# 2nr

## CP

#### CP Text: Member nations of the World Trade Organization should create patent pool licensing platforms for genomic medicines.

#### Solves the first advantage

Their author Stramiello 18 [(Michael, PhD, an intellectual property litigation associate in Washington, DC. His practice focuses on the life sciences industry) “CRISPR: The New Frontier of Biotechnology Innovation” American Bar Association, Jan/Feb 2018. https://www.americanbar.org/groups/intellectual\_property\_law/publications/landslide/2017-18/january-february/crispr-new-frontier-biotechnology-innovation-digital-feature/]//pranav

As CRISPR marches on, there may be an elegant solution for making it widely available without government intervention in licensing: patent pools. These joint licensing platforms enable owners to combine their IP rights into bundles that are made accessible, nonexclusively, to a broad range of users via a single transaction with predictable terms. As a result, licensors and licensees can concentrate on innovation and commercial development, respectively, while minimizing transaction costs and litigation risk.32 This model was popularized in the 1990s, when the consumer electronics industry adopted it to facilitate deployment of the MPEG-2 digital video standard, which has yielded about $5 trillion in worldwide product sales since 1997.33 A key coordinator of that effort, MPEG LA LLC, now invites CRISPR/Cas9 patent holders to participate in their own pool. MPEG LA has been gauging interest from CRISPR rights holders since at least April 2017.34 Broad and Rockefeller University announced that they had submitted nearly two dozen “key CRISPR-Cas9 patents,”35 from 10 families, “for evaluation of eligibility to participate in discussions facilitated by MPEG LA regarding creation of a CRISPR Joint Licensing Platform.”36 UC reportedly has no plans to follow suit, citing potential conflicts with its existing licenses.37 The effect that pooling would have on such arrangements may remain unclear until contributors finalize pool terms, which could take years. Early efforts might focus on pooling foundational patents, and there has also been speculation about specialized pools geared toward particular CRISPR applications (e.g., agriculture and industrial biotechnology).38 Pooling may prove to be more of a challenge with respect to human therapeutics, a field where rights holders typically expect exclusivity as a reward for their enormous investment in rigorous clinical trials.

## Infra

### O/V

### AT: pharma don’t likey

### At: ‘non-uq’

This ev is so bad lmao – it’s literally about the WRONG bill ??? – it’s ab $1 tril – disad is ab 3.5 tril lol + is passed through reconciliation which means gop is irrelelvant – they’ve conceded manchin & sinema are tentatively on board w reconciliation bc of biden pc

## Heg

Concede no heg ! not going for disad

CRISPR good stuff – doesn’t answer the disad means it’s j an aff add on- this usage is def not as a medicine and they’re not winning an internal link to it bc they didn’t go for innovation which means even if squo CRISPR is good, they haven’t won a reason why the plan would harm that

## Case

# 1NC

## 1

#### **Interpretation: Medicine is a substance used for diagnosis, treatment, mitigation, or prevention of medical condition**

Hettiarachchi and Wijesinge 21, Charith, and Sanath Wijesinghe[Charith Amidha Hettiarachchi\* Visiting Scholar, Department of Public Health, Faculty of Heath, University of Technology Sydney, Australia and Post-Doctoral Scholar, Ministry of Health, Sri Lanka. PhD Researcher, Faculty of Law, school of Law, Queensland University of Technology, Brisbane, Australia and Lecturer in Law, Department of Legal Studies, The Open University of Sri Lanka. “Food-Medicine Interface and Its Application in International Level, Comparative Jurisdictions and Sri Lankan Legal Context.” World Nutrition 12 (March 31, 2021): 103–11. https://doi.org/10.26596/wn.2021121103-111.]//anop

The definition of medicine stipulated in Therapeutic Goods Act of 1989 of New South Wales, Australia (Federal Register of Legislation, 2020) and the Drug and Cosmetic Act of 1940 of India and the Medicines Act of 1968 of United Kingdom (Legislation.Gov.UK, 2020) provides a similar meaning to that of the definition embodied in National Medicines Regulatory Authority Act of 2015 of Sri Lanka, irrespective of the different terminology used in those legislations. According to the National Medicines Regulatory Authority Act of 2015 of Sri Lanka, medicine includes ‘any substance or mixture of substances manufactured, sold, offered for sale or represented for use in the diagnosis, treatment, mitigation or prevention of disease, abnormal physical states or the symptoms thereof in man or animal; and restoring, correcting or modifying functions of organs in man or animal; a medicine or combination of medicine ready for use and placed on the market under a special name or in a characteristic form, both patent and non-proprietary preparations; a product made out of medicinal herbal extract; nutraceutical with therapeutic claims; and vaccines and sera, but does not include an Ayurvedic medicine or Homoeopathic medicine’ (Government Publication Bureau, 2015). Therefore, medicine is simply identified as a substance that used for diagnosis, treatment, mitigation or prevention of a medical condition. The Sri Lankan definition of medicine excludes Ayurveda medicines from its scope. Hence, Ayurveda medicines do not come under the purview of National Medicines Regulatory Authority Act of 2015 and but fall in the scope of Ayurveda Act of 1961.

#### Prefer: Real world education: our definition is used by five different countries in WTO – more internationally recognized – outweighs because WHO is an international organization.

#### Violation: crispr isn’t a “substance”, it’s a technique which is distinct.

Khatri ’19 [Minesh, assistant professor of medicine at Columbia University and is board certified in nephology and internal medicine. He received his medical degree from Duke University, completed his internal medicine residency at the University of Washington, and completed a nephrology fellowship at Columbia University.Khatri is an author of numerous publications in peer-reviewed journals and a member of leading medical societies in internal medicine and nephrology. Aside from taking care of patients, Khatri is also actively involved in medical education, “What Is CRISPR?”, 10-14-2019, https://www.webmd.com/cancer/guide/crispr-facts-overview]//pranav

CRISPR isn’t a drug. It’s a technique. The goal is to cut out and fix glitches in your genes that threaten your health. Although it’s not the first gene-editing method scientists have tried, it’s the simplest, fastest, and most accurate. And that makes it a game-changer. CRISPR is short for “clustered regularly interspaced short palindromic repeat.” It’s a bit of DNA that scientists first noticed in the immune system of bacteria. That inspired the gene-editing technique that everyone now calls CRISPR. Those bacteria use CRISPR like a “Most Wanted” list. When a virus attacks, the bacteria memorize the virus’s DNA and file its profile in their CRISPR. If that same virus attacks again later on, the bacteria pull up its file in CRISPR and copy it. That copy acts like an assassin: It hunts down the virus and cuts its DNA to destroy it.

Sfera is about a drug CRISPR CREATED which is distinct from CRISPR being a drug itself.

#### Standards:

#### [1] limits – their model explodes the topic into the fringes of what can promote health, such as medical tech, toiletries, and food. 2 impacts:

#### [a] engagement – explodes affs which creates unfair prep burdens where neg doesn’t have predictable ground to all affs – results in neg reading generics which always lets aff win and kills well-researched clash. Clash o/w – it’s the only thing unique to debate. Ground outweighs on sequencing– pre-round prep controls the i/l to in round abuse

#### [b] topic lit – they shift to discussions outside of public health. Kills quality of clash because it’s not the core of the topic lit and current events. Outweighs – even if they can increase clash, there’s no application of it

## 2

#### CP Text: Member nations of the World Trade Organization should create patent pool licensing platforms for genomic medicines.

#### Solves the first advantage

Their author Stramiello 18 [(Michael, PhD, an intellectual property litigation associate in Washington, DC. His practice focuses on the life sciences industry) “CRISPR: The New Frontier of Biotechnology Innovation” American Bar Association, Jan/Feb 2018. https://www.americanbar.org/groups/intellectual\_property\_law/publications/landslide/2017-18/january-february/crispr-new-frontier-biotechnology-innovation-digital-feature/]//pranav

As CRISPR marches on, there may be an elegant solution for making it widely available without government intervention in licensing: patent pools. These joint licensing platforms enable owners to combine their IP rights into bundles that are made accessible, nonexclusively, to a broad range of users via a single transaction with predictable terms. As a result, licensors and licensees can concentrate on innovation and commercial development, respectively, while minimizing transaction costs and litigation risk.32 This model was popularized in the 1990s, when the consumer electronics industry adopted it to facilitate deployment of the MPEG-2 digital video standard, which has yielded about $5 trillion in worldwide product sales since 1997.33 A key coordinator of that effort, MPEG LA LLC, now invites CRISPR/Cas9 patent holders to participate in their own pool. MPEG LA has been gauging interest from CRISPR rights holders since at least April 2017.34 Broad and Rockefeller University announced that they had submitted nearly two dozen “key CRISPR-Cas9 patents,”35 from 10 families, “for evaluation of eligibility to participate in discussions facilitated by MPEG LA regarding creation of a CRISPR Joint Licensing Platform.”36 UC reportedly has no plans to follow suit, citing potential conflicts with its existing licenses.37 The effect that pooling would have on such arrangements may remain unclear until contributors finalize pool terms, which could take years. Early efforts might focus on pooling foundational patents, and there has also been speculation about specialized pools geared toward particular CRISPR applications (e.g., agriculture and industrial biotechnology).38 Pooling may prove to be more of a challenge with respect to human therapeutics, a field where rights holders typically expect exclusivity as a reward for their enormous investment in rigorous clinical trials.

## 3

#### America’s maintaining hegemony and countering China’s rise through “counter-punching” strategies, but sustained innovation and private sector investment are key – reject “US declining now” args – the US has historically punched over its weight whenever it’s challenged

Harr 8/3 [Scott, Army Special Forces Officer and Ph.D. Candidate at the Helms School of Government, Liberty University. He holds an undergraduate degree in Arabic Language Studies from West Point and a Master’s degree in Middle Eastern Affairs from Liberty University. A trained Arabic and Farsi speaker with over four years of cumulative deployment time in the Middle East, his work has been featured in The Diplomat, RealClearDefense, The Strategy Bridge, Modern War Institute, Military Review, The National Interest, and Joint Force Quarterly among other national security-focused venues, “By Avoiding Arms Races, America Can Counter China’s Rise”, 08-03-2021, https://nationalinterest.org/feature/avoiding-arms-races-america-can-counter-china%E2%80%99s-rise-191094]//pranav

Rather than falling into the power projection arms race “trap“ that China desires, U.S. competitive strategies addressing China should adopt a framework based on “counter-punching.” As its name suggests, the counterpunch incorporates both defensive (“counter”) and offensive (“punch”) elements. Additionally, it is an adaptive maneuver that requires disciplined understanding and controlled strength that, effectively employed, offers better alternatives towards protecting and preserving U.S. power in the face of challenges from China. The defensive element of an American counterpunch towards China involves adopting military restraint and a revamped examination of deterrence. Classic deterrence strategy involves presenting the credible threat of force to adversaries to create undesirable risks for would-be aggressors. The key to deterrence, as Kenneth Waltz famously argued, is determining how much deterrence is “enough” to dissuade aggressors. That is, deterrence does not necessarily require the presentation of power projection assets capable of completely destroying an adversary, but only enough assets to make the risks of aggressive behavior not worth the projected losses involved. Seen in this light, a strategy that diligently examines how much deterrence is “enough” potentially eliminates the impulse to sustain the ever-increasing stakes in costly arms races while, critically, offering a chance to reinvest excess “deterrence” resources into areas that will preserve and protect U.S. power. The national resources freed up by foregoing an arms race with China represent the potent offensive element of the counterpunch. These resources can be reinvested in other areas such as the private sector which, besides being the hallmark of American prosperity and thus the critical reason for protecting American power in the first place, has historically played a decisive role in the United States’ successful war efforts. Buoyed by a strong and vibrant private sector where the United States remains a desirable global hub for innovation and technology, the needed capabilities for war (or intense competition) can be adaptively produced and rapidly called forward to tip the competitive (or combative) scales towards victory when required. Of course, the “punch” loses its effectiveness without clearly articulated triggers for employment. If China seeks to induce the United States into an uncontrolled arms race, then the current U.S. obsession with China—which seems to interpret every Chinese action in any sphere as a threat requiring a U.S. response—must be viewed as very encouraging in Beijing. An effective U.S. counterpunch requires clearly defined red lines that regulate and set behavior expectations between great powers and indicate when a Chinese competitive action warrants a U.S. response. Detractors of the counterpunch framework will immediately note the call for military restraint and interpret it as a reactive recipe for military weakness at precisely a time requiring proactive military strength. But military restraint does not imply weakness any more than eating fewer calories implies malnutrition. It simply means making smarter decisions that play to U.S. strengths and away from Chinese strategy. It also entails properly viewing the risks inherent in competition with China. The counterpunch skeptic incorrectly perceives greater risks in short-term military restraint (traded for economic investment and fortification) than in long-term arms races (traded for potential economic collapse). The counterpunch skeptic also fails to appreciate the United States’ historic strengths in adopting this approach. In fact, America has demonstrated exceptional skill as an adaptive counter-puncher—reacting and adapting to adversity and setbacks to rise above them and create positive effects preserving U.S. power and ideas. U.S. institutions have counter-punched their way to success in the political (from the failed Articles of Confederation to the Constitution), social (from abhorrent slavery to civil rights), and military (from disastrous Pearl Harbor to WWII victory) arenas to produce the stable and prosperous nation that exists today. As John Mearsheimer points out, China has the population size and economic capacity (the “sinew of power”) to pose unique and unprecedented challenges to U.S. power. Additionally, wasteful military exploits—often employed as a means of competing with rivals—have contributed to bringing down world powers again and again throughout history. China understands this apparent axiom and has woven its truth into its competitive strategy to displace the United States as the world’s preeminent power in the twenty-first century. U.S. competitive strategy against China must, therefore, resist the powerful (but seemingly prudent) urge to continually increase the stakes projecting power against China. Rather, the United States needs to adopt a disciplined counterpunch framework focused on protecting and preserving (not projecting) power. This framework leverages the elements of a successful counterpunch: it demonstrates a superior understanding of adversary strategy (China’s desire to economically exhaust the United States with power projection), it leverages smart defensive elements (adopting only “enough” deterrence to influence China’s actions), and it fortifies conditions of economic strength to ensure offensive actions can be brought to bear when required in competition or conflict (re-investing resources into a globally-leading private sector). Employing a counterpunch framework asks Americans to trust its institutions—which is a difficult task in the face of a rising China. But the ask is not for blind trust. As a country with less than one-sixth of the world’s population, the United States as a superpower has been punching above its weight for decades and has historically counter-punched successfully to muster adaptive and superlative responses whenever challenged with adversity. America must follow these historical impulses to remain a superpower in the twenty-first century.

#### The 1AC’s reduction of IPP for [CRISPR] is America “handing over its crown jewels” to competing nations by disincentivizing record setting innovation that causes spillover to other fields and destroys American hegemony.

Iancu 8/11 [Andrei, American-Romanian engineer and intellectual property attorney, who served as the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office from 2017 to 2021, “Biden is trying to undermine America's world-leading IP protections”, https://m.washingtontimes.com/news/2021/aug/11/biden-is-trying-to-undermine-americas-world-leadin/]//pranav

In May of this year, the Biden administration announced its support for a proposal at the World Trade Organization that would allow other countries to seize American intellectual property on COVID-19 technologies, including vaccines. On cue, those countries promptly modified their ask. Whereas the original proposal called for the waiver to last a limited number of years, the new proposal makes the waiver effectively permanent. And why not? If America is willing to hand over its crown jewels, it might as well demand to keep them forever. As a former Director of the U.S. Patent and Trademark Office, I know that America’s world-leading IP protections laid the foundation for our economic success and technological prowess. And as an immigrant from a communist nation, I know all too well how disrespect for private property rights undermines innovation and saps economic vitality. Since the Founding Fathers, Americans have understood that private property extends well beyond land, buildings, factories, and machines. The real source of America’s power and promise are ideas. Walls, locks, or guards can protect physical property, but the implementation of ideas — new songs, artificial intelligence, or medicines — requires special protections and trust in the rule of law. That’s why the Founders included intellectual property rights in the Constitution — in the form of an “exclusive right” for authors and inventors — to “promote the progress of science and useful arts.” Indeed, this is the only time the word “right” appears in the Constitution (amendments aside). The Founders knew that only the rule of law, and our respect for it, can protect and enable the development of these ideas. Yet, President Biden undermined that respect by signaling his support for the appropriation of America’s intangible assets. In doing so, he jeopardized America’s uniquely successful intellectual property system. The history of our nation — indeed, much of the history of the world — since 1789 has been the revolution in knowledge led by American ingenuity in agriculture, industry, medicine, and information technology. Progress like this does not just happen. Indeed, it didn’t, for the millennia of the entire human history until our nation’s founding a couple of hundred years ago! It’s not a coincidence that the last two centuries of uninterrupted, IP-driven innovation — up to and including the miraculous creation in a record time of the Covid vaccines themselves — began when one nation finally committed itself to protect intangible assets as much as physical property. The reason is simple: knowledge is cumulative. Every new discovery becomes the basis for new research. The revolutionary mRNA technology behind Pfizer and Moderna’s vaccines is, in fact, an evolutionary iteration of previous — patented — breakthroughs over the last two decades. Sen. Bernie Sanders, among others, turns up his nose at all this science, history, and progress. Like President Biden, he supports waiving vaccine patents because, he says, “We need a people’s vaccine, not a profit vaccine.” Ignore for a moment that many companies have agreed to sell their vaccines at non-profit prices for the duration of the pandemic, or that the vaccines are completely free for all patients at pharmacies nationwide, or that the federal government pays $19.50 per Pfizer dose, about $15 per Moderna dose, and $10 for the Johnson & Johnson shot — less than the cost of a pizza for medicines that are saving millions of lives and restoring our economy. Instead, focus on the fact that intellectual property protections enabled the creation of “people’s vaccines” in the first place. The choice isn’t between cheap vaccines and even cheaper vaccines — it’s between shots that are protected by strong IP laws or no shots at all. The same goes for every industry. If President Biden doesn’t protect the IP behind new vaccines, investors and inventors will ask, what other technologies are next? Will similar takings be imposed on climate change technologies, for example? Food processing? Essential semiconductor technologies? Companies will scale back investments in medical devices, microchips, energy, and everything in between if they think the U.S. Government might waive IP protection after the fact so that others may copy their inventions with impunity. Of immediate concern is the need for more treatments for Covid-19, especially as the pandemic keeps raging with new variants. Knowing that their IP may be appropriated as soon as it is developed, private industry — especially start-ups and smaller businesses that depend heavily on outside capital — may not invest the resources necessary to develop these new technologies that are desperately needed right now. Here’s the reality: remove patents and other forms of intellectual property, and private-sector investment in innovation dries up. The government will then try to step in to fill the gap, inefficiently as always. Like the taking of factories to nationalize industry, this taking of intellectual property is effectively the nationalization of our innovation economy. The result will be the same as in every other socialist regime that nationalized its industries: the kind of poverty, corruption, and misery that my family escaped from decades ago. American innovation has cured diseases, enabled human flight, led to the development of computers, and made our nation the envy of the world. Waiving intellectual property rights could forfeit it all.

#### China is actively seeking out CRISPR tech to facilitate battlefield enhancements- the aff gives it away

Kania and VornDick 19 Elsa Kania and Wilson VornDick (Elsa Kania is an Adjunct Senior Fellow with the Technology and National Security Program at the Center for a New American Security. Wilson VornDick consults on national security, emerging technologies, and China for Duco and Rane. )10-8-2019, "China’s Military Biotech Frontier: CRISPR, Military-Civil Fusion, and the New Revolution in Military Affairs," Jamestown, https://jamestown.org/program/chinas-military-biotech-frontier-crispr-military-civil-fusion-and-the-new-revolution-in-military-affairs/SJKS

While the potential leveraging of CRISPR to increase human capabilities on the future battlefield remains only a hypothetical possibility at the present, there are indications that Chinese military researchers are starting to explore its potential. Of course, genetic engineering has numerous military applications in materials science, such as those that can involve maritime and aerospace applications. However, at a time when the Central Military Commission (CMC) Science and Technology Commission is also supporting research in human performance enhancement and “new concept” biotechnology, the potential intersections of these interests merit concern and consideration. For instance, a doctoral dissertation titled “Evaluation and Research on Human Performance Enhancement Technology,” published in 2016, envisions CRISPR as one of three primary “human performance enhancement technologies” (人效能增强技术, ren xiaoneng zengqiang jishu) that can be utilized to boost personnel combat effectiveness. The researcher argues that because CRISPR holds such “great potential” as a “disruptive” technology, China must “seize the initiative.” Conclusion and Implications Ultimately, today’s advances in biotechnology may prove revolutionary, and the strategic implications, whether for medicine or the military or aggregate national competitiveness, are only just starting to be appreciated. [22] Today, the PRC is actively exploring new frontiers of such biological cross-disciplinary technologies: from these prominent developments in CRISPR to bionic robotics, intelligentized exoskeletons, and techniques for human-machine collaboration. So too, at a time when Chinese universities and enterprises are pursuing investment and expanding global research collaborations in such fields, it is important that their foreign partners remain cognizant of the interests and involvements of their counterparts. For instance, although biomedical research involves numerous promising applications in medicine and therapeutics, there are also reasons for concern about some of the ethical and security externalities of these research engagements. [23] Going forward, these trends will merit continued analytic attention.

#### Only U.S. hegemony prevents global instability---alternatives can't maintain peace

Haass, 17 - President of the Council on Foreign Relations (Richard, "Who Will Fill America’s Shoes?," *Project Syndicate*, 6-24-2017, https://www.project-syndicate.org/commentary/global-leadership-successor-to-america-by-richard-n--haass-2017-06)

Still, a shift away from a US-dominated world of structured relationships and standing institutions and toward something else is under way. What this alternative will be, however, remains largely unknowable. What we do know is that there is no alternative great power willing and able to step in and assume what had been the US role.

China is a frequently mentioned candidate, but its leadership is focused mostly on consolidating domestic order and maintaining artificially high economic-growth rates to stave off popular unrest. China’s interest in regional and global institutions seems designed mostly to bolster its economy and geopolitical influence, rather than to help set rules and create broadly beneficial arrangements.

Likewise, Russia is a country with a narrowly-based economy led by a government focused on retaining power at home and re-establishing Russian influence in the Middle East and Europe. India is preoccupied with the challenge of economic development and is tied down by its problematic relationship with Pakistan. Japan is held back by its declining population, domestic political and economic constraints, and its neighbors’ suspicions.

Europe, for its part, is distracted by questions surrounding the relationship between member states and the European Union. As a result, the whole of the continent is less than the sum of its parts – none of which is large enough to succeed America on the world stage.

But the absence of a single successor to the US does not mean that what awaits is chaos. At least in principle, the world’s most powerful countries could come together to fill America’s shoes. In practice, though, this will not happen, as these countries lack the capabilities, experience, and, above all, a consensus on what needs doing and who needs to do it.

#### Goes nuclear---extinction

Thomas H. Henricksen 17, emeritus senior fellow at the Hoover Institution, 3/23/17, “Post-American World Order,” <http://www.hoover.org/research/post-american-world-order>

The tensions stoked by the assertive regimes in the Kremlin or Tiananmen Square could spark a political or military incident that might set off a chain reaction leading to a large-scale war. Historically, powerful rivalries nearly always lead to at least skirmishes, if not a full-blown war. The anomalous Cold War era spared the United States and Soviet Russia a direct conflict, largely from concerns that one would trigger a nuclear exchange destroying both states and much of the world. Such a repetition might reoccur in the unfolding three-cornered geopolitical world. It seems safe to acknowledge that an ascendant China and a resurgent Russia will persist in their geo-strategic ambitions.

What Is To Be Done?

The first marching order is to dodge any kind of perpetual war of the sort that George Orwell outlined in “1984,” which engulfed the three super states of Eastasia, Eurasia, and Oceania, and made possible the totalitarian Big Brother regime. A long-running Cold War-type confrontation would almost certainly take another form than the one that ran from 1945 until the downfall of the Soviet Union.

What prescriptions can be offered in the face of the escalating competition among the three global powers? First, by staying militarily and economically strong, the United States will have the resources to deter its peers’ hawkish behavior that might otherwise trigger a major conflict. Judging by the history of the Cold War, the coming strategic chess match with Russia and China will prove tense and demanding—since all the countries boast nuclear arms and long-range ballistic missiles. Next, the United States should widen and sustain willing coalitions of partners, something at which America excels, and at which China and Russia fail conspicuously.

There can be little room for error in fraught crises among nuclear-weaponized and hostile powers. Short- and long-term standoffs are likely, as they were during the Cold War. Thus, the playbook, in part, involves a waiting game in which each power looks to its rivals to suffer grievous internal problems which could entail a collapse, as happened to the Soviet Union.

## 4

#### Biden PC is key to getting Manchin & Sinema on board and he won’t give up – it’s *try or die* & the margin of error is *literally* 0.

Strauss 10/13 [Daniel, Staff Writer @ The New Republic, “Has the Time Come for Biden to Knock Some Heads on Capitol Hill?”, 10-13-2021, https://newrepublic.com/article/163982/biden-reconciliation-cost-democrats]//pranav

At the same time, though, the White House has moved to a different phase of negotiations. Susan Rice, the director of the White House’s Domestic Policy Council, has become more visible in negotiations on the Hill, oftentimes spotted going in and out of meetings with White House National Economic Council director Brian Deese. Rice, according to multiple administration officials, has been involved in the reconciliation package talks for months, and lawmakers have looked to her as one of the point people within the administration on topics that fall under the DPC’s purview: Health care, childcare, housing. Deese and Rice have been “tag teaming” those meetings, one administration official said. “It’s just that as the negotiations have come to a head, she’s become a little more visible,” the official added. But veterans of past major Democratic policy battles warn about the limits of a White House that throws up its hands and says enough is enough. The White House has already gone out to the states, looking to rally support among the broader public by having Biden himself stump in key congressional districts. He has also used the power of the Oval Office to try to win over lawmakers like Sinema and Manchin. “Having dealt with situations like this, there is a point where the administration really doesn’t have a lot of leverage,” said former Democratic Senate Majority Leader Tom Daschle. “They can use the media. They can use the president’s Oval Office presence to bring people down and persuade as much as they can, but ultimately there isn’t a lot of leverage, and when you’re at 50–50 and almost 50–50 in the House, every person is in a position to veto a particular proposal.” But Daschle said, so far, the White House has played its hand well in the negotiations. “I think the administration has played it about right. They’ve got to give the leaders enough flexibility,” Daschle said. Phil Schiliro, who served as the White House director of legislative affairs during Barack Obama’s presidency, stressed that right now the White House is in the common-ground phase of negotiating with lawmakers. “It really is [about] trying to find the opportunities to reach common ground, and that’s just a process,” Schiliro said. Still, increasingly, Democrats are having to face picking one of two choices: spending less or including fewer programs in a domestic policy package they hoped just about every Democrat running in 2022 could run on. “Here, I don’t know that there’s any magic to any number, as much as there’s getting the policies right,” Schiliro said. Publicly, the White House is trying to exude calm. Its latest deadline for moving a package forward is still a few weeks away. White House press secretary Jen Psaki told reporters Tuesday that Biden’s role, right now, as he remains very involved in negotiations, is “to find common ground so that we can move forward with an agenda that the American people demand we pass.” Privately, though, the White House and Washington Democrats in general know they’re fast approaching a different deadline—the moment when someone is going to have to come out and say whether to shrink the overall spending and duration of the package or include fewer programs. That is the only way for Democrats to win over the members they need to pass anything at all. The only Democrat with the necessary stature and the ear of the people who matter most to make that call is the president. Biden was the one who promised to unite as much of Congress as possible behind as large a domestic policy agenda as anyone in Washington had ever seen. Now he has to cut it.

#### Big Pharma hates the plan – empirics – err neg our ev literally cites their press releases

PhRMA ’21 [The Pharmaceutical Research and Manufacturers of America (PhRMA) represents the country’s leading innovative biopharmaceutical research companies, which are devoted to discovering and developing medicines that enable patients to live longer, healthier and more productive lives. Since 2000, PhRMA member companies have invested nearly $1 trillion in the search for new treatments and cures, including an estimated $83 billion in 2019 alone, “PhRMA Statement on WTO TRIPS Intellectual Property Waiver”, 05-05-2021, https://www.phrma.org/coronavirus/phrma-statement-on-wto-trips-intellectual-property-waiver]//pranav

WASHINGTON, D.C. (May 5, 2021) – Pharmaceutical Research and Manufacturers of America (PhRMA) president and CEO Stephen J. Ubl made the following statement after the United States Trade Representative expressed support for a proposal to waive patent protections for COVID-19 medicines: “In the midst of a deadly pandemic, the Biden Administration has taken an unprecedented step that will undermine our global response to the pandemic and compromise safety. This decision will sow confusion between public and private partners, further weaken already strained supply chains and foster the proliferation of counterfeit vaccines. “This change in longstanding American policy will not save lives. It also flies in the face of President Biden’s stated policy of building up American infrastructure and creating jobs by handing over American innovations to countries looking to undermine our leadership in biomedical discovery. This decision does nothing to address the real challenges to getting more shots in arms, including last-mile distribution and limited availability of raw materials. These are the real challenges we face that this empty promise ignores. “In the past few days alone, we’ve seen more American vaccine exports, increased production targets from manufacturers, new commitments to COVAX and unprecedented aid for India during its devastating COVID-19 surge. Biopharmaceutical manufacturers are fully committed to providing global access to COVID-19 vaccines, and they are collaborating at a scale that was previously unimaginable, including more than 200 manufacturing and other partnerships to date. The biopharmaceutical industry shares the goal to get as many people vaccinated as quickly as possible, and we hope we can all re-focus on that shared objective.”

#### They lash out against infra and use COVID clout to kill it – they have public support, and a win now postpones reform indefinitely which turns case

Fuchs et al. 09/02 [Hailey Fuchsattended Yale University and was an inaugural Bradlee Fellow for The Washington Post, where she reported on national politics**,** Alice Ollstein is a health care reporter for POLITICO Pro, covering the Capitol Hill beat. Prior to joining POLITICO, she covered federal policy and politics for Talking Points Memo, Megan Wilson is a health care and influence reporter at POLITICO, “Drug industry banks on its Covid clout to halt Dems’ push on prices”, 09-02-2021, https://www.politico.com/news/2021/09/02/drug-prices-democrats-lobbying-508127]//pranav

As Democrats prepare a massive overhaul of prescription drug policy, major pharmaceutical companies are mounting a lobbying campaign against it, arguing that the effort could undermine a Covid fight likely to last far longer than originally expected. In meetings with lawmakers, lobbyists for the pharmaceutical industry have issued warnings about the reconciliation package now moving through both chambers of Congress that is set to include language allowing Medicare to negotiate the price of some drugs, which could generate billions of dollars in savings. In those conversations, K Street insiders say, lobbyists have explicitly mentioned that the fight against the coronavirus will almost certainly extend beyond the current surge of the Delta variant. And they’re arguing that now isn’t the time to hit the industry with new regulations or taxes, particularly in light of its successful efforts to swiftly develop vaccines for the virus. “For years, politicians have been saying that the federal government can interfere in the price of medicines and patients won’t suffer any harm,” said Brian Newell, a spokesperson for the Pharmaceutical Research and Manufacturers of America, or PhRMA, in a statement. “But in countries where this already happens, people experience fewer choices and less access to prescription medicines. Patients know if something sounds too good to be true, then it usually is.” The escalating warnings from the pharmaceutical industry are part of what is expected to be one of the more dramatic and expensive lobbying fights in recent memory, and a heightened repeat of the industry’s pushback to actions by former President Donald Trump to target drug prices. The proposal now under consideration in Democrats’ reconciliation package could save the federal government hundreds of billions of dollars by leveraging its ability to purchase prescription drugs, according to a report from the Congressional Budget Office. Without those funds, Democrats won’t be able to pay for the rest of the health care agenda they’ve promised to voters, including expansions of Medicare, Medicaid and Obamacare. But the plan has political power as more than a revenue raiser. Party leaders — from President Joe Biden to Senate Budget Chair Bernie Sanders (I-Vt.) — are touting it as one of the most important components of the $3.5 trillion package, with the potential to lower out-of-pocket health spending for tens if not hundreds of millions of people. Outside advocates have also zeroed in on it as the most consequential policy fight on the horizon. “This is the best chance that we have seen in a couple of decades to enact meaningful reforms to drug pricing policy in the United States that will lower the prices of prescription drugs, and it’s very clear that the drug companies are going all out to stop it,” said David Mitchell, founder of Patients for Affordable Drugs. “This is Armageddon for pharma.” Progressive Democrats and their outside allies believe they’re closer than they’ve been in decades to imposing some price controls, and worry that failure to do so this year will delay progress indefinitely given the possibility of the party losing one or more chambers of Congress in the 2022 midterms. In April, the House passed a fairly aggressive version — H.R. 3 (117) — though a handful of moderate Democrats friendly to the industry have threatened to block it when it comes back to the floor for a vote later this fall. Leadership has largely shrugged off this threat, banking on the fact that the most vulnerable frontline Democrats are vocally in favor of the policy, while most of the dissenters sit in safe blue districts. The Senate is designing its own version, outlined by Sen. Ron Wyden (D-Ore.) in June, as a middle ground between HR3 and the more narrow, bipartisan bill he and Sen. Chuck Grassley (R-Iowa) put forward last Congress. A senior Senate Democratic aide confirmed to POLITICO that the bill is nearly complete and that they’re in the process of shopping it around to undecided senators to make sure it has enough support to move forward in the 50-50 upper chamber. “It makes sense to get buy-in before releasing it rather than releasing it with fingers crossed and then tweaking it once members complain,” the aide said. But the reform push is coming at a time when the pharmaceutical industry is working hand-in-hand with government officials to combat the pandemic and enjoying a boost in public opinion as a result, even as drug costs continue to rise. The companies claim that fundamental changes to their bottom line — in addition to the Medicare provision, the reconciliation bill will likely raise corporate tax rate significantly, as high as 28 percent (a jump of 7 percentage points) — will threaten its current investments in research and development at a historically critical juncture. With the final draft of the bill expected in the coming weeks, the Pharmaceutical Research and Manufacturers of America, the lobbying arm of the pharmaceutical industry, is taking its case public. The group has recently spent at least seven figures on ads pressuring Congress not to change Medicare drug policy.

#### Big pharma always wins – independently kills aff solvency bc it causes the plan to be watered down so much that de facto monopolies can survive

Florko & Facher ‘19 [Nicholas Florko is a Stat News Washington correspondent and Lev Facher is Stat News health and life sciences writer, “How pharma, under attack from all sides, keeps winning in Washington”, 07-16-2019, Stat News, https://www.statnews.com/2019/07/16/pharma-still-winning/]//pranav

It does not seem to matter how angrily President Trump tweets, how pointedly House Speaker Nancy Pelosi lobs a critique, or how shrewdly health secretary Alex Azar drafts a regulatory change. The pharmaceutical industry is still winning in Washington. In the past month alone, drug makers and the army of lobbyists they employ pressured a Republican senator not to push forward a bill that would have limited some of their intellectual property rights, according to lobbyists and industry representatives. They managed to water down another before it was added to a legislative package aimed at lowering health care costs. Lobbyists also convinced yet another GOP lawmaker — once bombastically opposed to the industry’s patent tactics — to publicly commit to softening his own legislation on the topic, as STAT reported last month. Even off Capitol Hill, they found a way to block perhaps the Trump administration’s most substantial anti-industry accomplishment in the past two years: a rule that would have required drug companies to list their prices in television ads. To pick their way through the policy minefield, drug makers have successfully deployed dozens of lobbyists and devoted record-breaking sums to their federal advocacy efforts. But there is also a seemingly new strategy in play: industry CEOs have targeted their campaign donations this year on a pair of vulnerable Republican lawmakers — and then called on them not to upend the industry’s business model. In more than a dozen interviews by STAT with an array of industry employees, Capitol Hill staff, lobbyists, policy analysts, and advocates for lower drug prices, however, an unmistakable disconnect emerges. Even though Washington has stepped up its rhetorical attacks on the industry, and focused its policymaking efforts on reining in high drug prices, the pharmaceutical industry’s time-honored lobbying and advocacy strategies have kept both lawmakers and the Trump administration from landing any of their prescription-drug punches. “Big Pharma has replaced Big Tobacco as the most powerful brute in the ranks of Washington power brokers,” Sen. Dick Durbin (D-Ill.) said in a statement to STAT. Durbin, who recently saw the industry successfully oppose his proposal to curtail some of the industry’s patent maneuvering, added that, “Pharma’s billions allow them to continue to rip off American families and taxpayers.” The industry doesn’t get all the credit; it has also benefited from a fractured Congress and discord between President Trump’s most senior health care advisers. PhRMA, the drug industry’s largest lobbying group here, declined to comment for this article. But industry leaders have broadly argued against efforts to rein in the industry’s practices in terms of price hikes and patents, making the case that that could irreparably stifle medical innovation. The battle is far from over, and industry representatives and lobbyists are quick to hypothesize that the worst, for them, is yet to come. They point to several ongoing legislative initiatives, including in the Senate Finance Committee, that could take more concerted direct aim at their pricing strategies in Medicare. They’re waiting, too, to see if House Democrats can cut a drug pricing deal with the White House to empower Medicare to negotiate at least some drug prices. Another pending regulation, loathed by drug makers, might tie their pricing decisions in Medicare to an index of international prices. They’ve also bemoaned the Trump administration’s decision last week to abandon a policy change that would have ended drug rebates — which, the pharmaceutical industry has said, could have given drug makers more space to lower their prices voluntarily. “We’re getting killed!” one pharma lobbyist told STAT. Of course, the Trump administration’s supposedly devastating decision to abandon that proposal simply maintains the status quo. “Big Pharma has replaced Big Tobacco as the most powerful brute in the ranks of Washington power brokers.” n Valentine’s Day, Sen. Thom Tillis (R-N.C.) enjoyed a showering of love that is familiar in Washington: a flood of campaign contributions, many at the federal limit of $2,800 for a candidate or $5,000 for an affiliated political committee. One donation came from Pfizer’s CEO, Albert Bourla, who donated $5,000 to Tillis and another $10,000 to Sen. John Cornyn (R-Texas) and associated campaign committees. Another came from Kenneth Frazier, the top executive at Merck. The Tillis campaign committee eventually cashed checks from CEOs and other high-ranking executives at those companies as well as Amgen, Eli Lilly, Sanofi, and Bristol Myers-Squibb, plus two high-ranking officials at the advocacy group PhRMA. Six lobbyists at one firm that works with PhRMA, BGR, also combined to contribute $100,000 to a bevy of Republican lawmakers and the party’s campaign arms. Tillis raised an additional $64,500 from drug industry political action committees in the past quarter, according to disclosures released on Monday. A Pfizer spokeswoman declined to comment about Bourla’s contributions, and representatives for the other companies did not respond to STAT’s request for comment. Tills was one of few individual lawmakers — in many cases, the only one — to whom the executives had written personal checks during the current election cycle. While drug industry CEOs frequently contribute to political committees for congressional leadership, the breadth of executives who donated Tillis specifically is notable, particularly considering his outspoken role on pharmaceutical industry issues. While lobbyists pushed back on the notion that campaign contributions directly influence votes, the donations targeted so specifically to a particular candidate could be seen as a prime example of Washington’s system for rewarding loyalty and how industries protect their interests. The same PhRMA PAC that donated to Tillis has given generously in recent years: nearly $200,000 in the 2018 campaign cycle, roughly 58% of which was targeted toward Republicans. Drug industry PACs donated $10.3 million in total in that cycle, according to the Center for Responsive Politics. The figure two years before was even higher: a total of $12.2 million from industry-aligned PACs alone. It is no accident that the pharmaceutical industry has maintained its reputation among the nation’s most powerful lobbies, said Sheila Krumholz, the executive director of the Center for Responsive Politics, an organization that tracks political influence. “Their access and influence goes beyond this Congress or even the administration,” Krumholz said in an interview, adding that she “was struggling to think of evidence” it had waned. Pharma has a reputation here for winning on policy — often thanks to the lawmakers who are among the biggest recipients of the millions that drug corporations, employees, and the industry political arms donate each year. Even as the rhetoric has escalated, the industry has quietly worked to insulate itself from any major legislative changes. Take, for example, a recent about-face from Cornyn, the Texas Republican who took in some campaign cash alongside Tillis. As recently as February, Cornyn seemed to be positioning himself as a rare Republican figurehead for anti-pharma congressional wrath. At a widely publicized hearing before the Senate Finance Committee, he went head-to-head with AbbVie CEO Richard Gonzalez, pressing him to explain why the company had filed more than 100 patents on its blockbuster arthritis drug Humira. Cornyn introduced legislation soon after the skirmish to crack down on patent “thicketing,” a term for a drug company tactic to accumulate tens, if not hundreds, of patents to shield a drug from potential generic competition. Pharma sprung into action. They recruited congressional allies, including Tillis, to pressure Cornyn to significantly rework the bill, and they succeeded. The version of the bill that eventually cleared the Senate Judiciary Committee was stripped of language that would have empowered the Federal Trade Commission to go after patent thicketing. Instead, the bill limited how many patents a drug maker could assert in a patent lawsuit. The new version of the bill lost “a lot of teeth” and “solves a narrower problem in a narrow way,” advocates told STAT when the change was first introduced. It is far from the only example of the industry’s aggressive interventions to water down legislation. “In lots of ways they’re like the [National Rifle Association], because they have an incredible power to squash out any negative opinion, nor to feel any of the ill effects of those things,” said Pallavi Damani Kumar, an American University crisis communications professor who once worked in media relations for drug manufacturers. “It just speaks to how incredibly savvy they are.” Pharmaceutical industry lobbyists also successfully fought to keep another anti-drug industry patent proposal from Sen. Bill Cassidy (R-La.) and Dick Durbin (D-Ill.) out of a bipartisan drug pricing package moving through the Senate HELP Committee. The legislation would have allowed the FDA to approve cheaper versions of drugs, even when the more expensive product was protected by certain patents. Cassidy’s proposal never even made it into the HELP package. As the lobbyist who bemoaned the withdrawal of the rebate rule put it, Cassidy “simmered down” in the face of industry pressure. In recent weeks, the industry had targeted Cassidy in particular, in recent weeks, for fear he would break with many of his GOP colleagues to support a cap on some price hikes for drugs purchased under Medicare, a proposal so far pushed only by Democrats. “Sen. Cassidy doesn’t care what lobbyists think — he is going to do what’s best for patients,” said Ty Bofferding, a Cassidy spokesman. “Sen. Cassidy fought for the committee to include the REMEDY Act in the package, despite strong opposition from the pharmaceutical industry.” The committee eventually included half the bill’s provisions, he added, as well as four other pieces of legislation meant to prevent the industry from taking advantage of the patent system. The drug industry also notched a win by watering down another proposal in that package from Sen. Susan Collins (R-Maine) that would have blocked drug makers from suing over patents they didn’t disclose to the FDA. The version of the bill that actually made it into the package doesn’t block drug makers from suing, but instead directs the FDA to create a public list of companies that fail to disclose their patents. “This change is a big win for drug makers,” Michael Carrier, a Rutgers University professor and expert on patent gaming, told STAT. “Shaming is something drug makers don’t seem worried about.” Matthew Lane, the executive director of the Coalition Against Patent Abuse, likewise added that the altered bill “doesn’t seem to be doing much anymore.” Not all of the pharma-endorsed changes, however, are self-serving. Patent experts and federal regulators too had raised concerns with some of the bill being proposed. Cornyn’s patent bill was particularly controversial. “These provisions encourage ‘fishing expeditions’ by zealous bureaucrats, politically motivated by the popularity of efforts to reduce drug prices and garner the political benefits of being seen to be pursuing these ends,” Kevin Noonan, a patent lawyer at McDonnell Boehnen Hulbert & Berghoff wrote in a recent blog post, referring to the original Cornyn bill. Drug-pricing advocates said lobbyists have even managed to convince lawmakers to introduce some legislation they say has explicitly favored the drug industry, including intellectual property-focused legislation that would allow drug makers to patent human genes. That particular bill would “undo the bipartisan effort underway to fix pharma’s exploitation of the patent system,” said the Coalition Against Patent Abuse. And they were far from the only group raising concerns. The American Civil Liberties Union and more than 150 other groups wrote to lawmakers last month opposing the bill. Pharma’s list of policy victories goes on: Drug companies and allied patient groups forced the Trump administration to back off a proposal to make relatively minor changes to Medicare’s so-called protected classes policy. Currently, Medicare is required to cover all drugs for certain conditions, including depression and HIV. The Trump administration proposed in November that private Medicare plans should be able to remove certain drugs in those classes from their formularies, if the drugs were just new formulations of a cheaper, older version of the same drug, or when a drug spiked in price. But drug industry opposition helped convince the administration to spike that effort. A week ago, the industry struck its biggest blow yet. Three of the country’s largest pharmaceutical companies —Amgen, Eli Lilly, and Merck — prevailed in a lawsuit to strike down a Trump administration requirement that they disclose list prices in television advertisements. The lack of congressional action — despite the Democratic enthusiasm and bipartisan appetite — is still further evidence of industry’s ability to stave off defeat. As the dozens of Democrats running for president ramp up their anti-pharma rhetoric, both Trump and progressives have begun to fret that Washington’s efforts have proven to be all bark and no bite. With two weeks remaining before the August recess and an escalating 2020 campaign, some advocates fear that the window for bold action is closing quickly. “It’s appalling that we are six months into this Congress and we haven’t seen meaningful legislation passed on American’s number one issue for this congress,” said Peter Maybarduk, who leads drug-pricing initiatives for the advocacy group Public Citizen. “Congress needs to get its act together.”

#### Infra’s k2 stopping existential climate change – warming is incremental and every change in temperature is vital

Higgins 8/16 [Trevor, Senior Director, Domestic Climate and Energy, “Budget Reconciliation Is the Key to Stopping Climate Change”, 08-16-2021, https://www.americanprogress.org/issues/green/news/2021/08/16/502681/budget-reconciliation-key-stopping-climate-change/]//pranav

The United States is suffering acutely from the chaotic changes in climate that scientists now directly attribute to the burning of fossil fuels and other human activity. The drought, fires, extreme heat, and floods that have already killed hundreds this summer across the continent and around the world are a tragedy—and a warning of worsening instability yet to come. However, this week, the Senate initiated an extraordinary legislative response that would set the world on a different path. Enacting the full scope of President Joe Biden’s Build Back Better agenda would put the American economy to work leading a global transition to clean energy and stabilizing the climate. A look at what’s coming next through the budget reconciliation process reveals a ray of hope that is easy to miss amid the fitful negotiations of recent months: At long last, Congress is on the verge of major legislation that would build a more equitable, just, and inclusive clean energy economy. This is our shot to stop climate change. Building a clean energy future must start now Until the global economy stops polluting the air and instead starts to draw down the emissions of years past, the world will continue to heat up, blundering past perilous tipping points that threaten irreversible and catastrophic consequences. Stemming the extent of warming at 1.5 degrees Celsius rather 2 degrees or worse will reduce the risk of crossing such tipping points or otherwise exceeding the adaptive capacity of human society. Every degree matters. Stabilizing global warming at 1.5 degrees Celsius starts with cutting annual greenhouse gas emissions in the United States to half of peak levels by 2030. This isn’t about temporary offsets or incremental gains in efficiency—it’s about the rapid adoption of scalable solutions that will work throughout the world to eliminate global net emissions by 2050 and sustain net-negative emissions thereafter. Building this better future will tackle climate change, deliver on environmental justice, and create good jobs. It will give us a shot to stop the planet from continuously warming. It will alleviate the concentrated burdens of fossil fuel pollution, which are concentrated in systemically disadvantaged, often majority Black and brown communities. It will empower American workers to compete in the global clean energy economy of the 21st century. There is no time to lose in the work of building a clean energy future.

## Case

### Innovation

[1] Mischel proves uniqueness for the CP – patents incentivize CRISPR innovation

[2] Framing issue – ALL of their internal links are from YEARS ago and their cards are talking about events that have already happened which should mean their impact is terminally non-unique & they’re missing an internal link to patent disputes from tons of new patents.

[3] The Stramiello ev

[a] no impact – they’re missing an internal link as to why disputes deter the development of tech – patent disputes don’t mean innovation comes to a halt

[b] it’s only about disputes on “foundational patent rights” which is not the kind of patents Mischel is about

[c] Their ev is SUPER SPECIFIC to 2018 – any other interpretation would be a terrible misreading of their evidence which you should reject

[4] The Sherkow ev

[a] no link- is about a specific dispute between UC & MIT+Harvard

[b] don’t solve – universities could dispute about anything which would implicate research sharing & their ev is only ab formal sharing which means alternative methods solve

[c] isn’t a problem with patents in general, but only giving patents to singular researchers when multiple participated

[5] Reader proves even if patents disincentivize some scientists – massive innovation is still possible from scientists that do hold the patents

#### [6] I/L Turn - Terrorists can’t use CRISPR for bioterror yet, but the 1AC’s further democratization of the tech erases any barriers.

Pavel & Venkatram 9/7 [Barry Pavel is the senior vice president and director of the Scowcroft Center for Strategy and Security at the Atlantic Council. Prior to joining the Atlantic Council, Barry Pavel was a career member of the Senior Executive Service in the Officer of the Under Secretary of Defense for Policy for almost eighteen years. From October 2008 to July 2010, he served as the special assistant to the President and senior director for defense policy and strategy on the National Security Council (NSC) staff, serving both President George W. Bush and President Barack Obama. Prior to this, Pavel was the chief of staff and principal deputy assistant secretary of defense for special operations/low-intensity conflict and interdependent capabilities. From October 1993 to November 2006, Pavel also led or contributed to a broad range of defense strategy and planning initiatives for both the Clinton and George W. Bush administrations. In this capacity, Pavel supported post-9/11 deterrence policy (including deterrence of terrorist networks and regional nuclear powers); strategies for reducing ungoverned areas; and a long-range planning construct that accounts for trends and “strategic shocks” that could significantly change Department of Defense’s role in national security, Vikram Venkatram is a Young Global Professional in the Scowcroft Center for Strategy and Security, Forward Defense at the Atlantic Council. He is a recent graduate of Georgetown University’s School of Foreign Service, where he studied Science, Technology, and International Affairs with a minor in Biology. He is also currently a second-year graduate student in Georgetown’s Security Studies Program. Originally from San Jose, California, his main interests lie in biosecurity issues, ranging from pandemic preparedness to emerging biotechnology to environmental security to bioethics, “Facing the future of bioterrorism”, 09-07-2021, https://www.atlanticcouncil.org/commentary/article/facing-the-future-of-bioterrorism/]//pranav

Biotechnology has developed at an astounding rate over the first twenty years of the twenty-first century. Emerging biotechnological tools have become cheaper and more accessible than ever before, and less expertise is necessary to use those tools effectively. Amateur biologists can now accomplish feats that would have been impossible until recently for even the foremost experts in top-of-the-line laboratories. The iGEM competition is a great example of this phenomenon in practice: a synthetic biology competition in which amateur scientists compete with one another to build biological systems and operate them within living cells. Similarly, CRISPR, a scientific technique that enables the manipulation of DNA and genetic engineering, can be used in the high-school classroom as an illustrative practical example of biology. There exists a new and growing community of “biohackers” who use novel biotechnology tools to modify their own bodies in a variety of ways. As biotechnologist Drew Endy at Stanford University put it, many years ago hackers would hack computer code, but now they are hacking the code for life.1 Thus, biotechnology capabilities are becoming democratized. In general, this evolution of biotechnology will bring with it an amazing array of changes to our societies, our economies, and our security. The growing biotech revolution will have as great an impact on our way of life as the communications and information revolution. Chronic diseases will be mitigated, human life spans will be extended, and the global economy will be increasingly driven by biological inventions and processes. A new understanding of epigenetics could usher in an era of highly personalized medicine, and gene drives could wipe mosquito-borne diseases like malaria from the planet. One day, engineered living materials, built through synthetic biology, might grow to suit specific architectural needs and heal when faced with wear and tear. Neuroenhancement technology could optimize human performance: increasing learning speed, combatting neurological diseases, or even assisting soldiers by boosting their awareness and decision-making on the battleground. A new generation of scientists will build a suite of as-yet-undiscovered technologies, transforming the world in radical ways. However, greater access to cheap but powerful biotechnology tools—and a reduced need for expertise in operating those tools—also is making it easier for malicious actors to utilize that technology for ill. Terrorist groups could use synthetic biology to craft bioweapons, using data to manufacture dangerous pathogens or modifying easily accessible pathogens to make them more virulent. At present, there are still some barriers to entry that prevent such actors from operating with free reign, as widespread access to certain pathogens, tools, and data is still limited. But these barriers will only continue to recede over the next decade. In evaluating the future of terrorism and counterterrorism, one must consider: How should the United States and its allies prepare to face the growing threat of bioterrorism?

### WTO Cred

**Collapse inevitable**

**MacKenzie 8**. MacKenzie Debora is a scientific reporter citing Jared Diamond (prof of Geography at UC Los Angeles and Physiology PhD), Joseph Tainter (archaeologist at University of Utah and Anthropology PhD), Yaneer Bar-Yam (head of the New England Complex Systems Institute in Cambridge and Physics PhD), and Luis Bettencourt (Pritzker Director of the Mansueto Institute for Urban Innovation at the University of Chicago and statistical and high-energy physics models PhD) [“Are We Doomed, New Scientist,” 2008, EBSCO, Vol. 197, Issue 2650, p. 32-35]

DOOMSDAY. The end of civilisation. Literature and film abound with tales of plague, famine and wars which ravage the planet, leaving a few survivors scratching out a primitive existence amid the ruins. Every civilisation in history has collapsed, after all. Why should ours be any different? Doomsday scenarios typically feature a knockout blow: a massive asteroid, all-out nuclear war or a catastrophic pandemic. Yet there is another chilling possibility: what if the very nature of civilisation means that ours, like all the others, is destined to collapse sooner or later? A few researchers have been making such claims for years. Disturbingly, recent insights from fields such as complexity theory suggest that they are right. It appears that once a society develops beyond a certain level of complexity it becomes increasingly fragile. Eventually, it reaches a point at which even a relatively minor disturbance can bring everything crashing down. Some say we have already reached this point, and that it is time to start thinking about how we might manage collapse. Others insist it is not yet too late, and that we can - we must - act now to keep disaster at bay. History is not on our side. Think of Sumeria, of ancient Egypt and of the Maya. In his 2005 best-seller, **Jared Diamond of the University of California**, Los Angeles, blamed environmental mismanagement for the fall of the Mayan civilisation and others, and warned that we might be heading the same way unless we choose to stop destroying our environmental support systems. **Lester Brown of the Earth Policy Institute in Washington DC agrees**. He has that governments must pay more attention to vital environmental resources. "It's not about saving the planet. It's about saving civilisation," he says. Others think our problems run deeper. From the moment our ancestors started to settle down and build cities, we have had to find solutions to the problems that success brings. "For the past 10,000 years, **problem solving has produced increasing complexity** in human societies," **says Joseph Tainter**, **an archaeologist at the University of Utah, Salt Lake City**, and author of the 1988 book The Collapse of Complex Societies. If crops fail because rain is patchy, build irrigation canals. When they silt up, organise dredging crews. When the bigger crop yields lead to a bigger population, build more canals. When there are too many for ad hoc repairs, install a management bureaucracy, and tax people to pay for it. When they complain, invent tax inspectors and a system to record the sums paid. That much the Sumerians knew. Diminishing returns There is, however, a price to be paid. Every extra layer of organisation imposes a cost in terms of energy, the common currency of all human efforts, from building canals to educating scribes. And increasing complexity, Tainter realised, produces diminishing returns. The extra food produced by each extra hour of labour - or joule of **energy** invested per farmed hectare - **diminishes** as that investment mounts. We see the same thing today in a declining number of patents per dollar invested in research as that research investment mounts. This law of diminishing returns appears everywhere, Tainter says. To keep growing, societies must keep solving problems as they arise. Yet each problem solved means more complexity. Success generates a larger population, more kinds of specialists, more resources to manage, more information to juggle – and, ultimately, less bang for your buck. Eventually, says Tainter, the point is reached when all the energy and resources available to a society are required just to maintain its existing level of complexity. Then when the climate changes or barbarians invade, overstretched institutions break down and civil order collapses. What emerges is a less complex society, which is organised on a smaller scale or has been taken over by another group. Tainter sees diminishing returns as the underlying reason for the collapse of all ancient civilisations, from the early Chinese dynasties to the Greek city state of Mycenae. These civilisations relied on the solar energy that could be harvested from food, fodder and wood, and from wind. When this had been stretched to its limit, things fell apart. Western industrial civilisation has become bigger and more complex than any before it by exploiting new sources of energy, notably coal and oil, but these are limited. There are increasing signs of diminishing returns: the energy required to get is mounting and although global is still increasing, constant innovation is needed to cope with environmental degradation and evolving - the yield boosts per unit of investment in **innovation are shrinking**. "Since problems are inevitable," Tainter warns, "this process is in part ineluctable." Is Tainter right? **An analysis of complex systems has led Yaneer Bar-Yam**, **head of the New England Complex Systems Institute in Cambridge, Massachusetts**, **to the same conclusion that Tainter reached from studying history**. Social organisations become steadily more complex as they are required to deal both with environmental problems and with challenges from neighbouring societies that are also becoming more complex, Bar-Yam says. This eventually leads to a fundamental shift in the way the society is organised. "To run a hierarchy, managers cannot be less complex than the system they are managing," Bar-Yam says. As complexity increases, societies add ever more layers of management but, ultimately in a hierarchy, one individual has to try and get their head around the whole thing, and this starts to become impossible. At that point, hierarchies give way to networks in which decision-making is distributed. We are at this point. This shift to decentralised networks has led to a widespread belief that modern society is more resilient than the old hierarchical systems. "I don't foresee a collapse in society because of increased complexity," says futurologist and industry consultant Ray Hammond. "Our strength is in our highly distributed decision making." This, he says, makes modern western societies more resilient than those like the old Soviet Union, in which decision making was centralised. Things are not that simple, says Thomas Homer-Dixon, a political scientist at the University of Toronto, Canada, and author of the 2006 book The Upside of Down. "Initially, increasing connectedness and diversity helps: if one village has a crop failure, it can get food from another village that didn't." As connections increase, though, networked systems become increasingly tightly coupled. This means the impacts of failures can propagate: the more closely those two villages come to depend on each other, the more both will suffer if either has a problem. **"Complexity leads to higher vulnerability** in some ways," says Bar-Yam. "This is not widely understood." The reason is that as networks become ever tighter, they start to transmit shocks rather than absorb them. "The intricate networks that tightly connect us together - and move people, materials, information, money and energy - amplify and transmit any shock," says Homer-Dixon. "A financial crisis, a terrorist attack or a disease outbreak has almost instant destabilising effects, from one side of the world to the other." For instance, in 2003 large areas of North America and Europe suffered when apparently insignificant nodes of their respective electricity grids failed. And this year China suffered a similar blackout after heavy snow hit power lines. Tightly coupled networks like these create the potential for propagating failure across many critical industries, says Charles Perrow of Yale University, a leading authority on industrial accidents and disasters. Credit crunch Perrow says interconnectedness in the global production system has now reached the point where "a breakdown anywhere increasingly means a breakdown everywhere". This is especially true of the world's financial systems, where the coupling is very tight. "Now we have a debt crisis with the biggest player, the US. The consequences could be enormous." "A networked society behaves like a multicellular organism," says Bar-Yam, "random damage is like lopping a chunk off a sheep." Whether or not the sheep survives depends on which chunk is lost. And while we are pretty sure which chunks a sheep needs, it isn't clear - it may not even be predictable - which chunks of our densely networked civilisation are critical, until it's too late. "When we do the analysis, almost any part is critical if you lose enough of it," says Bar-Yam. "Now that we can ask questions of such systems in more sophisticated ways, we are discovering that they can be very vulnerable. That means civilisation is very vulnerable." So what can we do? "The key issue is really whether we respond successfully in the face of the new vulnerabilities we have," Bar-Yam says. That means making sure our "global sheep" does not get injured in the first place - something that may be hard to guarantee as the climate shifts and the world's fuel and mineral resources dwindle. Scientists in other fields are also warning that complex systems are prone to collapse. Similar ideas have emerged from the study of natural cycles in ecosystems, based on the work of ecologist Buzz Holling, now at the University of Florida, Gainesville. Some ecosystems become steadily more complex over time: as a patch of new forest grows and matures, specialist species may replace more generalist species, biomass builds up and the trees, beetles and bacteria form an increasingly rigid and ever more tightly coupled system. "It becomes an extremely efficient system for remaining constant in the face of the normal range of conditions," says Homer-Dixon. But unusual conditions - an insect outbreak, fire or drought - can trigger dramatic changes as the impact cascades through the system. The end result may be the collapse of the old ecosystem and its replacement by a newer, simpler one. Globalisation is resulting in the same tight coupling and fine-tuning of our systems to a narrow range of conditions, he says. Redundancy is being systematically eliminated as companies maximise profits. Some products are produced by only one factory worldwide. Financially, it makes sense, as mass production maximises efficiency. Unfortunately, it also minimises resilience. "We need to be more selective about increasing the connectivity and speed of our critical systems," says Homer-Dixon. "Sometimes the costs outweigh the benefits." Is there an alternative? Could we heed these warnings and start carefully climbing back down the complexity ladder? Tainter knows of only one civilisation that managed to decline but not fall. "After the Byzantine empire lost most of its territory to the Arabs, they simplified their entire society. Cities mostly disappeared, literacy and numeracy declined, their economy became less monetised, and they switched from professional army to peasant militia." Pulling off the same trick will be harder for our more advanced society. Nevertheless, Homer-Dixon thinks we should be taking action now. "First, we need to encourage distributed and decentralised production of vital goods like energy and food," he says. "Second, we need to remember that slack isn't always waste. A manufacturing company with a large inventory may lose some money on warehousing, but it can keep running even if its suppliers are temporarily out of action." The electricity industry in the US has already started identifying hubs in the grid with no redundancy available and is putting some back in, Homer-Dixon points out. Governments could encourage other sectors to follow suit. The trouble is that in a world of fierce competition, private companies will always increase efficiency unless governments subsidise inefficiency in the public interest. Homer-Dixon doubts we can stave off collapse completely. He points to what he calls **"tectonic" stresses** that will shove our rigid, tightly coupled system outside the range of conditions it is becoming ever more finely tuned to. These include population growth, the growing divide between the world's rich and poor, financial instability, weapons proliferation, disappearing forests and fisheries, and climate change. In imposing new complex solutions we will run into the problem of diminishing returns - just as we are running out of cheap and plentiful energy. "This is the fundamental challenge humankind faces. We need to allow for the healthy breakdown in natural function in our societies in a way that doesn't produce catastrophic collapse, but instead leads to healthy renewal," Homer-Dixon says. This is what happens in forests, which are a patchy mix of old growth and newer areas created by disease or fire. If the ecosystem in one patch collapses, it is recolonised and renewed by younger forest elsewhere. We must allow partial breakdown here and there, followed by renewal, he says, rather than trying so hard to avert breakdown by increasing complexity that any resulting crisis is actually worse. Lester Brown thinks we are fast running out of time. "The world can no longer afford to waste a day. We need a Great Mobilisation, as we had in wartime," he says. "There has been tremendous progress in just the past few years. For the first time, I am starting to see how an alternative economy might emerge. But it's now a race between tipping points - which will come first, a switch to sustainable technology, or collapse?" Tainter is not convinced that even new technology will save civilisation in the long run. "I sometimes think of this as a 'faith-based' approach to the future," he says. Even a society reinvigorated by cheap new energy sources will eventually face the problem of diminishing returns once more. **Innovation** itself **might be subject to diminishing returns, or** perhaps absolute **limits**. **Studies of** the way **by Luis Bettencourt of the Los Alamos National Laboratory**, **New Mexico**, **support this idea**. His team's work suggests that an ever-faster rate of innovation is required to keep cities growing and prevent stagnation or collapse, and in the long run this cannot be sustainable.

**Growth causes extinction**

**Smith 14**. Richard Smith is an economic historian with a UCLA history PhD and systems science PhD. He has written on China, capitalism and the global environment and on related issues for New Left Review, Monthly Review, The Ecologist, the International Journal of Ecological Economics and Statistics, and Real-World Economics Review [“Green Capitalism: The God That Failed,” January 9th, <http://truth-out.org/news/item/21060-green-capitalism-the-god-that-failed>]

The results are in: **No amount of "green capitalism" will** be able to ensure the profound changes we must urgently make to **prevent** the **collapse** of civilization from the catastrophic impacts of global warming. The following is an updated version of an article that originally was published in the Real-World Economics Review. We consider Richard Smith's article foundational to understanding the world we live in. Given its length, several sittings or a printout may be required to complete reading. As soaring greenhouse gas (GHG) emissions drove global CO2 concentrations past 400 parts per million in May 2013, shell-shocked climate scientists warned that unless we urgently adopt "radical" measures to suppress GHG emissions (50 percent cuts in emissions by 2020, 90 percent by 2050) **we're headed for a**n average temperature **rise of** 3 degrees or **4 degrees** Celsius before the end of the century. Four degrees might not seem like much, but make no mistake: Such an increase will be catastrophic for our species and most others. Humans have never experienced a rise of 4 degrees in average temperatures. But our ancestors experienced a four-degree cooler world. That was during the last ice age, the Wisconsin Stage (26,000 to 13,300 years ago). At that time, there were two miles of ice on top of where I'm sitting right now in New York City. In a four-degree warmer world "Heat waves of undreamt-of-ferocity will scorch the Earth's surface as the climate becomes hotter than anything humans have ever experienced. ... There will be "no ice at either pole." "Global warming of this magnitude would leave the whole planet without ice for the first time in nearly 40 million years." Sea levels will rise 25 meters - submerging Florida, Bangladesh, New York, Washington DC, London, Shanghai, the coastlines and cities where nearly half the world's people presently live. Freshwater aquifiers will dry up; snow caps and glaciers will evaporate - and with them, the rivers that feed the billions of Asia, South America and California. The "wholesale **destruction of ecosystems"** will bring on the **collapse** of **agriculture** around much of the world. "Russia's harsh cold will be a distant memory" as "temperatures in Europe will resemble the Middle East. ... The Sahara will have crossed the Strait of Gibraltar and be working its way north into the heart of Spain and Portugal. ... With food supplies crashing, humanity's grip on its future will become ever more tentative." Yet long before the temperature increase hits four degrees, the melting will have begun thawingthepermafrost of the Arctic, releasingvast quantities ofmethane buried under the Arctic seas and the Siberian and North American tundra, accelerating GHG concentrations beyond any human power to stop runaway warming and sealing our fate as a species.(1) Yet paradoxically, most climate scientists and even most climate activists have yet to grapple with the implications of their science: namely that GHG **suppression** on the order of 90 percent in less than 40 years would **require** a radical across-the-board **economic contraction** in the developed industrialized countries, and economic contraction is incompatible with a stable capitalism. On this point, the Chamber of Commerce and National Association of Manufacturers would appear to be right and pro-growth, pro-market environmentalists wrong: Under capitalism, growth and jobs are more often than not at odds with environmental protection. There may be some win-wins here and there. But for the most part, given capitalism, imposing big cuts in greenhouse gas emissions means imposing big job cuts across industrialized economies around the world. That's why, regardless of protests, no capitalist government on the planet will accept mandatory cuts in GHG emissions. Since the Reagan Revolution of the 1980s, when environmentalists began to turn to the market, "green growth" theorists and proponents have argued au contraire that "jobs and environment are not opposed," that economic growth is compatible with emissions reduction, that carbon taxes and/or cap-and-trade schemes could suppress GHG emissions while "green jobs" in new tech, especially renewable energy, would offset lost jobs in fossil fuel industries. Their strategy has failed completely, yet this remains the dominant view of leading climate scientists, including James Hansen, and of most environmental organizations. All such market-based efforts are doomed to fail, and a sustainable economy is inconceivable without sweeping systemic economic change. The project of sustainable capitalism based on carbon taxes, green marketing, "dematerialization" and so forth was misconceived and doomed from the start because **maximizing profit and saving the planet are inherently in conflict** and cannot be systematically aligned even if, here and there, they might coincide for a moment. That's because under capitalism, **CEOs and corporate boards are not responsible** to society; they're **responsible to private shareholders**. CEOs can embrace environmentalism so long as this increases profits. But saving the world requires that the pursuit of profits be systematically subordinated to ecological concerns: For example, the science tells us that to save the humans, we have to drastically suppress fossil fuel consumption, even close down industries like coal. But no corporate board can sacrifice earnings, let alone put themselves out of business, just to save humanity, and no government can suppress fossil fuel industries because to do so would precipitate economic collapse. I claim that profit-maximization is an iron rule of capitalism, a rule that trumps all else, and this sets the limits to ecological reform - not the other way around, as green capitalism theorists had supposed. And contrary to green capitalism proponents, across the spectrum from resource extraction to manufacturing, the practical possibilities for "greening" and "dematerializing" production are severely limited. This means the only way to prevent overshoot and collapse is to enforce a massive economic contraction in the industrialized economies, retrenching production across a broad range of unnecessary, resource-hogging, wasteful and polluting industries, even virtually shutting down the worst. Yet this option is foreclosed under capitalism because this is not socialism: No one is promising new jobs to unemployed coal miners, oil drillers, automakers, airline pilots, chemists, plastic junk makers and others whose jobs would be lost because their industries would have to be retrenched - and unemployed workers don't pay taxes. So CEOs, workers and governments find that they all "need" to maximize growth, overconsumption, even pollution, to destroy their children's tomorrows to hang onto their jobs today. If they don't, the system falls into crisis, or worse. So we're all on board the TGV of ravenous and ever-growing plunder and pollution. As our locomotive races toward the cliff of ecological collapse, the only thoughts on the minds of our CEOs, capitalist economists, politicians and most labor leaders is how to stoke the locomotive to get us there faster. Corporations aren't necessarily evil. They just can't help themselves. They're doing what they're supposed to do for the benefit of their owners. But this means that, so long as the global economy is based on capitalism and private property and corporate property and competitive production for market, we're doomed to a collective social suicide - and no amount of tinkering with the market can brake the drive to global ecological collapse. **We can't shop** our way **to sustainability**, because the problems we face cannot be solved by individual choices in the marketplace. They require collective democratic control over the economy to prioritize the needs of society and the environment. And they require local, reigional, national and international economic planning to reorganize the economy and redeploy labor and resources to these ends. I conclude, therefore, that if humanity is to save itself, we have no choice but to overthrow capitalism and replace it with a democratically planned eco-socialist economy. I. SAVING THE EARTH FOR FUN AND PROFIT In rejecting the antigrowth "limits" approach of the first wave of environmentalism in the 1970s, the pro-market theoretical founders of pro-growth "green capitalism" in the 1980s and '90s, Paul Hawken, Lester Brown and Francis Cairncross, argued that green technology, green taxes, green labeling, eco-conscious shopping and the like could "align" profit-seeking with environmental goals, even "invert many fundamentals" of business practice such that "restoring the environment and making money become one and the same process."(2) This turn to the market was an expression of broader trends from the 1980s in which activists retreated from collective action to change society in favor of individualist approaches to trying to save the world by embracing market forces - "shopping our way to sustainability."(3) In the market mania of the Reagan-Clinton era, Herman Daly's plea for imposing "limits to growth" came to seem dated - like Birkenstocks and Bucky Fuller's geodesic dome houses. Many American environmentalists bought into the "doing well by doing good" message of green capitalism because there had never been much of a left or socialist presence in the American environmental movement beyond a small anarchist fringe, unlike Europe, where many if not most greens were also reds. So it was easy for American environmentalists to go with the market - and there were jobs. Protesting didn't pay the rent. Some became eco-entrepreneurs or signed on with one or another of the hundreds of new green businesses from organic foods to eco-travel to certifying lumber or fair trade coffee that sprang up in the '80s and '90s. Others connected with mainstream environmental NGOs like the Sierra Club to focus on petitioning and lobbying efforts. In these and other ways, through the '80s and '90s, protesting gradually gave way to lobbying and promoting green capitalism. "There is No Polite Way to Say That Business is Destroying the World" Of all the eco-futurist writers of the 1980s and ;90s, entrepreneur and "Natural Capitalism" guru Paul Hawken has probably been the most influential voice for eco-capitalism. Hailed by Inc. magazine as "the poet laureate of American capitalism," Hawken says he was inspired to pen his best seller, Ecology of Commerce (1993), when his company Smith & Hawken won the prestigious Environmental Stewardship Award from the Council on Economic Priorities in 1991. When George Plimpton presented the award to Smith & Hawken at New York's Waldorf-Astoria Hotel, Hawken says he "looked out over the sea of pearls and black ties, suddenly realizing two things: first, that my company did not deserve the award and, second, that no one else did either. What we had done was scratch the surface of the problem. ... But in the end, the impact on the environment was only marginally different than if we had done nothing at all. The recycled toner cartridges, the sustainably harvested woods, the replanted trees, the soy-based inks and the monetary gifts to nonprofits were all well and good, but basically we were in the junk mail business, selling products by catalog. All the recycling in the world would not change the fact that [this] is an energy-intensive endeavor that gulps down resources." For the reality, Hawken said, was that: Despite all this good work, we still must face a sobering fact. If every company on the planet were to adopt the best environmental practices of the "leading" companies - say, the Body Shop, Patagonia or 3M - the world would still be moving toward sure degradation and collapse. ... Quite simply, our business practices are destroying life on earth. Given current corporate practices, not one wildlife preserve, wilderness or indigenous culture will survive the global market economy. We know that **every natural system on the planet is disintegrating. The land, water, air and sea have** been functionally **transformed from life-supporting systems into repositories for waste**. There is no polite way to say that business is destroying the world. (4)

**Crisis is a catalyst for transition**

**Alperovitz et al 16**. Lionel R. Bauman Alperovitz is a Professor of Political Economy (PhD) at the University of Maryland, College Park Department of Government and Politics, former fellow of King's College, Cambridge, founding Fellow of the Harvard Institute of Politics, former Fellow at the Institute for Policy Studies, former Guest Scholar at the Brookings Institution, served as a Legislative Director in the US House of Representatives and the US Senate and as a Special Assistant in the US Department of State Gar, with James Gustave Speth, Senior Fellow at The Democracy Collaborative, and is Co-Chair of The Next System Project, Ted Howard, President and Co-Founder of The Democracy Collaborative, and Joe Guinan, Executive Director of The Next System Project, Senior Fellow at The Democracy Collaborative [“Systemic Crisis and Systemic Change in the United States in the 21st Century,” 2016, *The Next System*, URL: <http://thenextsystem.org/wp-content/uploads/2016/09/NSPOberlin-final.pdf>, Accessed on 4/17/2018]//vikas

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

**No war from decline**

**Clary 15**. Cristopher Clary has a PhD in political science from MIT, MA in national security affairs, postdoctoral fellow, Watson Institute for International Studies, Brown University [“Economic Stress and International Cooperation: Evidence from International Rivalries”, 4/25/15, *MIT Political Science*, URL: <https://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. 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 politicalmilitary threat and, therefore, an enemy.”2 In other work, Thompson writing with Michael Colaresi, explains further: The presumption is that decisionmakers explicitly identify who they think are their foreign enemies. They orient their military preparations and foreign policies toward meeting their threats. They assure their constituents that they will not let their adversaries take advantage. Usually, these activities are done in public. Hence, we should be able to follow the explicit cues in decisionmaker utterances and writings, as well as in the descriptive political histories written about the foreign policies of specific countries.3 Drawing from available records and histories, Thompson and David Dreyer have generated a universe of strategic rivalries from 1494 to 2010 that serves as the basis for this project’s empirical analysis.4 This project measures rivalry termination as occurring on the last year that Thompson and Dreyer record the existence of a rivalry. Economic crises lead to conciliatory behavior through five primary channels. (1) Economic crises lead to austerity pressures, which in turn incent leaders to search for ways to cut defense expenditures. (2) Economic crises also encourage strategic reassessment, so that leaders can argue to their peers and their publics that defense spending can be arrested without endangering the state. This can lead to threat deflation, where elites attempt to downplay the seriousness of the threat posed by a former rival. (3) If a state faces multiple threats, economic crises provoke elites to consider threat prioritization, a process that is postponed during periods of economic normalcy. (4) Economic crises increase the political and economic benefit from international economic cooperation. Leaders seek foreign aid, enhanced trade, and increased investment from abroad during periods of economic trouble. This search is made easier if tensions are reduced with historic rivals. (5) Finally, during crises, elites are more prone to select leaders who are perceived as capable of resolving economic difficulties, permitting the emergence of leaders who hold heterodox foreign policy views. **Collectively**, these mechanisms make it much more likely that a leader will prefer conciliatory policies compared to during periods of economic normalcy. This section reviews this causal logic in greater detail, while also providing historical examples that these mechanisms recur in practice. **Economic Crisis Leads to Austerity** Economic crises generate pressure for austerity. Government revenues are a function of national economic production, so that when production diminishes through recession, revenues available for expenditure also diminish. Planning almost invariably assumes growth rather than contraction, so the deviation in available revenues compared to the planned expenditure can be **sizable**. When growth slowdowns are prolonged, the cumulative departure from planning targets can grow even further, even if no single quarter meets the technical definition of recession. Pressures for austerity are felt most acutely in governments that face difficulty borrowing to finance deficit expenditures. This is especially the case when this borrowing relies on international sources of credit. Even for states that can borrow, however, intellectual attachment to balanced budgets as a means to restore confidence—a belief in what is sometimes called “expansionary austerity”—generates incentives to curtail expenditure. These incentives to cut occur precisely when populations are experiencing economic hardship, making reductions especially painful that target poverty alleviation, welfare programs, or economic subsidies. As a result, mass and elite constituents strongly resist such cuts. Welfare programs and other forms of public spending may be especially susceptible to a policy “ratchet effect,” where people are very reluctant to forego benefits once they have become accustomed to their availability.6 As Paul Pierson has argued, “The politics [of welfare state] retrenchment is typically treacherous, because it imposes tangible losses on concentrated groups of voters in return for diffuse and uncertain gains.”7 Austerity Leads to Cutbacks in Defense Spending At a minimum, the political costs of pursuing austerity through cutbacks in social and economic expenditures alone make such a path unappealing. In practice, this can spur policymakers to curtail national security spending as a way to balance budgets during periods of economic turmoil. There is often more discretion over defense spending than over other areas in the budget, and it is frequently distantly connected to the welfare of the mass public. Many militaries need foreign arms and foreign ammunition for their militaries, so defense expenditures are doubly costly since they both take up valuable defense budget space while also sending hard currency overseas, rather than constituencies at home. Pursuing defense cuts may also conform to the preferences of the financial sector, which shows a **strong aversion** to military conflict even if that means policies of appeasement and conciliation.8 During periods of economic expansion, the opportunity costs associated with defense expenditure—the requirement for higher taxes or foregone spending in other areas—are real but acceptable. Economic contraction heightens the opportunity costs by forcing a choice between different types of spending. There is a constituency for defense spending in the armed services, intelligence agencies, and arms industries, but **even in militarized economies** this constituency tends to be numerically much smaller than those that favor social and economic expenditures over military ones. Defense Cutbacks Encourage Rapprochement An interest in defense cutbacks can lead to conciliatory behavior through two paths. **First**, the cutbacks themselves serve as a **concrete signal** to adversaries that the military threat posed by the economically distressed state is declining. This permits the other state to halt that portion of defense spending dedicated to keeping up, **breaking the back of ongoing arms races** through reciprocated, but non-negotiated moves. Unilateral conventional force reductions were a major element of Gorbachev’s foreign policy in the late 1980s, alongside negotiated strategic arms control, and diplomatic efforts to achieve political understandings with the United States.9 Gorbachev similarly used force reductions in Afghanistan, Mongolia, and the Soviet Far East to signal to China in 1987 that he was serious about political negotiations.10 Elsewhere, non-negotiated, tit-for-tat military redeployments facilitated Argentina-Brazil rapprochement.11 **Second**, leaders may believe cutbacks are necessary, but would be dangerous in the absence of negotiated improvements with traditional foes. Economic downturns can serve as **motivation to pursue arms control** or political settlement. During periods of normalcy, such outcomes would be positives, but are viewed as “too hard” by political leaders that move from one urgent problem to the next. During periods of economic crisis, however, arms control or political improvements might allow for much needed cuts in defense spending, and are **pursued with greater vigor**. The Johnson administration attempted both unilateral and negotiated arms limitations because of budgetary concerns as President Johnson and Secretary McNamara struggled to pay for the “Great Society” domestic programs and the increasingly costly Vietnam War. They first attempted unilateral “caps” on costly nuclear forces and anti-ballistic missile defenses and when this failed to lead to a reciprocal Soviet response they engaged in formal arms control talks. Détente continued in the Nixon administration, accelerating in 1971 and 1972, simultaneous with rising budget deficits and inflation so serious that Nixon instituted price controls. Nixon’s decision to sharply limit anti-ballistic missile defenses to enable arms control talks was **contrary to his strategic views, but necessitated by a difficult budgetary environment** that made paying for more missile defense emplacements unrealistic.12 As Nixon told his national security advisor Kissinger in an April 1972 discussion of ballistic missile and anti-ballistic missile developments: “You know we've got a hell of a budget problem. We've got to cut it down, we've got to cut 5 billion dollars off next year's defense budget. So, I don't want to [inaudible: do it?] unless we've got some settlement with the Russians.”13 In practice, unilateral defense cuts and force reductions are frequently combined with negotiated political agreements in a sequential, iterative fashion, where a unilateral reduction will **signal seriousness** that opens the way for political agreement, which in turn permits **even deeper reductions**. Defense cuts and force reductions are not only a means to achieve rivalry termination, but also a goal in and of themselves that rivalry termination helps secure. Leaders are seeking resources from defense they can use elsewhere. Thus when Argentine leader Raul Alfonsín campaigned for the need for drastic budgetary austerity, his specific “platform was the reduction of military spending to use it for the other ministries, connected with the concept of eliminating the hypothesis of conflict” with Argentinian rivals, according to Adalberto Rodríguez Giavarini, who served in Alfonsín’s ministry of defense (and later was Argentina’s foreign minister).14 Similarly, Gorbachev was motivated to reduce arms in the late 1980s because he determined it was necessary to cut Soviet defense spending and defense production, and repurpose part of the defense industry to make consumer and civilian capital goods, according to contemporary U.S. Central Intelligence Agency classified assessments.15 Thus the “**main reason**” why strategic arms control breakthroughs occurred from 1986 to 1988 and the Soviet Afghan intervention concluded in 1989 was a realization within the Politburo of “excessively high expenditures on defense,” according to Nikolai Ryzhkov, Gorbachev’s prime minister.16 **Economic Downturns Provoke Strategic Reassessment**: Threat Deflation and Prioritization Economic downturns encourage leaders to seek new ideas to use to frame their policy problems. During periods of economic difficulty, elites can come to realize that their problems are not amenable to old solutions, and search for new ideas.17 During an economic crisis, politics and policy are “**more fluid**,” as old answers seem stale and insufficient.18 An ideational entrepreneur that can link economic **lemons** to foreign policy **lemonade** can find a patron when leaders are casting about for ways to reframe the world in acceptable ways to their peers and publics. The behavior of an old foe is often ambiguous, and can be viewed as either injurious to one’s interests or neutral toward them. During periods of normalcy, the motivation of defense establishments is tilted toward threat and danger. During periods of economic crisis, national leaders have a counteracting motivation to **downplay such dangers**, so that the threats faced by a nation are manageable through available resources. Economic difficulties provide a motivation for leaders to view equivocal signals from the international system in a way that is benign. To the extent that rivalries are perpetuated because of threat inflation, economic downturns provide incentives to deflate the threat, potentially **disrupting cycles of competition and enmity**. South Korean president Kim Dae-jong came to power in the aftermath of the 1998 Asian economic crisis, pursued a “sunshine policy” toward the North, cut South Korean defense spending in nominal and real terms, and pursued a policy toward North Korea that political scientist Dong Sun Lee called “threat deflation” despite the growing North Korean nuclear weapons threat.19 Economic crises can also spur strategic reassessment through another channel. If leaders view economic problems as structural, rather than a temporary gale, they may come to question whether available national resources are sufficient to confront all of the national threats identified in the past. This creates incentives to economize threats, seeking political settlements where possible in order to focus remaining resources on competitions that can be won. A concrete example: in 1904, the chancellor to the Exchequer wrote his cabinet colleagues: “[W]e must frankly admit that the financial resources of the United Kingdom are inadequate to do all that we should desire in the matter of Imperial defense.”20 The result was a British decision to minimize political disagreement with the United States and focus on other defense challenges. While such a decision is in line with realist advice, it occurred not when the power trajectories were evident to British decisionmakers but when the budget situation had reached a crisis that could no longer be ignored. Economic Downturns Increase Incentives for International Economic Cooperation Economic downturns not only create incentives to cut spending, they encourage **vigorous pursuit** of opportunities for economic cooperation. This, too, can engender conciliatory behavior. Economic downturns can **increase motives to pursue trade** and investment. Rivalries with old foes often directly impinge on trade and investment with the adversary and may indirectly impinge on trade and investment with third parties, especially if the rivalry is viewed as being likely to generate disruptive military conflict. Additionally, economic aid is sometimes used as an inducement for adversaries to set aside a political dispute. This aid can either serve as a side payment from one rival to another, or it can be offered by a third party to one or both rivals as an incentive to set aside lingering disputes. Such aid is more attractive during periods of economic turmoil than during periods of comparative normalcy. In South Asia, India and Pakistan struggled from 1947 to 1960 with how to manage water resources in the Indus Rivers basin, inheriting a canal system meant to service pre-partitioned India. Pakistan, suffering an economic downturn, and India, reliant on foreign aid to avert economic crisis, agreed to an Indus Waters Treaty in 1960 to resolve the lingering dispute, made possible in substantial part because of World Bank financing that was especially attractive to the struggling economies. In the Middle East, Egypt and Israel made the hard choices necessary for the Camp David accord in 1979 precisely because the Sadat and Begin governments faced difficult economic situations at home that made the U.S. aid guarantee in exchange for a peace agreement especially attractive.21 In 1982, the Yemen’s People’s Republic agreed to stop its attempts to destabilize Oman, because otherwise Yemen would not receive economic assistance from Arab oil producing states that it desperately needed.22 In the late 1990s, El Niño-induced flooding devastated Ecuador and Peru, spurring reconciliation as leaders sought to increase trade, secure investment, and slash military expenditures so they could be used at home.23 As one Western diplomat assessed at the time, Ecuador and Peru “have decided it's better to see reason…. They see foreign companies eager to invest in South America, and if Peru and Ecuador are in conflict, it makes them less attractive than, say, Argentina or Brazil or Chile for investment purposes. That's the last thing either country wants.”24 **Economic Downturns Can Cause Meaningful Leadership Change** The above mechanisms have identified how economic difficulties can alter the preferences of an incumbent leader. Additionally, economic crises can lead to leadership turnover and, during periods of difficulty, the selection process that determines new leadership can **loosen ideological strictures** that relate to extant rivalries. Leaders may be selected based on judgments about their ability to cope with economic problems, with greater elite acceptance of ideological heterogeneity in foreign policy beliefs than in periods of normalcy.25 In Stephen Brooks and William Wohlforth’s words, “If everything is going well or is stable, then why select leaders who might subvert the triedand-true identity? But if that identity is leading to increased material difficulties, pressure for change will likely mount. In these circumstances, those who are willing to alter or adjust the hallowed precepts of the existing identity and its associated practices are more likely to assume power.”26 Economic crisis, then, can spur incumbent leaders to either **abandon the “baggage” of rivalry** or facilitate the selection of new leaders that do not carry such baggage. The most well-known example of an incumbent selectorate looking for a reformer, even one without much foreign policy experience, involves Mikhail Gorbachev’s ascension to the Soviet premiership. In political scientist Jerry Hough’s words, “If the rate of economic growth continued to decline, if administrative and labor efficiency continued to fall, if corruption was not punished, these conditions would have dangerous consequences for the [Soviet Union in the] 1980s and 1990s…. Gorbachev’s promotion was an answer to these concerns.”27