in growth rate form to explore the scope for economic growth in a climate-constrained world: yˆ=Cˆ−Pˆ−cˆ−eˆ (3) We assign values to the right side of Equation (3) to determine per-capita real income growth. First, we adopt the United Nation’s population projection (the “medium variant” from UN DESA 2015), which implies Pˆ = 0.79% yr−1 until 2050. Next, in line with the “2050 Low Carbon Economy Roadmap” adopted by the E.U., we assume that global CO2 emissions in 2050 will be 85% lower than in 1990; this implies an annual average reduction in global carbon emissions Cˆ by 6.92% yr−1. Our numbers refer to CO2 emissions caused by the combustion of fossil fuels in the energy sector. The latest IPCC target—net zero emissions by 2050—refers to all climate-relevant GHGs (IPCC 2018). CO2 emissions from land-use changes and the transport sector, as well as other GHG emissions, are probably harder to reduce or more expensive to reduce than energy-sector CO2 emissions; and it is doubtful that negative-emission technologies can be ramped up to the equivalent of 15% of the 1990 global emissions level. Therefore the 85% reduction target is a soft one (the IPCC target is stricter). Next, we borrow from the OECD (2017, Table 2.18) the projected decreases in energy intensity and carbon intensity: eˆ = −2.69% yr−1 and cˆ = −3.68% yr−1. These ambitious intensity reductions originally come from the IEA-IRENA 66% 2 °C scenario (IEA-IRENA 2017), which refers to the G20, and we assume they apply to the whole world. Based on the assumptions made, the climate-constrained growth rate of global real per-capita income is found to be negative (−1.34%yr−1) during the next three decades: yˆ=Cˆ−Pˆ−cˆ−eˆ=−6.92%−0.79%+3.68%+2.69%=−1.34% (4) Even with a relatively “soft” emission-reduction target, climate-constrained growth is not just well below the historical income growth rate (of 1.49%yr−1 during 1971–2017), but negative—which means there is a conflict between growing the world economy and keeping global warming from becoming dangerous and unstoppable. The sobering bottom line is this: taking the 85% reduction target as given, even under the techno-optimistic assumption that we manage to bring about historically unprecedented reductions in carbon intensity and energy intensity, the climate constraint is binding in the sense that future global economic growth would have to be not just significantly lower than historical growth, but even negative.11 An argument in favor of greater scope for economic growth has to rely on even more optimistic assumptions concerning technological progress—even more potent climate policies would have to be adopted to bring about even sharper reductions in carbon intensity and energy intensity. The growth implications of uncompromising climate policies are not obvious. Our plea is that we do whatever it takes to force through the technological, structural and societal changes needed to reduce carbon emissions so as to stabilize warming at 1.5 °C (Grubb 2014; Steffen et al. 2018) and just accept whatever consequences this has in terms of economic growth.

Is Obama Right about Decoupling?

The only way the world can meet the COP21 target is by a permanent absolute decoupling of growth and CO2 emissions (de Bruyn and Opschoor 1997; Ward et al. 2016). As shown in Tables 1 and 2 absolute decoupling over long periods remains elusive both in the OECD and non-OECD countries (as a whole). But what about recent individual country experiences: is there a group of leading high-income countries, including the U.S., that are growing their GDP while at the same time reducing their carbon emissions? Can we indeed put to rest the argument that halting warming requires accepting lower growth, as Obama argues? We systematically investigate the hypothesis that today’s high-income countries have crossed the turning point of the ubiquitous “inverted U-shaped” CKC (see Dinda 2004; Kaika and Zervas 2013a, 2013b; Stern 2017). The CKC hypothesis holds that CO2 emissions per person do initially increase with rising per capita income (due to industrialization), then peak and decline after a threshold level of per capita GDP, as countries arguably become more energy-efficient, more technologically sophisticated and more inclined to and able to reduce emissions by corresponding legislation and enforcement. The large empirical and methodological literature12 on the CKC does not provide unambiguous and robust evidence of a CKC peaking for carbon dioxide, if only because of well documented but yet unresolved econometric problems concerning the appropriateness of model specification and estimation strategies (e.g., Wagner 2008). We will leave these econometric issues aside however and instead focus on the fact that the majority of empirical CKC studies use territorial or PB emissions data to test the CKC hypothesis (Mir and Storm 2016)—and hence overlook the emissions embodied in international trade and in global commodity chains (Peters et al. 2011). Based on IPCC guidelines, GHG emissions are counted as the national emissions coming from domestic production. This geographical definition hides the GHG emissions embodied in international trade. Rich countries including the EU-27 and the United States. with high average consumption levels are known to be net carbon importers as the CO2 emissions embodied in their exports are lower than the emissions embodied in their imports (Nakano et al. 2009; Boitier 2012; Agrawala et al. 2013). Vice versa, most developing (and industrializing) countries are net carbon exporters. What this implies is that, because of cross-border carbon leakages, CB emissions are higher than PB emissions in the OECD countries but lower in the developing countries (Aichele and Felbermayr 2012). This indicates that while there may well be a Kuznets-like delinking between per-capita income and per-capita PB emissions, it is as yet unclear whether such delinking is also occurring in terms of CB emissions (e.g., Rosa and Dietz 2012; Knight and Schor 2014; Jorgenson 2014; Mir and Storm 2016).13 If not, the notion of “carbon decoupling” has to be rethought—in terms of a delinking between income and CB emissions. After all, it is no great achievement to reduce domestic per capita carbon emissions by outsourcing carbon-intensive activities to other countries and by being a net importer of GHG, while raising consumption and living standards (e.g., Rothman 1998; Bagliani, Bravo, and Dalmazzone 2008).

Estimating the Turning Points of Production-Based and Consumption-Based CKCs

Method

To evaluate the CKC hypothesis we run standard panel data regressions of per-capita CO2 emissions on per-capita income and per-capita income squared. The data and replication files are available as part of the supplementary materials on the article webpage. The population model includes country-specific effects and time-specific effects: lnco2=β0+β1⋅ln y+β2⋅(ln y)2+αt+ai+u (5) The dependent variable, co2, is either PB per-capita CO2 emissions or CB per-capita CO2 emissions. y is “real” per-capita GDP, and u is the unobserved disturbance term. t = 1, 2, …, T indexes time periods, and i = 1, 2, …, n indexes countries. αt is a time-specific effect, and ai is a country-specific effect (the population model, as written here, includes a regression constant, so ∑tαt=0 and ∑iai=0). The model restricts all countries to have a common turning point while allowing the level of emissions at the turning point to differ across countries. Turning points TP are calculated as TP=exp(−βˆ12βˆ2) (6) where the hat “∧” from now on denotes an estimate of the corresponding population parameter. The country-specific effect captures, for instance, a country’s endowment with fossil fuels. This interpretation immediately suggests that ai correlates with y; after all, a large resource endowment can be expected to increase a country’s income. The fixed-effect estimator (FE) addresses this endogeneity problem. The cross-country panel is short (large n, small T). The time-specific effects are estimated by the inclusion of dummy variables in the regressor vector. Equation (5) represents the “standard EKC regression model” (Stern 2017, 13), relating the log of per-capita emissions to the log of per-capita income. With the fixed-effects estimator, we are using the most common, tried, and tested estimation method. Alternative estimation methods including non-parametric ones tend to produce similar results (Stern 2017). The fixed-effects estimator exploits the variation over time to estimate the parameters of the model in Equation (5). Over a time period of one or two decades, the within-variation is relatively small compared to the variation across countries. Consequently, the standard errors will be relatively large. This is the price to pay for the ability to control for country-specific effects. Structural change means that the parameters of the model (5) will in general not be constant over time, but given our time horizon of one or two decades, there is no point in testing for structural breaks. When predicting the level of per-capita CO2 emissions for the average country, we use Duan’s smearing estimate to address the re-transformation bias (Duan 1983). Simply re-transforming the estimated conditional expectation would lead to underestimation of the per-capita emission level. We predict the per-capita emissions level at the mean of the estimated time-specific effects and the mean of the (implicitly) estimated country-specific effects: co2ˆ0=h⋅exp(βˆ0+βˆ1⋅ln y0+βˆ2⋅(ln y0)2+1T∑Tt=2aˆt) (7) where h=N−1∑i∑t exp(aˆi+uˆit) is the adjustment factor. aˆi+uˆit is the combined residual, the sum of the implicitly estimated country-specific effect and the idiosyncratic residual. Duan’s assumptions (homoscedasticity and i.i.d. data) are not satisfied here (heteroscedasticity and possible dependence across time), but it is better to make the adjustment than to knowingly underestimate the per-capita emission level.

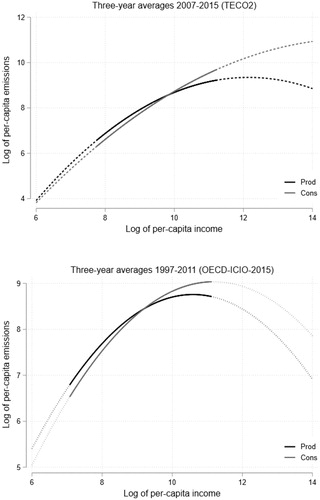
Data

Our primary CO2 emissions data come from TECO2, the OECD’s Trade-in Embodied CO2 Database (OECD, 2019).14 The database, described in Wiebe and Yamano (2016), provides county-level estimates of CO2 emissions caused by the combustion of fossil fuels. This emissions concept excludes CO2 emissions from land-use change and forest fires, fugitive emissions, and emissions from industrial processes. The independent variable, co2, is defined as either PB emissions divided by population or CB emissions divided by population (kg CO2 per person). TECO2 covers 64 countries between 2005–2015. The GDP and population variables come from the Penn World Table (PWT) 9.1 (Feenstra, Inklaar, and Timmer 2015). The income variable, y, is defined as expenditure-side real GDP at chained PPPs in 2011 US$ (PWT variable code “rgdpe”) divided by population (“pop”). We simply write “dollars” or “dollars per person” to refer to this unit. We work with non-overlapping three-year averages to reduce measurement error and focus on structural relationships. We exclude small countries from our main estimation sample; more specifically, we exclude countries with a 1990–2015-average population below the first quartile in the PWT (fewer than 1.92 million people). The main estimation sample has N = 174 observations with n = 58 and T = 3. Table 3 reports descriptive statistics of the main sample (based on TECO2) and the other two samples. The mean per-capita income level in the main sample is $28,000, the minimum income is $2300 (Cambodia), and the maximum income is $75,000 (Singapore). The majority of countries in the main sample are high-income countries; income at the first quartile is $15,000. PB emissions range from 310 to 23,105 kg CO2 per person, and CB emissions range from 527 to 20,867 kg CO2 per person. The 58 countries account for 85% of global emissions in 2015 (both in terms of PB accounting and in terms of CB accounting). [Table 3 omitted]

Robustness

We adjust the baseline regressions in a number of ways to assess the robustness of the results. We include linear and quadratic time trends; we vary the observation frequency by switching from three-year non-overlapping averages to annual data; we include the small countries that are excluded from the main estimation sample; and finally, we use several sources for the CO2 emission data. This last robustness check is particularly important because the literature documents how country-level CB emission estimates vary with the underlying input-output table (Wiedmann et al. 2011; Moran and Wood 2014; Rodrigues et al. 2018; Wieland et al. 2018). Therefore, we source alternative CO2 emission data from Eora15 and the OECD-ICIO-201516. Both databases provide country-level estimates of PC and CB CO2 emissions caused by the combustion of fossil fuels. Eora (Lenzen et al. 2013) covers 190 countries between 1990 and 2015. The OECD-ICIO-2015 (OECD 2015) covers 61 countries between 1995 and 2011.

Regression Results

Figure 1 plots CKCs for the “average country” and “average time period,” that is, it shows predicted emissions at varying income levels at the mean of the country-specific effects and the mean of the time-specific effects (the country-specific effects and the time-specific effects shift the intercept, moving the curves up or down). The curves in the upper panel are derived from regressions based on the main estimation sample. The regressions provide no evidence for the existence of a CKC, neither for PB emissions nor for CB emissions. Over the sample range, emissions monotonically increase with income. There is no turning point. Figure 1. The Carbon-Kuznets-Curve. Note: Based on calculations by the authors as described in the Method section. For the underlying fixed-effect estimations results, see Table 4, column 1, and Table 5, column 1. The CKCs are drawn as solid lines inside the range of observed per-capita incomes and as dotted lines outside the sample range (dotted when higher than the sample maximum or lower than the sample minimum).  The claim that eventually emissions will fall as income grows—there are turning points, but they are outside the sample range—would require a willingness to extrapolate the statistical relationship beyond the extreme values in the sample to an unobserved domain. The data determines the shape of the curve in the sample range, but it cannot tell us whether the population parameters and the functional form are stable at unobserved income levels. The statistical analysis of historical data cannot justify extrapolation. The fixed-effect regression that underpins Figure 1 is summarized in Table 4. Columns 1 and 4 report results from the baseline specification that includes time period dummies in the regressor vector. A Wald test for the joint significance of the time period dummies suggests that they should be included in the regression model (it rejects the null that the coefficients on the time period dummies are jointly zero). The signs of the regression coefficients are consistent with the existence of a CKC, but their magnitude implies turning points far outside the estimation sample range. In the case of CB emissions, the coefficient on the log of income squared is not statistically significant at the 5% level, suggesting a linear positive relationship between emissions and income.17 Replacing the time period dummies with a linear time trend (columns 2 and 5) or with a quadratic time trend (columns 3 and 6) changes little: coefficient signs, magnitudes, and their statistical significance are essentially the same as in the specification with time period dummies. [Table 4 omitted] A different source for emissions data gives different results. We postulate the same statistical model and use the same estimation method but switch the emissions data source. The use of the OECD-ICIO-2015 database leads to the CKCs shown in the lower panel of Figure 1—now the turning points fall inside the estimation sample range. The turning point for PB emissions is at $39,000–$41,000 and the turning point for CB emissions is at nearly twice that level at $71,000–$78,000, near the estimation sample’s maximum. The underlying regressions are summarized in Table 5. In general, the OECD-ICIO-2015 yields more precise coefficient estimates (in the sense that the t ratios are higher than in the baseline regressions) because it covers a longer stretch of time and the fixed-effects estimator relies on time variation. The table reports six regressions that all support the existence of a CKC: the coefficients have the “right” signs and magnitudes and are statistically significant at the 0.1% level. [Table 5 omitted] The appendix presents the results of several robustness tests. Table 6 replicates the analysis from Table 4 and 5, this time using Eora as the source for emissions data. The Eora sample contains more developing countries than the other two samples, which introduces additional variation in the dependent variable. The income variables and time dummies capture only a small fraction of this variation. The coefficients have the “right” signs, but are not statistically significant, even after excluding potential outliers (quantitative outlier tests could support the exclusion of observations from Belarus, Moldova, and Ethiopia). The lack of statistical significance stems in part from the high correlation between the log of income and the log of income squared. When either variable is included alone, its regression coefficient becomes statistically significant and indicates a positive relationship between income and emissions (regressions not reported). Table 7 adds six small countries that were excluded from the main estimation sample, meaning it uses data for all 64 countries covered by TECO2. The results are basically the same as in Table 4 and need no further commenting. Table 8 moves from the three-year non-overlapping averages to annual observations. Exploiting the high-frequency variation does improve the precision of the coefficient estimates, and the coefficient on the log of income squared turns up statistically significant. Changes to the size of the coefficients are minor. Overall TECO2 suggests that emissions monotonically increase with income, for the database produces no evidence of turning points inside the sample range, neither for PB emissions nor for CB emissions. [Tables 6-8 omitted] In the case of CB emissions, the regression coefficients vary with the source data (compare the columns 4–6 in Table 4 and Table 5). In the case of PB emissions, the coefficients hardly change. Yet even small changes in the coefficients generate large changes in the turning points (e.g., compare the columns 1–3 and 4–6 in Table 5) because the turning points are calculated as an exponential function of the ratio of the regression coefficients. Given this non-linearity, an innocuous switch of the source for emissions data has dramatic implications for the turning points. Therefore, the exact quantitative implications of the CKC analysis are to be interpreted with caution. Robust quantitative interpretations would presume a level of precision that no statistical analysis can deliver. The implied turning points, whether inside the sample range or outside, are higher for CB emissions than for PB emissions—this qualitative finding is robust and holds across all specifications.

Summing Up

Our econometric analysis yields three conclusions. First, the evidence in support of a CKC pattern for PB emissions is fragile at best. Only the OECD-ICIO-2015 database generates the inverted-U-shaped pattern. In any case, global economic development along the CKCs would not be compatible with the IPCC (2018) pathway consistent with keeping global warming below 1.5 °C. If China developed along the path of the production-based CKC, it would exhaust a third of the global carbon budget before even reaching the turning point.18 The production-based inverted U-shaped CKC is, in other words, not a relevant framework for climate change mitigation. Second, our results suggest that economic growth has not decoupled from CB emissions.19 Some of the OECD countries have managed to some extent to delink their production systems from CO2 emissions by relocating and outsourcing carbon-intensive production activities to the low-income countries. The generally used production-based GHG emissions data ignore the highly fragmented nature of global production chains (and networks) and are unable to reveal the ultimate driver of increasing CO2 emissions: consumption growth (Rosa and Dietz 2012; Knight and Schor 2014; Mir and Storm 2016). Corroborating evidence is provided by Jorgenson (2014) who finds that in North America, Europe, and Oceania, increases in human well-being (measured as life expectancy) are associated with a rising carbon intensity of well-being. Third, and most importantly, what the statistical analysis shows is that to avoid environmental catastrophe, the future must be different from the past. However, the dominant “green growth” approaches remain squarely within the realm of “business-as-usual” economics, proposing solutions which rely on technological fixes on the supply side and voluntary or “nudged” behavior change on the demand side, and which are bound to extend current unsustainable production, consumption and emission patterns into the future. The belief that any of this half-hearted tinkering will lead to drastic cuts in CO2 emissions in the future is altogether too reminiscent of Saint Augustine’s “Oh Lord, make me pure, but not yet.” If past performance is relevant for future outcomes, our results should put to bed the complacency concerning the possibility of “green growth.” We have to stop the self-deception.

#### Tech fails — doesn’t displace fossil fuels and increased consumption offsets efficiency gains.

Parrique et al. 19, Centre for Studies and Research in International Development (CERDI), University of Clermont Auvergne, France; Stockholm Resilience Centre (SRC), Stockholm University, Sweden, Barth J., Briens F., C. Kerschner, Kraus-Polk A., Kuokkanen A., Spangenberg J.H. (Timothee, July, Decoupling Debunked: Evidence and arguments against green growth as a sole strategy for sustainability, *European Environmental Bureau*, https://mk0eeborgicuypctuf7e.kinstacdn.com/wp-content/uploads/2019/07/Decoupling-Debunked.pdf)

Not leading to relevant innovations

Innovation is not in and of itself a good thing for ecological sustainability. The desirable type of innovation is eco-innovation or one that results “in a reduction of environmental risk, pollution and other negative impacts of resources use compared to relevant alternatives” (Kemp and Pearson, 2008, p.5). But this is only one type among several. In general, firms have an incentive to innovate to economise on the most expensive factors of production to maximise profits. Because labour and capital are usually relatively more expensive than natural resources, more technological progress will likely continue to be directed towards labour- and capital-saving innovations, with limited benefits, if any, for resource productivity and a potential rise in absolute impacts due to more production. But decoupling will not occur if technological innovations contribute to saving labour and capital while leaving resource use and environmental degradation unchanged. Another issue is that technologies do not only solve environmental problems but also tend to create new ones. Assuming that resource productivity becomes a priority over labour and capital productivity, there is still nothing preventing technological innovations from creating more damage. For example, research into processes of extractions can lead to better ways to locate resources (imaging technologies and data analytics), to extract them (horizontal drilling, hydraulic fracturing, and automated drilling operations), and to transport them (Arctic shipping routes). These innovations may target resource use but with a result opposite to the objective of decoupling, that is more extraction. And this is not even considering unintended side-effects, which often accompany the development of new technologies (Grunwald, 2018).

Not disruptive enough

Another problem has to do with the replacement of harmful technologies. Indeed, it is not enough for new technologies to emerge (innovation), they must also come to replace the old ones in a process of “exnovation” (Kimberly, 1981). What is required is a “push and pull strategy” (Rockström et al., 2017): pushing environmentally-friendly technologies into society and pulling harmful ones, like fossil-based infrastructure, out of it. First, in reality, such a process is slow and difficult to trigger. Most polluting infrastructures (power plants, buildings and city structures, transport systems) require large investments, which then creates inertia and lock-in (Antal and van den Bergh, 2014, p. 3). Let us, for instance, consider the energy, buildings, and transport sectors, which account for the large majority of world energy consumption and greenhouse gas emissions. Initial lifetime for a nuclear or a coal power plant is about 40 years. Buildings can last at least as much. The average lifetime for a car is 12-15 years, and this is about what it takes for an innovation to spread in the vehicle fleet. The wide availability of petrol refuelling stations gives an infrastructural advantage to petrol-based cars, whereas this is the opposite situation for electric, gas, or hydrogen vehicles that would require different and new supporting infrastructures. Building a highway or a nuclear plant is a commitment to emit for at least as long as these infrastructures will last – Davis and Socolow (2014) speak of “committed emissions.” Energy is a good case in point: using more renewable energy is not the same as using less fossil fuels. The history of energy use is not one of substitutions but rather of successive additions of new sources of energy. As new energy sources are discovered, developed, and deployed, the old sources do not decline, instead, total energy use grows with additional layers on the energy mix cake. York (2012) finds that each unit of energy use from non-fossil fuel sources displaced less than one-quarter of a unit of its fossil-fuel counterpart, showing empirical support for the claim that expanding renewable energies is far from enough to curb fossil fuel consumption. The relative part of coal in the global energy mix has been reduced since the advent of petroleum but this occurred in spite of absolute growth in the use of coal (Krausmann et al., 2009).

### 2AC---Geo Fails

#### Geoengineering fails---SRM causes future spikes in temperatures and CCS won’t reduce emissions. PLUS, both technologies are unproven.

Wildfire 20 (Mary, May 11th, “False Solutions to Climate Change: Geoengineering,” *Resilience*, https://www.resilience.org/stories/2020-05-11/false-solutions-to-climate-change-geoengineering/)

Part 5: Geoengineering

Geoengineering refers to proposals for solving the problem of climate change, not by mitigation—that is, reducing emissions and deforestation, the causes of global heating—but instead by the use of new technologies. There are quite a few ideas out there for geoengineering, or “negative emissions,” but they all come down to one of two approaches. “Solar radiation management” means blocking some incoming sunlight so as to reduce temperatures on Earth, and “carbon capture and sequestration” refers to various means of sequestering carbon dioxide so it isn’t added to the overabundance in the Earth’s atmosphere.

All of the proposals have major risks. One they all have in common is the risk that governments, heavily influenced by big corporations, might be persuaded that an easy technofix is in the offing. This would reduce pressure to finally, at last, take serious action to reduce greenhouse gas emissions: mitigation. This is the obvious solution we’ve been evading for several decades now. Pronouncements by proponents of geoengineering almost always state that they aren’t intended to replace mitigation which is still necessary, but to supplement it because it no longer seems possible to reduce emissions fast enough. But one doesn’t have to be a cynic to see that any talk about magic solutions will be eagerly seized upon by those resisting the obvious solution that is anathema to powerful interests, especially fossil fuel, electric utility and agribusiness corporations. If you look at the projection by the IPCC of scenarios in which we keep emissions low enough to stay below two degrees of warming—never mind 1.5 degrees—all of them assume “negative emissions.”

So what are these technologies? Let’s take the solar radiation management category—SRM—first. Some propose to fly airplanes continuously around, spraying aerosols into the atmosphere to reflect some incoming sunlight, so the Earth warms less. Another proposal involves ships sailing the seas, perhaps run by robots, each emitting billions of micro-droplets of water sucked from the sea into the sky to form reflective clouds. There have also been proposals to paint roofs or roads or big swathes of desert white, and fantasies of launching a lot of mirrors into orbit to reflect incoming sunlight.

A big issue with any such plan is that SRM doesn’t actually reduce greenhouse gas levels at all; so if it is ever stopped—because the planes run out of fuel, or the unintended consequences cause conflict, perhaps—then the temperature would quickly climb to what it would have been if the technique had never been implemented, thus creating an even more extreme adjustment problem for species. It also does nothing to reduce the increasing acidity of the ocean, which threatens to wipe out most species there.

Furthermore, many if not all of these approaches will influence weather patterns. If they do, it won’t matter what the change is—someone will benefit and someone else be harmed. The Asian monsoon is a likely example. If India fails to get the monsoon and a neighboring country gets plenty of rain, millions of angry Indian farmers will accuse the other country of “stealing our rain.” Wars can easily ignite over such accusations, and the fact that the U.S. military is a chief funder of research into these approaches, and has discussed the possibility of using weather modification in warfare in the past, means such reactions would not be all paranoia. Given the unpredictability of weather, it would be impossible to tell whether a weather pattern with adverse effects on any area was caused by the geoengineering, or naturally; which means that if these gambits are put into effect, it’s pretty much guaranteed that someone will soon be screaming that they have been harmed by it.

Another two problems with any form of solar radiation management is that reduced incoming sunlight means reduced efficiency in solar panels, and in the photosynthesis which is the basis of both our crops and the natural food web.

Now let’s look at the other category of geoengineering, carbon capture and sequestration, CCS.

One form of carbon dioxide removal is ocean fertilization. The idea here is that the ocean absorbs much more carbon dioxide than either the air or the land, so why not get it to take even more? CO2 is absorbed by phytoplankton doing photosynthesis, so we need to get more sea plants growing faster, by fertilizing the oceans. Small experiments have tried dumping iron filings in the ocean, as iron is seen as a key limiting nutrient—but it didn’t work. Wrong place maybe. Turns out ecosystems are complex!

Afforestation is another proposal, but I have a logical problem with this popular idea. If it’s possible for trees to grow in a certain area, why isn’t it already forested? Surely because humans have cut down the native trees, whether for lumber and fuel, or to use the land for agriculture or cities. Unless we have a drastic loss of population, we will not soon need less land for such things. There are places trees can be planted, but I question the idea that we can simply calculate how much CO2 a tree absorbs, then multiply by how much we want absorbed and assume there will be someplace to plant that many trees

Sometimes people talk about directly capturing CO2 from the air with machinery, either by collecting it from the smokestacks of power plants, or by Direct Air Capture (DAC) machines. The trouble with smokestack schemes is that they make the plants much more expensive, and reduce the efficiency so that it’s necessary to burn 30% more coal for the same amount of power. Since coal can no longer compete with renewable energy even where carbon capture and sequestration (CCS) is not mandated, this doesn’t look like a likely solution. As for DAC, the energy requirement to run plants to collect the much more diffuse CO2 from the ambient air makes them a non-starter. In either case, the collected CO2 must then be conveyed to a geological formation in which proponents hope it will be permanently sequestered. If done on a large scale, this would require a major new network of pipelines—it makes no sense to invest in such a major undertaking when renewables would be cheaper. What has actually been done with CO2 collected from pilot projects is to use it for enhanced oil recovery, in which it’s pumped into depleted oil wells to bring a last remnant up—obviously, we are not looking at reduced emissions here.

#### And its worse for the environment!

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Reducing the impacts of human-caused climate change through the use of bioenergy with carbon capture and storage – better known as BECCS – could have major consequences for wildlife, forests and water resources, a new study shows.

The large-scale conversion of existing land to BECCS plantations could cause global forest cover to fall by as much as 10% and biodiversity “intactness” to decline by up to 7%, the lead author tells Carbon Brief.

And the introduction of solar geoengineering could also threaten wildlife, a second study shows. The new research finds that implementing – and then not sustaining – such a technology could cause global temperatures to rebound rapidly, leaving many species unable to cope with the sharp change in conditions.

The two studies reiterate the need to fully consider the possible consequences of implementing geoengineering technologies if they are used to lessen the effects of global warming, the authors of both studies tell Carbon Brief.

The findings also highlight “the solution to global warming is mitigation”, one author concludes. “In order to achieve climate goals, it is now essential to immediately reduce CO2 emissions, instead of using harmful technologies to compensate for a more leisurely pace,” another author says.

The first study, published in Nature Climate Change, assesses how using BECCS could affect different aspects of the natural world, including forest cover, biodiversity and freshwater resources.

BECCS has been labelled by many as a promising “negative emissions technology”, meaning it could be used to reduce the amount of CO2 in the atmosphere. Put simply, BECCS involves burning biomass – such as trees and crops – to generate energy and then capturing the resulting CO2 emissions before they are released into the air.

Though yet to be demonstrated on a commercial basis, large-scale BECCS is already included by scientists in many of the modelled “pathways” showing how global warming can be limited to 2C above pre-industrial levels.

Some scientists hope that BECCS could be used to soak up some of the CO2 that is released by human activity, which could, in turn, help the world to achieve “net zero” emissions.

The new study explores whether this could be achieved without causing too much damage to many aspects of the natural world.

BECCS could cause problems for the natural world by taking up a large amount of land, water and other resources, explains lead author Dr Vera Heck, from the Potsdam Institute for Climate Impacts Research (PIK).

Her research finds that using BECCS on a wide scale could come with “large risks” for the natural world. She tells Carbon Brief:

### Growth Unsustainable — 2NC

#### Financialization — make unsustainable credit bubbles and cyclical collapses inevitable.

Durand 17, He teaches Economics and Development Theories at the University of Paris 13 and the EHESS. Working within the tradition of Marxist and French Regulationist political economy, he is the author of several articles on the euro–crisis, the financialization-globalization nexus and the post-Soviet transformation (Cédric, *Fictitious Capital: How Finance Is Appropriating Our Future*, pp. 41-44)

THE INTRINSIC INSTABILITY OF FINANCE

Finance markets radically differ from markets for goods and services. Whereas in normal times rising prices weaken demand in the real economy, the opposite is generally true of ﬁnancial securities: the ‘more prices increase, the more these securities are in demand. The same applies the other way around: during a crisis, the fall in prices engenders ﬁre sales, which translate into the acceleration of the price collapse. This peculiarity of ﬁnancial products derives from the fact that their purchase — dissociated from any use-value — corresponds to a purely speculative rationale; the objective is to obtain surplus-value by reselling them at a higher price at some later point. Blinded to the disaster of the inevitable reverse, agents take on more and more debt in order to buy the assets that the bubble is forming around. Moreover, the self-sustaining price rise fuelled by agents’ expectations is further exaggerated by credit. Indebtedness increases prices, and since the securities can serve as the counterpart to fresh loans, their increasing value allows agents to take on more debt. We ﬁnd this same mechanism in most speculative episodes, from the seventeenth-century Netherlands to the subprime crisis. In the former case, the speculation was on tulip bulbs; in the latter case, on residential properties.

The ﬁnancial instability hypothesis allows us to inscribe these speculation dynamics in an understanding of economic cycles. Minsky sets out from the recognition that capitalist economies experience periods of acceleration and inﬂation and periods in which they are caught in deflationary spirals in which debts become unsustainable. The 1960s and 1970s corresponded to the ﬁrst dynamic and the 1930s (paradigmatically so) to the second, as described by the economist Irving Fischer in 1933. The latter dynamic comes about when economic agents trying to meet the deadlines on their debt repayments are forced to sell what they have at discounted prices. This brings a general down- ward movement in prices and diminished revenues, and ultimately leads to a growth in the weight of debt relative to income. This in turn unleashes a self-sustaining movement toward depression, which only state intervention can interrupt.

According to Minsky, this alternation of cycles cannot be explained by the play of real macroeconomic relations alone. Following Michal Kalecki, the post-Keynesian tradition supposes that, at the macro- economic level, companies’ proﬁts ﬂow from their own investment decisions (‘the capitalists earn what they spend’). Minsky himself adopts this hypothesis, but suggests that it must be complicated by taking ﬁnancial relations into account.6 The past, present and future are linked not only by accumulated capital and labour power, but also by credit:

the inherent instability of capitalism is due to the way proﬁts depend upon investment, the validation of business debts depends upon proﬁts, and investment depends upon the availability of external ﬁnancing. But the availability of ﬁnancing presupposes that prior debts and the prices that were paid for capital assets are being val- idated by proﬁts. Capitalism is unstable because it is a ﬁnancial and accumulating system with yesterdays, todays, and tomorrows!

Credit relations are far from simple, for bankers and ﬁnancial intermediaries are capitalists like any other: since they are in competition with one another and seek to make proﬁts, they must constantly innovate. The result is a complex web of ﬁnancial mechanisms that separate the ultimate owners of wealth from the managers of the enter- prises that control and exploit this wealth. Finance’s tendency toward increased sophistication leads to three possible systems of relations between income and debts. The ﬁrst corresponds to a situation in which economic actors’ incomes cover their repayment obligations: thus ﬁnancial relations are solid and pose no problems to the overall reproduction of the economy. The second possibility is the establish- ment of speculative relations in which some economic units keep their debt rolling (they can only repay the interest, but not the principal). Such a conﬁguration produces vulnerability, and the slightest cojunctural difﬁculty risks tipping the situation into the third possibility: the development of Ponzi structures, where income ﬂows are insufficient to repay either the principal or the interest on the debt. The consequence is that indebtedness can only increase, ultimately leading to bankruptcies.

The stability of economies is largely dependent on the respective weights of these three types of ﬁnancing relations. Minsky enjoys a certain posthumous renown because he emphasised that across periods of prolonged prosperity, economies gradually evolve toward a ﬁnancing structure that makes the system unstable. Starting from a situation where ﬁnancial relations covered by incomes are predominant, they move on to a situation in which speculative ﬁnancial activities, and then Ponzi systems, become increasingly important, to the point that the insolvability of a small number of agents will end up provoking a collapse in asset prices. As Figure 2 shows, during periods of relative stability, the quest for proﬁt leads to the development of ﬁnancial innovations that accelerate credit circulation and reduce the quality of securities, which inevitably results in ﬁnancial crisis or even a crisis in the real economy. Falling asset prices and the contraction of credit feed one another: agents in ﬁnancial distress are forced to sell their holdings a whatever price they can; companies which are no longer able to obtain credit lay off staff, cut wages and lower the prices of their products; deflation leads to a growth in the weight of debts relative to less sustainable and threatens agents whose euphoric period becomes ever less sustainable and threatens agents whose economic situation had up till then seemed solid.

#### Boom and bust cycles — debt fuels instability.

Rammelt 19, PhD from the University of Amsterdam in Environmental Studies (Crelis, June 17th, “Capitalism inevitably leads to crises: alternative economic model explains how,” <https://ontgroei.degrowth.net/capitalism-inevitably-leads-to-crises-alternative-economic-model-explains-how/)>

Capitalism typically goes through cycles of expansion to contraction. We commonly refer to these as ‘business cycles’ or ‘economic cycles’. Every now and then, however, these cycles go off the hinges. They become unstable and can lead to recessions, crises and depressions. This inherent instability of the capitalist system cannot be explained by standard economic models. Instead, those models blame instability on excessive regulation, government interventions or other factors outside the market-economic system. Some unorthodox economists see it differently. Steve Keen, for example, developed an alternative kind of economic model—one that can mimic instability. The model provides compelling and urgent insights into how economic crises arise from within the structures of capitalism. Another crisis seems inevitable as long as the causes are misdiagnosed. During a briefing on the 2007/2008 global financial crisis, Queen Elizabeth II asked academics at the London School of Economics why nobody saw it coming. The response was: “Your Majesty, the failure to foresee the timing, extent and severity of the crisis and to head it off, while it had many causes, was principally a failure of the collective imagination of many bright people, both in this country and internationally, to understand the risks to the system as a whole”. But in reality, many did see it coming (Bezemer 2009). They were simply looking at it from a different angle. Neoliberal economists typically look for explanations that have little to do with the economic system itself, such as a political event, a bad policy or some other so-called ‘exogenous’ factor—something that originates from outside the economic system as such. In the words of a neoliberal think-tank: “[I]t’s not capitalism that falls over, it’s those attempts to constrain it too rigidly”. Alternative—mostly Marxian and post-Keynesian—explanations for the instabilities have been sought within the structure of the economic system itself. One such explanation is provided by heterodox economist Hyman Minsky. His argument is summarised in the following two-minutes excerpt from the documentary ‘Boom, Bust, Boom’. Hyman Minsky suggested that stability leads to instability—a hypothesis that standard economics cannot effectively test. Economic models normally emphasise equilibrium between supply and demand. When there is a difference between the two, the market is assumed to balance this out. The transition from one equilibrium to another is assumed to be stable and any delay in the transition is perceived as irrelevant. However, real-world economies are hardly ever in equilibrium because of all sorts of delays in information or in getting goods on and off the market. As observed by Irving Fisher, one of Minsky’s inspirations: “the exact equilibrium thus sought is seldom reached and never long maintained. New disturbances are, humanly speaking, sure to occur, so that, in actual fact, any variable is almost always above or below the ideal equilibrium” (Fisher 1933:339). The idea of perpetual disequilibrium was picked up by Marxist economist Richard Goodwin. He proposed a model of a growing, yet always fluctuating, economy. In his model, high employment during phases of economic expansion pushes wages upward, which suppresses profits and leads to a reduction in investment. The contraction reduces employment and wages fall. This again increases profits and boosts investment (Goodwin, 1967). In short, downturns are caused by the increased bargaining power of workers—a result of high employment in upturn periods. A deceleration in the rate of growth brings about an acceleration, which brings about a deceleration again, etc. These fluctuations are driven by the internal clock of the economy, not by some external cause. In Marx’s own words: “The mechanism of the capitalist production process removes the very obstacles that it temporarily creates” (Marx 1976:770). Goodwin perceived a so-called predator–prey structure in the arguments put forward by Marx. As foxes eat chickens, chicken reproduction drops, which leaves fewer chickens for foxes to eat in the near future. Consequently, the fox population drops, which then allows the chicken population to rebuild. As its food source becomes available again, the fox population also rebuilds and the cycle starts again. In a predator–prey structure, the size of one population is continuously oscillating being constrained by the size of the other.Similarly, Goodwin’s model showed how economic cycles of expansion and contraction can be explained by “the inherent conflict and complementarity of workers and capitalists” (Goodwin 1967:8). Goodwin’s model mimics perpetual cyclical behaviour. However, cycles sometimes amplify and become unstable. As explained in the earlier video fragment, the reason according to Hyman Minsky is an increase in private sector credit, or debt-fuelled growth. marked Economist Steve Keen recently incorporated Minsky’s hypothesis in Richard Goodwin’s model. Unlike standard economic models, Keen’s system dynamics model can generate instability as one of its outcomes. The model effectively mimics the behaviour of key indicators prior to, during and after the 2007/08 global financial crisis: dampening cycles in the short run and widening cycles in the long run—followed by collapse. The dynamic is visualised in the graph below. To understand how the Keen’s model works, we must first ask: what is money? Nowadays, money is generally understood as a currency, i.e., a medium of exchange or a unit of account. However, money is also debt. This happens when credit is created by banks to be invested in the real economy, and to be paid back with interest. Credit money then appears in the economic system as a bank deposit (Daly & Farley 2012). This sort of debt reinforces itself: the more firms grow, the more confidence they enjoy, the more loans they get, the more they grow, and so on. It should be noted that it is in the interest of banks that the private sector gets and stays indebted to them. In the words of Willem Hoogendijk: “Business needing money is caused by money needing business” (Hoogendijk 2015:9). With an understanding of money as debt, let’s get back to Keen’s model. This is how it works. In the short run, the interest payments on rising debt reduce profits and investment. The next peak is lessened and the oscillations gradually dampen. In the long run, however, debt has continued to accumulate . Higher and growing interest payments reduce investment and employment, which leads to a more rapidly falling wage bill. This causes a surge in profits, loans and investment. This again boosts employment, raises the wage bill, and so on. Rather than dampened, however, the cycles now become more intense. Eventually, the peak is so extreme that the incurred debt brings profit down below zero and keeps it there. The system collapses (Keen, 1995). (Keen’s model is much more detailed that what I have described here. As a start, you can find a description of a simpler version of his model in Rammelt (2019). You can also play around with the model itself here. For deeper insights into the topic, I suggest listening to Steve Keen’s lectures here.) The ultimate question is: “Can ‘It’—a Great Depression—happen again?” Minsky famously asked. Standard economics does not provide the right toolset to reflect on this questions. It is high time to look outside of conventional textbooks: “the dynamic, non-equilibrium social system that is a market economy should be analysed with dynamic, non-equilibrium tools” (Keen 2011:33). If crises in pure free-market capitalism are inevitable, as Minsky, Keen and others have concluded, it is then also high time to consider systemic alternatives. One such alternative is degrowth. The movement asserts that economic expansion fails to achieve meaningful social and environmental goals, while slowdown destabilises the inner workings of the current economic system itself. Indeed, recessions, unemployment and foreclosures loom when the mechanisms of debt-fuelled growth slow down. The degrowth movement asks how we can escape this prison?

#### Stranded assets.

Cambridge 18, Citing a study conducted by researchers from Cambridge University (UK), Radboud University (NL), the Open University (UK), Macau University, and Cambridge Econometrics (University of Cambridge, June 4th, "'Carbon bubble' coming that could wipe trillions from the global economy: study,” *Phys*, https://phys.org/news/2018-06-carbon-trillions-global-economy.html)

Fossil fuel stocks have long been a safe financial bet. With the International Energy Agency projecting price rises until 2040, and governments prevaricating or rowing back on the Paris Agreement, investor confidence is set to remain high. However, new research suggests that the momentum behind technological change in the global power and transportation sectors will lead to a dramatic decline in demand for fossil fuels in the near future. The study indicates that this will now happen regardless of apparent market certainty or the adoption of climate policies—or lack thereof—by major nations. Detailed simulations produced by an international team of economists and policy experts show this fall in demand has the potential to leave vast reserves of fossil fuels as "stranded assets": abruptly shifting from high to low value sometime before 2035. Such a sharp slump in fossil fuel price could cause a huge "carbon bubble" built on long-term investments to burst. According to the study, the equivalent of between one and four trillion US dollars could be wiped off the global economy in fossil fuel assets alone. A loss of US$0.25 trillion triggered the crash of 2008 by comparison. Publishing their findings today in the journal Nature Climate Change, researchers from Cambridge University (UK), Radboud University (NL), the Open University (UK), Macau University, and Cambridge Econometrics, argue that there will be clear economic winners and losers as a consequence. Japan, China and many EU nations currently rely on high-cost fossil fuel imports to meet energy needs. They could see national expenditure fall and—with the right investment in low-carbon technologies—a boost to Gross Domestic Product (GDP) as well as increased employment in sustainable industries. However, major carbon exporters with relatively high production costs, such as Canada, the United States and Russia, would see domestic fossil fuel industries collapse. Researchers warn that losses will only be exacerbated if incumbent governments continue to neglect renewable energy in favour of carbon-intensive economies. The study repeatedly ran simulations to gauge the outcomes of numerous combinations of global economic and environmental change. It is the first time that the evolution of low-carbon technologies has been mapped from historical data and incorporated into 'integrated assessment modeling'. "Until now, observers mostly paid attention to the likely effectiveness of climate policies, but not to the ongoing and effectively irreversible technological transition," said Dr. Jean-Francois Mercure, study lead author from Radboud University and Cambridge University's Centre for Environment, Energy and Natural Resource Governance (C-EENRG). Prof Jorge Viñuales, study co-author from Cambridge University and founder of C-EENRG, said: "Our analysis suggests that, contrary to investor expectations, the stranding of fossil fuels assets may happen even without new climate policies. This suggests a carbon bubble is forming and it is likely to burst."

#### AI.

OTG ‘18 (Citing the Financial Stability Board; an international body that monitors and makes recommendations about the global financial system. The Board includes all G20 major economies, FSF members, and the European Commission, 2/7/18; “How Artificial Intelligence Triggered The Stock Market Plunge”; *Off The Grid News*; https://www.offthegridnews.com/current-events/how-artificial-intelligence-triggered-the-stock-market-plunge/)

Experts are warning that artificial intelligence (AI) may trigger the next stock market or financial crash – especially in light of Monday’s freefall that was triggered in part by computers. The financial industry’s rush to replace human traders with AI can intensify market shocks and make crashes worse, a panel of financial experts said. “Taken as a group, universal banks’ vulnerability to systemic shocks may grow if they increasingly depend on similar algorithms or data streams,” a November 1 report from the Financial Stability Board (FSB) warned. The FSB is a group of experts that advises central banks like the Federal Reserve and the Bank of England on risks. The FSB is worried about next-generation trading technologies that use advanced software algorithms based on AI and machine learning to make financial decisions, Bloomberg Markets reported. Will AI Take Over Wall Street? “These risks may become more important in the future if AI and machine learning are used for ‘mission-critical’ applications of financial institutions,” the FSB warned. “Moreover, advanced optimization techniques and predictable patterns in the behavior of automated trading strategies could be used by insiders or by cyber-criminals to manipulate market prices.” On Monday the Dow Jones plunged 800 points in about 10 minutes. It ended the day down 1,175 points. “The explosive speed of the fall … that is done by machines,” Tom Stevenson of Investment Director at Fidelity Personal Investing told the BBC. A major fear is that AI might start making trades so fast that humans will be unable to keep up with the process. Another is that hackers or terrorists would be able to sabotage the markets.Artificial intelligence is closer to taking over the financial industry than many people believe. The world’s first hedge fund run by artificial intelligence, Numerai, went online last year. Since then, at least two other efforts to create AI hedge funds, Sharpe Capital and Algo Marketplace, have been proposed. “If computing power and data generation keep growing at the current rate, then machine learning could be involved in 99 percent of investment management in 25 years,” Luke Ellis of the British investment firm Man Group Plc told Bloomberg.

#### Climate change.

Spratt et al. 20, David Spratt: Research Director for Breakthrough National Centre for Climate Restoration and co-author of What Lies Beneath: The understatement of existential climate risk and Climate Code Red: The case for emergency action. Alia Armstead: Research Coordinator for Breakthrough. Ian Dunlop: co-author of What Lies Beneath and of the Club of Rome’s Climate Emergency Plan. He is a senior member of the Breakthrough Advisory Board (How Economics Has Underestimated Climate Damage and Encouraged Inaction, *Breakthrough - National Centre for Climate Restoration*, Accessible: https://www.breakthroughonline.org.au/publications)

THREE DEGREES OF WARMING Cost–benefit analysis, the mainstay of climate change economics, requires dollar numbers to be put on the costs of acting to reduce the level of future warming as compared to the damage caused by not acting, for various emissions scenarios. The first requirement is that these numbers can be reasonably estimated. Recent work from the University of Melbourne has shown that on current global emission patterns, a conservative estimate of costs of inaction for Australia would be $A584.5 billion by 2030, $A762 billion by 2050, and more than $A5 trillion in cumulative damages from now until 2100. On the other hand, the cost of effective emissions reduction is estimated to be $A35.5 billion up to 2030, or 0.14% of cumulative GDP (Kompas et al. 2019). The estimated costs in the report and the majority of economic analyses to date focus on infrastructure damage, agricultural and labour productivity losses, human health impacts and ecosystem losses, but this is just the tip of the iceberg. The costs of extreme weather events, pollution and ecosystem and biodiversity loss are not included. More importantly, neither are the economic damages that Australia will incur as 3°C of warming sweeps through Asia and the Pacific, devastating nations, disrupting major trading partners and supply chains, and likely turning the region — the “disaster alley” of global climate disruption — into one of social chaos and breakdown (Dunlop & Spratt 2017). Thirteen years ago, senior US national security analysts looked at the consequences of 3°C of warming and concluded that it would “give rise to massive nonlinear societal events. In this scenario, nations around the world will be overwhelmed by the scale of change and pernicious challenges… Armed conflict between nations over resources… is likely and nuclear war is possible. The social consequences range from increased religious fervor to outright chaos” (Campbell et al. 2007). A survey of the scientific literature on the likely impacts of 3°C paints a frightening picture (Spratt and Dunlop 2019). In such a world, it is likely that the structures of societies will be severely tested, and some will crash. The poorest nations will suffer first and most deeply from climate change, but no region will escape. Water availability will decrease sharply in the lowerlatitude dry tropics and subtropics, and affect almost two billion people worldwide. Agriculture will become nonviable in the dry subtropics. The Sahara will jump the Mediterranean as Europeans begin a long trek north. Water flows into the great rivers of Asia will be reduced by the loss of more than one-half, and perhaps much more, of the Himalayan ice sheet. Aridification will emerge over more than 30% of the world’s land surface, most severely in southern Africa, the southern Mediterranean, west Asia, the Middle East, rural Australia and across the southwestern United States. Most regions in the world will experience a significant drop in food production and increasing numbers of extreme weather events, including heat waves, floods and storms. Food production will be inadequate to feed the global population and food prices will skyrocket, as a consequence of a one-fifth decline in crop yields, a decline in the nutritional content of food crops, a catastrophic decline in insect populations, aridification, monsoon failure and chronic water shortages, and conditions too hot for human summer habitation in significant food-growing regions. The lower reaches of the agriculturally-important river deltas such as the Mekong, Ganges and Nile will be inundated, and significant sectors of some of the world’s most populous cities — including Kolkata, Mumbai, Jakarta, Guangzhou, Tianjin, Hong Kong, Ho Chi Minh City, Shanghai, Lagos, Bangkok and Miami — abandoned. Deadly heat conditions will persist for more than 100 days per year in West Africa, Central America, the Middle East and South-East Asia, which together with land degradation, aridification, conflicts over land and water, and rising sea levels will contribute up to a billion people being displaced. Refugee conventions may give way to walls and blockades. One of the most recent and detailed cost-benefit analyses to be published uses detailed country-specific damage calculations. It finds that losses from climate damages for the higher emission scenarios will be up to 42% of global GDP by 2100. This is ten times the figure suggested by Nordhaus in his Nobel oration. Even so, the authors acknowledge that they do not account for “possible amplifications, for example, due to a potential destabilization of societies” (Ueckerdt et al. 2019)

### Transition — 2NC

#### Economic crisis is a game changer that powers existing movements---austerity fuels existing dissatisfaction with capitalism and globalization.

Flor Avelino 14, transition researcher and lecturer at DRIFT, Erasmus University Rotterdam, scientific coordinator of the Transformative Social Innovation research project, “Game Changers and Transformative Social Innovation: The Case of the Economic Crisis and the New Economy,” 2014, http://www.transitsocialinnovation.eu/content/original/Book%20covers/Local%20PDFs/178%20TRANSIT\_WorkingPaper1\_Gamechangers\_Avelino.pdf

The economic crisis is generally perceived to have profound impacts on society. The resulting ‘austerity’ measures and governmental budget cuts put pressure on public sector employment, transfer payments and social welfare systems, contributing to rising un- and under- employment among young and old and lower disposable incomes for many in society. There is also a growing dissatisfaction with capitalism leading, among others, to a rise of responsibility pressures on companies, a lack of trust in financial institutions, and a growing pressure on democratic political institutions (Castells 2010; Murphy 2011; Hudson 2014; Rifkin 2014; Weaver 2014). These in turn focus attention on the meaning and quality of life which can intensify individuals’ desires to live in a more responsible and meaningful way as citizens, workers and consumers, which again are accompanied by an increasing attention to social value creation (based on the attention to these issues in magazines and business literature).

Intertwined with these developments are counter-narratives and movements that propose alternative visions. From anti-globalisation or occupy movements, we can discern a loss of trust in the dominant economic model of the growth society and its associated livelihood model where most material needs are satisfied through impersonal market exchange. This formalised and impersonal market exchange is questioned, resulting in concepts such as sharing, reciprocity, generalized exchange, or restricted exchange (see Befu 1977, Peebles 2010 for an overview). These are reflected in calls for a more localized or sharing economy, which are now heard increasingly in many Western countries. While the mainstream discourse is still about how to regain adequate rates of economic growth, and underlying longer-sighted discourse (i.e. counternarrative) is emerging about what might replace the growth-society model. This includes (longstanding and more recent) ideas on de-growth (Schumacher 1973, Fournier 2008), green growth (OECD 2013), or post growth (Jackson 2009). These (counter-)narratives also question the market logic that constructs human beings as well as nature as resources and commodities in the production of goods (Freudenburg et al. 1995).

Contemporary discourses on a ‘new economy’ include calls to replace, complement, or transform the mainstream economic system with alternative paradigms. These include a wide variety of notions, e.g. ‘social economy’, ‘informal economy’, ‘solidary economy’, ‘sharing economy’, the ‘cooperative movement’, ‘the commons’, ‘green economy’, ‘blue economy’, ‘circular economy’, and so on (e.g. Rifkin, 2014). Many of these narratives and associated ideas are not necessarily ‘new’ as such. Indeed many have existed for decades (or even centuries), but the ‘game-changing’ economic crisis has triggered new and revitalised interest in these narratives, thereby translating relatively ‘old’ narratives into a modern narrative on ‘the new, social economy’ as a forward-looking response to contemporary challenges (ibid).

#### Transition will be forced---crisis causes degrowth by involuntarily ending growth.

Giorgos Kallis 18, ICREA Research Professor at Universitat Autònoma de Barcelona, environmental scientist working on ecological economics and political ecology, formerly Marie Curie International Fellow at the Energy and Resources Group of the University of California at Berkeley, PhD in Environmental Policy and Planning from the University of the Aegean in Greece, et al., 5/31/18, “Annual Review of Environment and Resources: Research On Degrowth,” Annual Review of Environment and Resources, Vol. 43, p. 308-309

The fate of such openings will play out amid coevolutionary processes involving institutional organization, technology, environmental conditions, values, and knowledge (149). Although current worlds seem trapped in continuity, history is rife with surprise, fueled by the incessant creativity of humans and their ability to come up with new ways of seeing the world and new forms of living and producing their societies and their environments (150). ¶ From this perspective, recent debates on the possibility of voluntary paths to degrowth versus the more probable event of forced reductions provoked by an involuntary crash (10, 77) is misleading (78). Change is always voluntary and is always enacted through unchosen conditions (such as the availability of fossil fuels or the thermodynamics of production processes). History is shaped by collective action or inaction. As economic growth falters and as the toll of its limits and costs becomes unbearable, a transition in the direction of something akin to degrowth could emerge from dynamics among unforeseeable reactions, experiments, adaptations, and political struggles. Such a transition does not have to be in the name of degrowth. As with the eco-communes of Barcelona that Cattaneo & Gavalda (107) studied, the reduction of resource use can be the outcome of broader processes of social transformation driven by an ambition to co-live autonomously and democratically (1). ¶ In contexts where life under growth is already disastrous for many people, and threatens to become even more so with climate change and the overshooting of planetary boundaries, literature reviewed here studies, envisages, and advocates changes in institutions, policies, values, understandings, and everyday modes of living. Without the voluntary work to conceive and embody alternative ideas, explanations, practices, and institutions today, an involuntary end to growth may well lead to a state of continual economic depression in which islands of wealth are sustained in seas of deprivation, without pretense of democracy and social justice.

#### That’s especially true of the next recession — it’ll be huge and traditional economic tools will fail.

Duguay 20, Senior Economist for Prevedere and Council Member at Forbes (Andrew, June 19th, “Why The Next Recession Could Be Even Worse,” *Forbes*, <https://www.forbes.com/sites/forbesfinancecouncil/2020/06/19/why-the-next-recession-could-be-even-worse/?sh=3ebe6491d6af>, Accessed 06-21-2021)

The recession we’re not prepared for is the one still a few years away. To understand why, we’ll have to look back at one of the most dependable economic indicators in the past several decades: the correlation between the deficit as a percentage of gross domestic product and the unemployment rate. Since the 1970s, one followed the other, which makes sense considering the government is prone to ratchet up spending when the economy is depressed. In 2016, however, there was an anomaly: The deficit and employment rate diverged. The deficit continued to rise even as the economy thrived and unemployment remained low.

Why is this important? First, it is important to disabuse the common misconception that a growing deficit invariably leads to an accelerated inflation rate. That’s not necessarily the case. Furthermore, a larger deficit is not in and of itself particularly harmful to the economy in the short term; it’s mostly benign — until inflation ramps up, that is. Historically, the U.S. has responded to deficits in one of three ways: raising taxes, reducing spending or suppressing interest rates below the inflation rate, which effectively amounts to a “backdoor taxation.” We haven’t seen any of these responses in more than a decade.

Put another way, we won’t have the ability to stimulate the economy the next time we face a recession. Our deficit broke from historical trends four years ago, which was only exacerbated by the enormous spending via the current stimulus packages. Spending during a downturn is not only prudent; it’s necessary. But it becomes deleterious to the economy when the deficit is already at an elevated level.

This puts the U.S. on a precarious trajectory that could lead to a much deeper recession in the next few years. While there has been a clear necessity to provide an unprecedented stimulus to curtail an immediate collapse of the economy, there could be significant long-term consequences if the government doesn’t balance this spending in the near future.

#### Global economic collapse makes it impossible to finance resource extraction---policymakers will be forced to craft a new economy with less emissions.

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

The evidence that the global financial system is a not-so-slow moving train crash is getting stronger. That investors and the billion or so middle class people who have any savings and discretionary expenditure are losing faith, might be an understatement. It may be that paralysis and inertia is all that is holding the system together.

A collapse in credit could make it very difficult to raise the finance necessary for the ongoing extraction of tar sands, shale gas and other mad resource extraction projects that are accelerating the production of GGE[Greenhouse Gas Emissions]. A deflationary spiral that follows from a credit crisis and collapsing asset (housing, etc.) values could change behaviour to the extent that people stop spending on anything but essentials because of job insecurity and the fact that everything will be cheaper next month.

I believe the chances of global economic collapse (in the next five years) being severe enough to achieve this have to be rated at least 50%. Further I believe many climate activists and policy professionals are shifting to at least privately hoping this might be the case because the chances of a planned powerdown seems to be fading.

If we accept a global financial crash could make it very difficult, if not impossible, to restart the global economy with anything other than drastically reduced emissions, then an argument can be mounted for putting effort into precipitating that crash, the crash of the financial system. Any such plan would of course invite being blamed for causing it when it happens. No one wants to be strung up along with the bankers for causing a global version of Greece, Egypt or many other countries, let alone the horrors of Syria. On the other hand, we have no precedent to indicate how bad conditions might be in currently affluent countries.

The picture I am building is that it is almost inevitable that those who warn of the crisis will get the blame for causing it. So if we are going to be blamed anyway, we could be proactive about it and at least get the advantage for humanity of crisis now, rather than later. For the people of Syria caught in the grip of climate, energy and geopolitical struggle, all this hardly matters because it couldn't get worse for them. In fact conditions in such stricken places could actually improve if global superpower competition is disabled by the collapse of the global finance. Even the average citizen in Greece or Egypt might be hoping to see the remaining affluent countries get a 'taste of their own medicine'. The complexity of global human overshoot, so long predicted, and now unfolding, is far too multifaceted to be captured by any simple story about good, innocence, evil and blame.

### Offense — 2NC

#### to divert towards a strong military

#### less resources to foreign issues

#### Decline increases cooperation.

Christina L. **Davis &** Krzysztof J. **Pelc 17**, Christina L. Davis is a Professor of Politics and International Affairs at Princeton; Krzysztof J. Pelc is an Associate Professor of Political Science at McGill University, “Cooperation in Hard Times: Self-restraint of Trade Protection,” Journal of Conflict Resolution, 61(2): 398-429

Conclusion Political economy theory would lead us to expect rising trade protection during hard times. Yet empirical evidence on this count has been mixed. Some studies find a correlation between poor macroeconomic conditions and protection, but the worst recession since the Great Depression has generated surprisingly moderate levels of protection. We explain this apparent contradiction. Our statistical findings show that under conditions of pervasive economic crisis at the international level, states exercise more restraint than they would when facing crisis alone. These results throw light on behavior not only during the crisis, but throughout the WTO period, from 1995 to the present. One concern may be that the restraint we observe during widespread crises is actually the result of a decrease in aggregate demand and that domestic pressure for import relief is lessened by the decline of world trade. By controlling for product-level imports, we show that the restraint on remedy use is not a byproduct of declining imports. We also take into account the ability of some countries to manipulate their currency and demonstrate that the relationship between crisis and trade protection holds independent of exchange rate policies. Government decisions to impose costs on their trade partners by taking advantage of their legal right to use flexibility measures are driven not only by the domestic situation but also by circumstances abroad. This can give rise to an individual incentive for strategic self-restraint toward trade partners in similar economic trouble. Under conditions of widespread crisis, government leaders fear the repercussions that their own use of trade protection may have on the behavior of trade partners at a time when they cannot afford the economic cost of a trade war. Institutions provide monitoring and a venue for leader interaction that facilitates coordination among states. Here the key function is to reinforce expectations that any move to protect industries will trigger similar moves in other countries. Such coordination often draws on shared historical analogies, such as the Smoot–Hawley lesson, which form a focal point to shape beliefs about appropriate state behavior. Much of the literature has focused on the more visible action of legal enforcement through dispute settlement, but this only captures part of the story. Our research suggests that tools of informal governance such as leader pledges, guidance from the Director General, trade policy reviews, and plenary meetings play a real role within the trade regime. In the absence of sufficiently stringent rules over flexibility measures, compliance alone is insufficient during a global economic crisis. These circumstances trigger informal mechanisms that complement legal rules to support cooperation. During widespread crisis, legal enforcement would be inadequate, and informal governance helps to bolster the system. Informal coordination is by nature difficult to observe, and we are unable to directly measure this process. Instead, we examine the variation in responses across crises of varying severity, within the context of the same formal setting of the WTO. Yet by focusing on discretionary tools of protection—trade remedies and tariff hikes within the bound rate—we can offer conclusions about how systemic crises shape country restraint independent of formal institutional constraints. Insofar as institutions are generating such restraint, we offer that it is by facilitating informal coordination, since all these instruments of trade protection fall within the letter of the law. Future research should explore trade policy at the micro level to identify which pathway is the most important for coordination. Research at a more macro-historical scope could compare how countries respond to crises under fundamentally different institutional contexts. In sum, the determinants of protection include economic downturns not only at home but also abroad. Rather than reinforcing pressure for protection, pervasive crisis in the global economy is shown to generate countervailing pressure for restraint in response to domestic crisis. In some cases, hard times bring more, not less, international cooperation.

#### Empirics prove austerity pressures overwhelm.

Christopher **Clary 15**, Ph.D. in Political Science from MIT, Postdoctoral Fellow, Watson Institute for International Studies, Brown University, “Economic Stress and International Cooperation: Evidence from International Rivalries,” April 22, 2015, http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2597712

Do economic downturns generate pressure for diversionary conflict? Or might downturns encourage austerity and economizing behavior in foreign policy? This paper provides new evidence that economic stress is associated with conciliatory policies between strategic rivals. For states that view each other as military threats, the biggest step possible toward bilateral cooperation is to terminate the rivalry by taking political steps to manage the competition. Drawing on data from 109 distinct rival dyads since 1950, 67 of which terminated, the evidence suggests rivalries were approximately twice as likely to terminate during economic downturns than they were during periods of economic normalcy. This is true controlling for all of the main alternative explanations for peaceful relations between foes (democratic status, nuclear weapons possession, capability imbalance, common enemies, and international systemic changes), as well as many other possible confounding variables. This research questions existing theories claiming that economic downturns are associated with diversionary war, and instead argues that in certain circumstances peace may result from economic troubles. Defining and Measuring Rivalry and Rivalry Termination I define a rivalry as the perception by national elites of two states that the other state possesses conflicting interests and presents a military threat of sufficient severity that future military conflict is likely. Rivalry termination is the transition from a state of rivalry to one where conflicts of interest are not viewed as being so severe as to provoke interstate conflict and/or where a mutual recognition of the imbalance in military capabilities makes conflict-causing bargaining failures unlikely. In other words, rivalries terminate when the elites assess that the risks of military conflict between rivals has been reduced dramatically. This definition draws on a growing quantitative literature most closely associated with the research programs of William Thompson, J. Joseph Hewitt, and James P. Klein, Gary Goertz, and Paul F. Diehl.1 My definition conforms to that of William Thompson. In work with Karen Rasler, they define rivalries as situations in which “[b]oth actors view each other as a significant political-military threat and, therefore, an enemy.”2 In other work, Thompson writing with Michael Colaresi, explains further: The presumption is that decisionmakers explicitly identify who they think are their foreign enemies. They orient their military preparations and foreign policies toward meeting their threats. They assure their constituents that they will not let their adversaries take advantage. Usually, these activities are done in public. Hence, we should be able to follow the explicit cues in decisionmaker utterances and writings, as well as in the descriptive political histories written about the foreign policies of specific countries.3 Drawing from available records and histories, Thompson and David Dreyer have generated a universe of strategic rivalries from 1494 to 2010 that serves as the basis for this project’s empirical analysis.4 This project measures rivalry termination as occurring on the last year that Thompson and Dreyer record the existence of a rivalry.5 Why Might Economic Crisis Cause Rivalry Termination? Economic crises lead to conciliatory behavior through five primary channels. (1) Economic crises lead to austerity pressures, which in turn incent leaders to search for ways to cut defense expenditures. (2) Economic crises also encourage strategic reassessment, so that leaders can argue to their peers and their publics that defense spending can be arrested without endangering the state. This can lead to threat deflation, where elites attempt to downplay the seriousness of the threat posed by a former rival. (3) If a state faces multiple threats, economic crises provoke elites to consider threat prioritization, a process that is postponed during periods of economic normalcy. (4) Economic crises increase the political and economic benefit from international economic cooperation. Leaders seek foreign aid, enhanced trade, and increased investment from abroad during periods of economic trouble. This search is made easier if tensions are reduced with historic rivals. (5) Finally, during crises, elites are more prone to select leaders who are perceived as capable of resolving economic difficulties, permitting the emergence of leaders who hold heterodox foreign policy views. Collectively, these mechanisms make it much more likely that a leader will prefer conciliatory policies compared to during periods of economic normalcy. This section reviews this causal logic in greater detail, while also providing historical examples that these mechanisms recur in practice.

#### There are empirical inconsistencies, and increasing interdependence causes uncertainty about state resolve which raises conflict risk – it’s offense because the uncertainty effect is stronger than peaceful effects

Spaniel and Malone 3/5/19 [William Spaniel, Department of Political Science, University of Pittsburgh. Iris Malone, Department of Political Science, Stanford. The Uncertainty Tradeoff: Re-Examining Opportunity Costs and War. March 5, 2019. <https://wjspaniel.files.wordpress.com/2019/03/uncertainty-tradeoff-final.pdf>] **Italics in original**

However, not all scholars believe opportunity costs are a panacea for war.2 The historical record contains empirical inconsistencies in this relationship. At times, conflicts have arisen despite increased economic interdependence between parties, fueling concerns over when and whether opportunity costs reduce conflict. We therefore ask a simple question: holding all else equal, does increasing opportunity costs for war decrease the probability of conflict?3

In this paper, we develop a model that reconciles this puzzle by showing both proponents and skeptics of the opportunity cost mechanism are right. Instruments like trade have competing effects on the probability of war. How is this true? Despite raising the price of war, opportunity costs also have an indirect, second-order effect of exacerbating uncertainty about a state’s resolve, which is among the most popular mechanisms that explain war.4 Which effect is stronger? We show that the latter effect can dominate in equilibrium—that is, the probability of war increases *despite* raising opportunity costs.

#### As economic costs of war grow, they incentivize more aggressive negotiation strategies that exploit leverage – that makes conflicts more likely

Spaniel and Malone 3/5/19 [William Spaniel, Department of Political Science, University of Pittsburgh. Iris Malone, Department of Political Science, Stanford. The Uncertainty Tradeoff: Re-Examining Opportunity Costs and War. March 5, 2019. <https://wjspaniel.files.wordpress.com/2019/03/uncertainty-tradeoff-final.pdf>]

The intuition falls back on screening models where a proposer is uncertain about its opponent’s willingness to fight. Broadly, the uninformed state can pursue two strategies under these conditions. First, it can offer a generous amount that resolved types would accept. This has the benefit of avoiding the costs of war. Alternatively, it can propose a stingy settlement and screen the opponent’s willingness to fight, causing unresolved types to accept while inducing resolved types to reject. The latter benefits the proposer by giving it a large share of the settlement when the opponent accepts, but also forces it to pay the costs of war if its screening offer backfires.

When the difference between the costs of war for types is small, the proposing state has less incentive to screen. Why? Screening still forces the proposer to risk war, but the prospective gains from such a settlement are minimal. However, as the costs of conflict grow, a state is more likely to issue more aggressive demands because of a divergence in relative valuations among types. As the difference in relative costs between types increases, stingy offer strategies become more attractive. For the proposer, the increased screening incentives can outweigh the increased opportunity cost of conflict. This causes the proposer to risk war and trade breakdown by making more aggressive demands. Thus, increasing opportunity costs can have a countervailing effect of raising the risk of war even though these costs are common knowledge.

Our model verifies this counterintuitive relationship. It also generates comparative statics on when the uncertainty effect dominates over the opportunity cost effect. We focus on the role of opportunity costs in economic interdependence theory given its popularity. To preview, the effect arises as trade flows increase because a state cannot observe how its opponent weighs the benefits of trade relative to the costs of fighting. The probability of war increases when the state facing this uncertainty internalizes a larger portion of the military costs than the benefits of trade relative to their opponent’s internalization. The conditional effect introduced here suggests caution in making broad claims about the relationship between trade and war, though the scope conditions the model generates provide a straightforward substantive interpretation that scholars can exploit.

#### If anything, war is more likely when countries have strong economies.

Boehmer 8 Ph.D. in Political Science a fellow at UTEP’s Center for Excellence in Teaching and Learning (Charles R. Boehmer, 6-30-2008, ECONOMIC GROWTH AND VIOLENT INTERNATIONAL CONFLICT: 1875–1999, <https://www-tandfonline> com.proxy.lib.umich.edu/doi/full/10.1080/10242690903568801?scroll=top&needAccess=true, Date Accessed: 7-8-2018)//LB

The results again show that GDP growth appears to have a direct effect on the decisions to enter into war, which seems to support my theory that it affects decision‐makers’ views about national performance and hence resolve. This direct effect is notable relative to growth in military expenditures. Additionally, the only control variable that holds any explanatory power is major power status. The occurrence of war does not even appear to be a function of time; the Peace Years and spline variables are statistically insignificant. Although the magnitude and duration of GDP growth affects the occurrence of war, the time since a state’s past involvement in war has no effect on participation in future wars. War is a complex event to explain, and only the GDP growth variable offers any further explanation than simply that major powers are more war‐prone than minor power states. Table V presents the changes in the probability of a state entering into war as its economy fluctuates in its economic growth. Again, only GDP growth and Major Power are statistically significant. Being a major power increases the risk that a state will become involved in a war in a given year by 248% compared with minor powers. 12 12 If one divides the sample between major and minor powers, the effect of GDP growth affects positively participation in Fatal MIDs by both major and minor powers, although the effect is stronger for minor powers. The opposite is true, however, for participation in wars, where the effect of GDP growth is stronger for major powers relative to minor powers. This is logical given that these states possess the capabilities to sustain a conflict beyond 999 battle deaths compared with minor power states. A full standard deviation increase in economic growth (moving from 3.7% to 7.9%) increases the probability that a state will become involved in a war by 34.6%. Hence, the substantive effect of economic growth is not as strong as the effect of being a major power but it is important nonetheless and offers more explanatory power than the remaining covariates. The theory set forth earlier theorizes that economic growth increases perceptions of state strength, increasing the likelihood of violent interstate conflicts. Economic growth appears to increase the resolve of leaders to stand against challenges and the willingness to escalate disputes. A non-random pattern exists where higher rates of GDP growth over multiple years are positively and significantly related to the most severe international conflicts, whereas this is not true for overall conflict initiations. Moreover, growth of military expenditures, as a measure of the war chest proposition, does not offer any explanation for violent interstate conflicts. This is not to say that growth of military expenditures never has any effect on the occurrence of war, although such a link is not generally true in the aggregate using a large sample of states. In comparison, higher rates of economic growth are significantly related to violent interstate conflicts in the aggregate. States with growing economies are more apt to reciprocate military challenges by other states and become involved in violent interstate conflicts.

# 1NR

## CP---Food & Opioid

#### The regulation deficit is about environmental regulation, that’s not the counterplan because we just fund health and farm program, only applies to aff solvency because they regulate.

Henson 2 [KU RED]—(Director of the Occidental Arts and Ecology Center, bachelor’s in ecology from UC Santa Barbara, JD from New College of California). Dave Henson. May 2002. “Dismantling the Mechanisms of Corporate Rule”. Program on Corporations, Law & Democracy. Originally printed in Fatal Harvest: The Tragedy of Industrial Agriculture. <https://www.poclad.org/BWA/2002/BWA_2002_MAY.html>. Accessed 7/7/21.

For decades, the U.S. mainstream environmental movement has used a strategy of regulatory and administrative law remedies to address the litany of environmental harms caused by industrial agriculture. Environmental organizations have focused campaign attention on arguments with corporations over how many parts per billion of a particular pesticide can be put in our rivers, how much of our public lands can be exploited, or how many individuals of a particular species it is acceptable to kill. The arenas of these struggles have been the courts and regulatory agencies, with occasional passage of legislation that restricts corporate harms.

What have we won? Indeed, the environmental movement has won some major legislative victories: the National Environmental Protection Act, an Endangered Species Act, a Clean Water Act, a Clean Air Act, and dozens of other laws that limit the damage that corporate agriculture and industrial society in general can do to nature and to people. In addition, the movement has created hundreds of national and state regulations and administrative rules that limit pesticide use, restrict farming near riparian corridors, require soil conservation efforts by farmers, and so on.

However, an honest assessment of the overall effectiveness of this strategy of regulating corporate harms must conclude that it is a limited strategy and that it has ultimately licensed an unsustainable and unacceptable level of ecological destruction and marginalized our most fundamental concerns. We have been fighting corporate assaults against nature timber harvest plan by timber harvest plan; factory farm by factory farm; dying stream by dying stream. We are constantly being called to fight against new and more virulent crises. If we win one, there is little time to celebrate because there are many more crises created by corporate agribusiness every day. Corporations have grown and become far more powerful in this regulatory environment. In short, corporations have successfully framed both the arena of struggle and the terms of the debate, and have limited us to incremental compromises.

Consider the national struggle around the new federal organic standards at the end of the 1990s. Congress appointed a blue-ribbon panel — a diverse committee of organic farmers, nutritionists, scientists, product manufacturers, and retailers — to propose a new law. After several years of research and hearings, the panel presented a carefully considered, comprehensive set of recommendations to the U.S. Department of Agriculture (USDA). In 1997, however, the USDA, on Democratic President Bill Clinton's watch, rejected those recommendations and instead issued to the nation draft organic standards obviously heavily influenced by corporate agribusiness and "life science" corporations. This proposal potentially allowed into the "organic" definition products with genetically engineered ingredients, food grown with toxic sewage sludge used as fertilizer, and products that had been irradiated. It was a slap in the face to the organic movement's hard work and to the trust it had placed in the regulatory system.

It then took almost two years of mass mobilization, including organizing the writing of a record 275,000 letters to the USDA, to fight industrial agriculture's attempted takeover of organic. We finally exposed the hypocrisy and shamed the USDA into retreating from the worst aspects of their industrial agriculture agenda for organics. Did we "win"? What might we have done for those two years of struggle if we had not had to fight that corporate takeover? What could we have done with 275,000 people mobilized proactively to further the sustainable agriculture agenda instead of having to drop everything and react to the attack on organics?

CORPORATE VS. DEMOCRATIC DECISION MAKING

The real struggle around the national organic standards was not over the federal definition of organic, important as that is. The real struggle was about public, democratic decision making versus private, corporate decision making on issues of food and agriculture.

This is one major case — and there are hundreds like it — where private capital, amassed as the wealth of multinational corporations, exerted much more decision-making authority than the people of this country.

## CP---ABR

### 1NR---CP---Solvency

#### Solves future pandemics, the reason they said were not prepared was because there was no profit in drug research, but the counterplan just fiats research without expectation of profit

Plump 5-18 [KU RED] (Andy Plump is the president for research and development at Takeda Pharmaceuticals and a cofounder of the Covid R&D Alliance. 5-18-2021, accessed on 6-12-2021, STAT, "The world needs to start preparing now for the next pandemic", <https://www.statnews.com/2021/05/18/luck-is-not-a-strategy-the-world-needs-to-start-preparing-now-for-the-next-pandemic/>)

As countries grapple with the worst global pandemic in a century, it’s hard to think about preparing for the next one. But if we don’t, it could be worse than Covid-19. Over the last 30 years, infectious disease outbreaks have emerged with alarming regularity. The World Health Organization lists an influenza pandemic and other high-threat viral diseases such as Ebola and dengue among the top 10 biggest threats to public health. The rate of animal-to-human transmission of viruses has been increasing, with the U.S. Centers for Disease Control and Prevention estimating that 75% of new infectious diseases in humans come from animals. These zoonotic infections can have profound effects on human life. The overall infection fatality rate is around 10% for severe acute respiratory syndrome (SARS), between 40% and 75% for Nipah virus, and as high as 88% for Ebola. While the infection fatality rate for Covid-19 is lower — likely less than 1% — the overall burden of death has been significantly higher since it has affected so many people, more than 160 million people as I write this. Luck is not a pandemic strategy Although the Covid-19 pandemic has been a human and health care disaster, by scientific measures the world was lucky this time. Covid-19 was far less lethal than its predecessors, less contagious than previous pandemic viruses, and we were able to quickly develop a cadre of effective vaccines. But luck is not a strategy. The same way the U.S. invests in and prepares for national defense, it must also prepare for another pandemic. Though the next viral outbreak cannot be prevented, the next pandemic can — but only with better preparation. There is no doubt that the global pharmaceutical industry, governments, nongovernmental organizations, and health care systems should have been better prepared for Covid-19 in part because the coronavirus that causes it, known as SARS-CoV-2, is closely related to other coronaviruses, particularly the one that caused the outbreak of SARS in 2003. In fact, coronavirus core proteins often share upward of 95% of their nucleic acid or protein sequences due to their close origins. In some cases, their active sites — the pockets to which antiviral therapies bind — are 100% identical. In short, coronaviruses are highly related, and where it counts they share complete or near complete identity. Had the drug discovery efforts initiated during the 2003 SARS epidemic been continued and come to fruition, antiviral medications to treat Covid-19 would have been on the shelf to help contain the pandemic, or at least better treat Covid-19 patients. Unfortunately, those efforts were abandoned once SARS seemed under control because there was no apparent market and no infrastructure to support ongoing research. The response to Covid-19 — if it can be sustained — suggests hope for the future and a springboard for preparedness, especially immediate and ongoing collaborations across the biopharmaceutical industry, academia, and government. Walls came down. Collaboration flourished. A tremendous amount of good science was conducted in diagnostics and clinical management, and the world witnessed spectacular efforts in vaccine development. The urgency of the crisis and the speed of drug development led the biopharmaceutical industry and governmental bodies to work in concert, streamlining regulatory processes in ways that must continue moving forward once the coronavirus crisis ends. Rethinking traditional practices is essential to pandemic preparedness, which must be approached with the same mindset as countries approach defense, with the goal of establishing a unified global bulwark against future disease outbreaks. Establish and fund infrastructure for collaboration Global health crises require organized structures and leadership. Governments and the biopharma industry need to create and coordinate a joint pandemic preparedness ecosystem. Such a structure would help governments, industry, academia, and others focus on their respective strengths for greater efficiency, partnerships, and preemptive research. Related: Real-time gene sequencing can help control — and may someday prevent — pandemics In March 2020, two dozen R&D leaders from the world’s leading biopharma companies, including my company, Takeda, came together to form the Covid R&D Alliance. It is showing that this type of industry collaboration is possible by rapidly assembling and coordinating therapeutic responses to the pandemic. At the national and international levels, this alliance and others are beginning to undertake early work to get ahead of drug development in advance of the next pandemic. But this effort must quickly be solidified before momentum and motivation are lost. The massive human suffering and economic impact of Covid-19 underscore the significant investment that must be made for future preparedness. Dedicated public and private funding of such an effort would demonstrate a commitment to global health care and create a defense against future pandemics that is founded on science and independent from political rhetoric. Identify leading threats and identify therapies for them The perpetrators of the next pandemic will likely come from the coronavirus or influenza families. Other possible culprits include flaviviruses such as the West Nile virus, filoviruses such as the Ebola virus, and alphaviruses known to associate with a number of human encephalitis diseases. Using a list like this to guide its work, the biopharmaceutical industry needs to begin creating an arsenal of antiviral molecules. Given the impossibility of predicting the future, it will be important to focus on broadly active compounds where possible, and virus-specific compounds to fill in gaps. In the coronavirus family, for example, SARS-CoV-2 is similar in structure to the 2003 SARS virus, and the virus that causes Middle East respiratory syndrome is only slightly different. It should be possible to develop a single antiviral molecule to be effective against all three. If a three-fer isn’t possible, then specific therapies should be developed for each potential pathogen. All therapeutic candidates should be evaluated against diverse viral strains as markers of future potential efficacy in future epidemics. There is no business model for preparing for a future pandemic. Without specific catalysts, interest in preparing for this unknown is likely to wane as Covid-19 comes under control. Whether it’s because businesses are thinking of investors, media, academia, or other audiences, the tendency is to go where the spotlight is shining — which would be a disaster for pandemic preparedness. What’s needed is a competitive environment to stimulate innovation. But without an established or obvious market, the necessary investment and entrepreneurism won’t materialize. Enabling future pandemic therapeutic preparedness will require establishing a novel, collaborative ecosystem in which biopharma companies, nongovernmental organizations, governments, academia, and other stakeholders are able to share information and coordinate areas of focus to maximize the collective efforts. The success of the whole will depend on the willingness and success of each individual piece. To prepare for the next viral pandemic, governments and nongovernmental organizations need to focus on preparing health care infrastructure and viral surveillance to predict the next outbreak. At the same time, academia and the pharmaceutical industry must focus on drug discovery, particularly antiviral therapies. These efforts must seamlessly interface. To enable future preparedness, the biopharmaceutical industry should leverage the ways of working that emerged during Covid-19 that included sharing assays, models, and data while concurrently focusing on competitive innovation. With the right level of coordination, and without massive resources, an arsenal of antiviral molecules can be created and tested on healthy human volunteers so the world has them at the ready for Phase 2 trials when threats emerge. Pandemic readiness will also require agility and an ability to adapt rapidly to the unknown. Estimates suggest the existence of 500,000 animal viruses with spillover potential to humans, with a small fraction of these (250 or so) having already made the jump. We must be ready for the perpetrators from poorly studied or poorly understood viral families, as well as the entirely new threats that evolution will create. Focusing on known pathogens is a critical first step in therapeutic preparedness, but the industry must also be ready to start entirely new programs with minimal notice.

## Innovation

### 2NC---!D---ABR

#### No antibiotic apocalypse---it’s slow and research solves.

Cox 17, Lecturer in Microbiology, Aston University. PhD, Molecular Microbiology and Drug Discovery. (Jonathan, 3-21-2017, "It’s the age of the antibiotic revolution, not apocalypse", *Conversation*, https://theconversation.com/its-the-age-of-the-antibiotic-revolution-not-apocalypse-73476)

Bad news sells papers. Or as Elliot Carver, the media mogul set on world domination in the Bond film Tomorrow Never Dies put it: “There’s no news like bad news.” As a scientist, my responsibility is to separate fact from fiction, to follow evidence, not instinct. So when I read doomsday reports of a coming “antibiotic apocalypse”, I question their legitimacy. Are we really all standing on the edge of the medical precipice, about to tumble into an oblivion of death-by-superbug? We most certainly are not. The end of the world may well be on the horizon, but it surely won’t be due to antibiotic resistance. In order to understand why, you need to understand resistance: where it comes from, what it can do, and crucially, what scientists are doing about it. Predominantly, antibiotic resistance is a man-made problem. Since the discovery of penicillin in 1928, we have consistently provided the opportunity for resistance to evolve, persist and spread through the mismanagement and incorrect administration of antibiotics. We have also learned major lessons in the last decade as to where antibiotic resistance comes from and what measures we can take to control it. Some of these, such as the C-reactive protein (CRP) test – which can help detect if patients actually need antibiotic drugs or not – are proving to be highly effective, while others haven’t been and have occasionally even exacerbated the problem. Sensitivity testing before use The point is, scientists all over the world are working tirelessly to think up new and innovative solutions to the problem. Despite their best efforts, and a growing understanding of antibiotic resistance, we still sometimes get it wrong. A woman in the US recently died of an infection so incredibly resistant that “there were no antibiotics left” to treat her. Some hysterical headlines described the deadly bacteria as a “superbug resistant to all available antibiotics”, because 26 different types failed to work. But was her infection resistant to all of these before she was given the very first antibiotic? The answer is undoubtedly, no. Fundamentally, bacteria are given an opportunity to develop resistance. Sensitivity testing allows infections to be tested against different antibiotics in a lab to see if they will be effective. While this was carried out on the woman’s infection, it was already too late – somewhere along the line, she’d had too much exposure to inappropriately used antibiotics and the infection had become resistant. Sensitivity testing at the start of an infection should be standard practice. The first questions doctors should be asking are “What antibiotics will actually work against this?” and “What am I up against?” so that any prescription will be effective in the first instance. More progressive hospitals with microbiology labs are beginning to do this as a matter of course to better control and manage antibiotic resistance. There isn’t always time, for example with sepsis, which moves very fast, but for chest, skin, and urinary tract infections the results can be available within 24 hours. Treatment is then based on fact rather than a guess. If you get it wrong enough times, you get resistance. Failing to test for bacterial sensitivity early on in the infection, waiting instead until it is known that the infection is resistant, makes the scenario much worse. Claims that the use of colistin, a “last hope” antibiotic, is soaring in English hospitals is true. But this is driven by a failure to test for antibiotic sensitivity before it is too late, leading to a need to turn to colistin. Clinicians often assume everyone’s urinary, respiratory or other infection is the same, and will respond in the same way to tried and tested antibiotics. Scientifically speaking, everyone’s infection is different and should be treated as such. No apocalypse in sight Sad as the death of the woman in the US is, it is not uncommon for a death to result from resistance. Reports suggest that around 700,000 people die from antibiotic resistant infections globally each year, the majority in underdeveloped countries with poor access to healthcare. This number is predicted to rise to 10m deaths a year by 2050 if nothing is done about the problem. But “apocalypse” is the wrong word for this. The global population has doubled since World War II, when around 10m people a year died. Humankind certainly won’t be wiped out. Even if we were to face the worst case scenario by 2050, antibiotic resistance would affect about 1% of people on the planet. And that is assuming we sit back and do nothing. In fact, 1,618 scientific research papers were published on antibiotic resistance in 2015. There is lots of funding into resistance and scientists are doing lots to tackle the problem. Schemes such as the Longitude Prize – a prize for scientists that has currently set a challenge for creating a cost-effective, accurate, rapid and easy-to-use test for bacterial infections – are pushing the momentum of discovery in this area.

#### ABR won’t get close to extinction, and intervening actors solve it.

Cara 17, science writer for The Atlantic, Newsweek, and Vocativ. (Ed, 1-27-2017, “The Attack Of The Superbugs”, http://www.vocativ.com/394419/attack-of-the-superbugs/)

Antibiotic-resistant infections kill at least 700,000 people worldwide a year right now, according to an exhaustive report commissioned by the UK in 2014, and without any substantial medical breakthroughs or policy changes that slow down resistance, they may claim some 10 million deaths annually by 2050 — eclipsing cancer in general as a leading cause. These deaths largely won’t come from pan-resistant infections, just tougher ones. A preventable death there, a preventable death here. Leaving that aside, antibiotics, along with proper sanitation and nutrition, gird our entire way of living. Most every invasive surgery, pregnancy, organ transplant and chemotherapy session we go through will become riskier. Other diseases like HIV, malaria or influenza will become deadlier, since bacteria often exploit the opening in our immune system they leave behind. And already precarious populations like those living with cystic fibrosis, prisoners, and the poor will lose years off their lives. For all the warranted gloom, though, Farewell does think there are reasons to be hopeful. “I don’t think we are doing enough, but the scientific community along with many governmental and private foundations are very actively involved in finding not only new antibiotics, but new solutions to this problem,” she said. There’s been a noticeable change in attitude and increased urgency surrounding antibiotic resistance, she said, one that she hadn’t seen even five years ago, let alone twenty. Until recently, that attitude change could be seen from places as high up as the U.S. federal government. In 2014, former President Obama issued an executive order aimed at addressing antibiotic resistance, the first real acknowledgement of the problem from an administration, devoting funding and outlining a national action for combatting resistance. Through its federal agencies, the administration pushed to reduce antibiotic use on farms and encouraged doctors to stop using them in excess. “There has been a lot of work done the last couple of years, much of it spurned by [Obama’s] National Action Plan,” said Dr. David Hyun, a senior officer for Pew Charitable Trusts’ Antibiotic Resistance Project. The CDC, in particular, has used its funding to open up regional labs that allow them to better detect and respond to antibiotic-resistant outbreaks like the Nevada case, he said. They ultimately hope to create an expansive surveillance system that can easily keep track of resistance rates on a national, state and regional level. A parallel system also exists for monitoring resistance in the food chain, shepherded by the CDC and the U.S. Department of Agriculture. In fact, it was this sort of cooperation between national and local health agencies that enabled Nevada doctors to stop the worst from happening, said Dr. Lei Chen. The swift identification of a possible CRE strain by the hospital, coupled with the woman’s medical history, led to a precautionary quarantine, while also prompting Chen’s public health department and eventually the CDC into action. And it may help prevent future cases from spilling into the public. According to Chen, the CDC has allocated funding this year to all of Nevada’s state public health departments so they can better detect CRE and other dangerous resistant strains. Under the Trump administration, there’s no telling how these small victories will hold up or whether they will advance. All references to antibiotics once found on the Whitehouse.gov site have been removed, including a link to the Obama administration’s national action plan, and the fact that they’re already tried to bar USDA scientists from discussing their work with the public while stripping funding from other public health agencies isn’t encouraging. Even with the best public policy, however, there’s no clear light at the end of the tunnel. Antibiotic resistance has gradually been worsening, even within the last 15 to 20 years, when superbugs like methicillin-resistant Staphylococcus aureus (MRSA) first became widely known, said Hyun. The effort needed to develop new drugs has been in short supply, hamstrung by pharmaceutical companies’ inability to recoup the costs of bringing new antibiotics to market. That’s because, unlike the latest heart medication, any new antibiotics will have to be treated like the last drops of water during a drought, used as little as possible — the exact opposite way to make money off a new product. Yet, much like climate change, the financial toll of not doing anything will total in the trillions years down the road. And it already numbers in the billions now, according to the CDC. Of course, we need bacteria to survive. And most need or pay no mind to us in return. Even pan-resistant bacteria don’t really mean harm. Some have been found in perfectly healthy people, a fact that’ll either comfort you or keep you awake at night, only causing problems when our immune system wavers. There’s no army of sentient E. coli that will rise up and someday overthrow the human race. But barring the calvary showing up, a new fear of ours will learn to settle in, almost unnoticed. It’ll creep in when we pick our heads up from a nasty fall that scrapes our skin open or breaks our bones; when we wave goodbye to our loved ones before they enter an operating room, or when we cradle our newborns into a world teeming with the living infinitesimal, wishing there was still a way to shield them from it as our parents once could for us. A fear of naked vulnerability. The antibiotic apocalypse will be gentle, if it fully arrives, but it won’t be any less devastating to the human spirit.

### 2NC---!D---Disease

#### Resiliency, intervening actors, burnout

Adalja 16, infectious-disease physician at the University of Pittsburgh (Amesh, 6-17-2016, "Why Hasn't Disease Wiped out the Human Race?," *The Atlantic*, https://www.theatlantic.com/health/archive/2016/06/infectious-diseases-extinction/487514/)

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.

When humans began to focus their minds on the problems posed by infectious disease, human life ceased being nasty, brutish, and short.

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.

#### Burnout and variation check

York 14 (Ian, head of the Influenza Molecular Virology and Vaccines team in the Immunology and Pathogenesis Branch of the Influenza Division at the CDC, PhD in Molecular Virology and Immunology from McMaster University, M.Sc. in Veterinary Microbiology and Immunology from the University of Guelph, former Assistant Prof of Microbiology & Molecular Genetics at Michigan State, “Why Don't Diseases Completely Wipe Out Species?” 6/4/2014, http://www.quora.com/Why-dont-diseases-completely-wipe-out-species)

But mostly diseases don't drive species extinct. There are several reasons for that. For one, the most dangerous diseases are those that spread from one individual to another. If the disease is highly lethal, then the population drops, and it becomes less likely that individuals will contact each other during the infectious phase. Highly contagious diseases tend to burn themselves out that way.¶ Probably the main reason is variation. Within the host and the pathogen population there will be a wide range of variants. Some hosts may be naturally resistant. Some pathogens will be less virulent. And either alone or in combination, you end up with infected individuals who survive.¶ We see this in HIV, for example. There is a small fraction of humans who are naturally resistant or altogether immune to HIV, either because of their CCR5 allele or their MHC Class I type. And there are a handful of people who were infected with defective versions of HIV that didn't progress to disease. ¶ We can see indications of this sort of thing happening in the past, because our genomes contain many instances of pathogen resistance genes that have spread through the whole population. Those all started off as rare mutations that conferred a strong selection advantage to the carriers, meaning that the specific infectious diseases were serious threats to the species.

### !D---Islands

#### Islands check global spread.

Osborne 19, citing Nick Wilson, from the University of Otago. (Hannah, 10-3-2019, "These are the best places on Earth to survive a global pandemic threatening to wipe humans out—according to scientists", *Newsweek*, https://www.newsweek.com/countries-safest-global-pandemic-human-extinction-1462869)

In the event of a global pandemic threatening mankind with extinction, Australia and New Zealand would be the best safe havens where humans could survive and eventually repopulate the planet, scientists have said.

"Discoveries in biotechnology could see a genetically-engineered pandemic threaten the survival of our species," Nick Wilson, from the University of Otago, said in a statement. "Though carriers of disease can easily circumvent land borders, a closed self-sufficient island could harbour an isolated, technologically-adept population that could repopulate the earth following a disaster."

## Opioids

### 2NC---!D---Food Wars

#### , only maybe true for the poorest countries, and government responses check

Rosegrant 13, Director of the Environment and Production Technology Division at the International Food Policy Research Institute, et al. (Mark W., 2013, “The Future of the Global Food Economy: Scenarios for Supply, Demand, and Prices”, in *Food Security and Sociopolitical Stability*, pg. 39-40

The food price spikes in the late 2000s caught the world’s attention, particularly when sharp increases in food and fuel prices in 2008 coincided with street demonstrations and riots in many countries. For 2008 and the two preceding years, researchers identified a significant number of countries (totaling 54) with protests during what was called the global food crisis (Benson et al. 2008). Violent protests occurred in 21 countries, and nonviolent protests occurred in 44 countries. Both types of protest took place in 11 countries. In a separate analysis, developing countries with low government effectiveness experienced more food price protests between 2007 and 2008 than countries with high government effectiveness (World Bank 201la). Although the incidence of violent protests was much higher in countries with less capable governance, many factors could be causing or contributing to these protests, such as government response tactics, rather than the initial food price spike.

Data on food riots and food prices have tracked together in recent years. Agricultural commodity prices started strengthening in international markets in 2006. In the latter half of 2007, as prices continued to rise, two or fewer food price riots per month were recorded (based on World Food Programme data, as reported in Brinkman and Hendrix 2011). As prices peaked and remained high during mid-2008, the number of riots increased dramatically, with a cumulative total of 84 by August 2008. Subsequently, both prices and the monthly number of protests declined.

Several researchers have studied the connection between food price shocks and conflict, finding at least some relationship between food prices and conflict. According to Dell et al. (2008), higher food prices lead to income declines and an increase in political instability, but only for poor countries. Researchers also found a positive and significant relationship between weather shocks (affecting food availability, prices, and real income) and the probability of suffering government repression or a civil war (Besley and Persson 2009). Arezki and Bruckner (2011) evaluated a constructed food price index and political variables, including data on riots and anti-government demonstrations and measures of civil unrest. Using data from 61 countries over the period 1970 to 2007, they found a direct connection between food price shocks and an increased likelihood of civil conflict, including riots and demonstrations.

Other researchers have broadened the analysis by considering government responses or underlying policies that affect local prices, and consequently influence outcomes and the linkage between food price shocks and conflict. Carter and Bates (2012) evaluated data from 30 developing countries for the time period 1961 to 2001, concluding that when governments mitigate the impact of food price shocks on urban consumers, the apparent relationship between food price shocks and civil war disappears. Moreover, when the urban consumers can expect a favorable response, the protests only serve as a motivation for a policy response rather than as a prelude to something more serious, such as violent demonstrations or even civil war.

Many in the international development community see war and conflict as a development issue, with a war or conflict severely damaging the local economy, which in turn leads to forced migration and dislocation, and ultimately acute food insecurity. Brinkman and Hendrix (2011) ask if it could be the other way around, with food insecurity causing conflict. Their answer, based on a review of the literature, is “a highly qualified yes,” especially for intrastate conflict. The primary reason is that insecurity itself heightens the risk of democratic breakdown and civil conflict. The linkage connecting food insecurity to conflict is contingent on levels of economic development (a stronger linkage for poorer countries), existing political institutions, and other factors. The researchers say establishing causation directly is elusive, considering a lack of evidence for explaining individual behavior. The debate over cause and effect is ongoing.

Policies can nevertheless be implemented to reduce price variability. Less costly forms of stabilization, at least in terms of government outlays, include reducing import tariffs (and quotas) to lower prices and restricting exports to increase food availability. However, these types of policy responses, while perhaps helping an individual country’s consumers in the short run, can lead to increased international price volatility, with potential for disproportionate adverse impacts on other countries that also may be experiencing food insecurity.

#### Protests are nonviolent, and intervening actors.

Barrett 13, Deputy Dean and Dean of Academic Affairs of the College of Business, Stephen B. and Janice G. Ashley Professor of Applied Economics and Management, and an International Professor of Agriculture, all at the Charles H. Dyson School of Applied Economics and Management, as well as a Professor in the Department of Economics and a Fellow of the David R. Atkinson Center for a Sustainable Future, all at Cornell University. (Christopher B., “Food Security and Sociopolitical Stability,” 26 September 2013, Google Books)

The simplest definition of sociopolitical stability is the absence of coordinated human activities that cause widespread disruption of daily life for local populations. Note that this excludes violent personal crimes, such as murder, and natural disasters. But this definition encompasses a continuum of activities that we can array according to the magnitude of their human consequences, from nonviolent riots or large-scale political protests and work stoppages at one end, through violent versions of such organized actions, to guerilla movements and terrorism by state and non-state actors, to outright civil war, and finally to interstate war at the other. Boulding (1978) defined peace as the absence of war and emphasized that peace does not require the resolution of all conflicts within or among nations, merely that such conflict remain nonviolent. As used here and in the rest of this volume, stability is an even more Utopian state than mere peace. For example, many of the food riots of the past several years proved extremely disruptive to the populations affected—and threatening to governments—but did not turn violent, at least in the sense of causing deaths. We consider such events moments of instability, even though peace prevailed.

This sort of hierarchical ordering is instructive, as it underscores two fundamental points made directly or indirectly by multiple contributors to this volume. First, not all instability is bad. When peaceful, structured, political, legal, and economic conflict occurs where the probability of large-scale conflict is negligible, mobilization against state policy is not automatically negative. Indeed, nonviolent social protest movements can be important forces for productive change. Social movements often push states to adopt policies that ultimately enhance both food security and sociopolitical stability by offering some redress for longstanding structural grievances that might otherwise lead to violence, even war.

This leads directly to the second fundamental point: the greatest dangers come not from lower-level instability associated with protests, riots, and work stoppages, but rather from violence at scale, especially in the form of organized civil or interstate war. Preserving peace is far more important, in human, economic, and geostrategic terms, than is maintaining stability. Indeed, a certain level of nonviolent instability can help to secure a stable peace if it compels the state to take actions that preempt the intensification and spread of deeper structural grievances—actions it would not choose without pressure. Riots are dangerous to local populations primarily insofar as they enable an opposition to build larger, more durable coalitions for violent political struggle against a regime. State and private actions can defuse more threatening and dangerous guerilla movements, terrorism, and civil or interstate war. Underappreciation of the central place of preventive and responsive action in mediating the relationship between food security and sociopolitical stability is perhaps the greatest deficiency of recent debates, which tend to treat the sociopolitical risks of food insecurity as driven largely by exogenous forcing variables such as climate or global market prices.

#### But the counterplan makes the Ag industry resilient

* plants are being modified to be successful in droughts
* ocean and island crops are resilient to rising sea levels and salinity
* livestock resistant to diseases
* livestock prepared for droughts

FAOUN 19 [FAO COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE @ UN, “THE STATE OF THE WORLD’s BIODIVERSITY FOR FOOD AND AGRICULTURE”, https://www.courthousenews.com/wp-content/uploads/2019/02/fao-report.pdf]

Maintaining, using and developing adapted genetic resources A number of countries note the significance of well-adapted species, varieties or breeds in terms of enhancing resilience to climate change. Several specific examples of how such components of BFA have been utilized in adaptation efforts are provided. For example, Papua New Guinea mentions the distribution to farmers of crop accessions identified in ex situ collections as being tolerant to salinity (taro and cassava varieties), drought (cassava, banana and aibika13 varieties) and flooding (taro and banana varieties). It notes that this activity proved very useful in sustaining food security during the drought that struck the country in 2015 and 2016,14 when 40 percent of the population was seriously affected. Panama reports that its criollo livestock breeds have a combination of characteristics that are not found in any introduced breeds, including high fertility rates, longevity, resistance to parasites and diseases and good grazing abilities, including the ability to make use of poor-quality pastures. It notes, in particular, the potential of two locally adapted cattle breeds, the Guaymi and the Guabal^, in climate change adaptation. It also mentions, among its climate change adaptation measures, the development of maize varieties and hybrids that are tolerant of drought and diplodia rot (a fungal disease) and that grow well in soils with low nitrogen levels. With regard to choices at species level, Sudan reports that some of its livestock keepers have replaced cattle and sheep with dromedaries and goats, as the latter species are better suited to a climate change-affected environment that is more prone to droughts.

Some countries note the significance of participatory breeding programmes in the context of climate change. For example, Oman mentions that local wheat and barley landraces have been improved through such programmes to obtain varieties that have shorter growing seasons and can be managed more flexibly, especially during years with prolonged periods of extreme heat and limited water availability. Ensuring farmers have access to the adapted germplasm they need is another issue highlighted. Nepal, for example, mentions the role of community-based seed banks in providing farmers with immediate access to locally adapted germplasm that can be used in efforts to cope with climate change.

### 2NC---COVID Thumper---Food Security

#### COVID-caused remittance loss and migration restrictions collapse global markets.

UN 11/10, citing David Beasley, Executive Director of the UN World Food Programme. (UN News, 11/10/20, "COVID-19 worsening food insecurity, driving displacement, warn UN agencies", https://news.un.org/en/story/2020/11/1077272)

In Populations at risk: Implications of COVID-19 for hunger, migration and displacement, the UN World Food Programme (WFP) and the International Organization for Migration (IOM) urged the global community to step up support for the immediate and rising humanitarian needs, as well as addressing the pandemic’s fallout, especially on the most vulnerable. David Beasley, Executive Director of WFP, said that the socio-economic impact of the pandemic is more devastating than the disease itself. “Many people in low- and middle-income countries, who a few months ago were poor but just about getting by, now find their livelihoods have been destroyed,” he said. “Remittances sent from workers abroad to their families at home have also dried up, causing immense hardship. As a result, hunger rates are sky-rocketing around the world.” The report – the first of its kind – assessed the implications of the COVID-19 pandemic for people’s food security in major migration and hunger hotspots around the world. It revealed important linkages between the two, with food insecurity – especially when combined with conflict, being one of the main drivers for people to move. Unprecedented impact The impact the pandemic has had on the ways people move is “unprecedented”, according to the two UN agencies. Measures and restrictions put in place to contain the spread of the disease have limited human mobility, opportunities to work and earn an income, straining the ability of migrant and displaced people to afford food and other basic needs. António Vitorino, Director-General of IOM, highlighted COVID-19’s impact on health and human movement, warning that it not only threatens global commitment but also ongoing assistance. “The impact of the COVID-19 crisis on health and human mobility threatens to roll back global commitments, including for the Global Compact on Migration, and hinder ongoing efforts to support those in need of assistance,” he said. “It is our collective responsibility to safeguard the rights of people on the move and ensure their protection from further harm,” he added. Hunger, displacement ‘closely intertwined’ According to the report, food insecurity and displacement are closely linked: nine out of ten of the world’s worst food crises are in countries with the largest number of internally displaced persons, while the majority of displaced people are located in countries affected by acute food insecurity and malnutrition. Migrant workers, especially those working in the temporary or informal sector, are some of the worst hit by the pandemic and its fallout. Without sustained income, many will not only be pushed to return home but will also cause at least a temporary drop in remittances that provide an essential lifeline for around 800 million – or one in nine – people in the world, the report added. At the same time, disruptions to seasonal agricultural work could hit the production, processing and distribution of food, affecting food availability and affordability at local and regional levels.