## off

### 1NC

#### Interpretation: Reduce means permanent reduction – it’s distinct from “suspend”

Reynolds 59 – Judge (In the Matter of Doris A. Montesani, Petitioner, v. Arthur Levitt, as Comptroller of the State of New York, et al., Respondents [NO NUMBER IN ORIGINAL] Supreme Court of New York, Appellate Division, Third Department 9 A.D.2d 51; 189 N.Y.S.2d 695; 1959 N.Y. App. Div. LEXIS 7391 August 13, 1959, lexis)

Section 83's counterpart with regard to nondisability pensioners, section 84, prescribes a reduction only if the pensioner should again take a public job. The disability pensioner is penalized if he takes any type of employment. The reason for the difference, of course, is that in one case the only reason pension benefits are available is because the pensioner is considered incapable of gainful employment, while in the other he has fully completed his "tour" and is considered as having earned his reward with almost no strings attached. It would be manifestly unfair to the ordinary retiree to accord the disability retiree the benefits of the System to which they both belong when the latter is otherwise capable of earning a living and had not fulfilled his service obligation. If it were to be held that withholdings under section 83 were payable whenever the pensioner died or stopped his other employment the whole purpose of the provision would be defeated, i.e., the System might just as well have continued payments during the other employment since it must later pay it anyway.  [\*\*\*13]  The section says "reduced", does not say that monthly payments shall be temporarily suspended; it says that the pension itself shall be reduced. The plain dictionary meaning of the word is to diminish, lower or degrade. The word "reduce" seems adequately to indicate permanency.

#### Violation: Vaccine waivers are temporary

#### Standards:

#### 1---Legal precision: it’s the best precedent within policy, shows how words are interpreted within the law

#### 2---Limits: it doubles the number of affs on the topic since every suspension is of different times, (ex: suspend IP protections for 6 months, 1 year, 2 years, etc.) makes it impossible to predict which turns clash and innovation

#### 3---Ground: decks link ground, all link cards are predicated on permanent changes because authors don’t care about temporary policies

#### 4---Aff shiftiness: no definition of how long suspension will be and how it happens allow affs to skirt out of DAs by changing their suspension periods, makes it impossible to be neg and decks clash

**D] Paradigm Issues –**

**1] T is DTD – A] their abusive advocacy skewed the debate from the start B] DTA is incoherent because we indict their advocacy**

**2] Comes before 1AR theory -- A] If we had to be abusive it’s because it was impossible to engage their aff B] T outweighs on scope because their abuse affected every speech that came after the 1AC C] Topic norms outweigh on urgency – we only have a few months to set them**

**3] Use competing interps on T – A] topicality is a yes/no question, you can’t be reasonably topical B] only our interp sets norms -- reasonability is arbitrary and invites judge intervention C] reasonability causes a race to the bottom of questionable argumentation**

### 1NC

#### Waiving IP protections sends a signal that encourages China to further erode U.S. IP---makes sustaining competitiveness impossible.

Staudt 21 – Current President of the Intellectual Property Owners Association, an international trade association representing members that own, or are interested in, intellectual property (IP) rights

Daniel J. Staudt, “Waiving IP Rights: The Wrong Path to the Right Goals,” IP Watchdog, June 2021, https://www.ipwatchdog.com/2021/06/15/waiving-ip-rights-the-wrong-path-to-the-right-goals/id=134546/

Waiving intellectual property (IP) protections for COVID-19 vaccines will hinder rather than further three meritorious objectives of the current U.S. Presidential Administration: ending the pandemic as soon as possible, leveling the IP playing field with China, and pursuing a worker-centric trade policy. Ensuring equitable, widespread, and successful distribution of vaccines across the globe to meet the challenges of COVID-19, ending the erosion of U.S. IP at the hands of China, and putting Americans back to work are goals that most of us in the U.S. share. An examination of the facts, however, demonstrates that waiving IP rights in the name of COVID-19 relief undermines each of these three U.S. government goals.

Waiver Would Hurt, Not Help

In terms of ending the pandemic as soon as possible, the Washington Post got it right in its May 4 editorial when it stated, “Sharing doses and know-how is better than stripping patents.” It is noteworthy that, during this global debate over whether IP protections should be waived, there have been no instances identified where IP has been used to limit access to vaccines or other COVID-related technologies. In contrast, there are many examples of innovator companies from a wide array of industries who have partnered and shared IP to create testing, vaccines, and therapies to address this pandemic. In fact, IP has enabled this innovation and facilitated this collaboration by providing the incentives that have enabled innovators to devote the resources, technical knowledge, and know-how necessary to counter the pandemic. As a result, our innovative industries have been able to create vaccines and other measures to fight the pandemic. Should an IP waiver be implemented, however, there would not be a stable framework in place to provide confidence to innovators that they can take the necessary risks associated with their inventions and creations as we continue to combat COVID-19. In fact, a waiver would have an immediate chilling effect on continued research and collaborations that are needed, for example, to overcome new variants of the virus, create vaccines for special populations, and develop new tools to help defeat the pandemic and for future vaccine development for other infectious deceases.

Waiver Would Be a Windfall for U.S. Competitors

A second stated goal of the Administration is to become more competitive with countries such as China. To that end, the Senate just passed legislation totaling well over $200 billion that’s designed to strengthen U.S. competitiveness against China. However, to achieve that goal, the United States needs to protect our IP against forced tech-transfer from foreign governments, not give it away. Providing a windfall to U.S. competitors at the same time we are purportedly trying to level the playing field with regards to IP not only makes a farce out of U.S. attempts to “get tough,” but it also sends a dangerous message – that the United States is willing to cave to global pressure and waive Word Trade Organization IP commitments, even if the efficacy of the waiver is not supported by the facts. Unfortunately, we have no reason to think that will be the last of the calls to waive such commitments.

#### Short-term competition key to prevent U.S.-China war.

Beckley & Brands 20 – Associate Professor of Political Science at Tufts University and Jeane Kirkpatrick Visiting Scholar at the American Enterprise Institute; Henry A. Kissinger Distinguished Professor of Global Affairs at the Johns Hopkins University School of Advanced International Studies and a Resident Scholar at the American Enterprise Institute

Michael Beckley, Hal Brands, “Competition With China Could Be Short and Sharp: The Risk of War Is Greatest in the Next Decade,” Foreign Affairs, December 2020, https://www.foreignaffairs.com/articles/united-states/2020-12-17/competition-china-could-be-short-and-sharp

The good news for the United States is that over the long term, competition with China may prove more manageable than many pessimists believe. Americans may one day look back on China the way they now view the Soviet Union—as a dangerous rival whose evident strengths concealed stagnation and vulnerability. The bad news is that over the next five to ten years, the pace of Sino-American rivalry will be torrid, and the prospect of war frighteningly real, as Beijing becomes tempted to lunge for geopolitical gain. The United States still needs a long-term strategy for protracted competition. But first it needs a near-term strategy for navigating the danger zone.

RED FLAGS

Much debate on Washington’s China policy focuses on the dangers China will pose as a peer competitor later this century. Yet the United States actually faces a more pressing and volatile threat: an already powerful but insecure China beset by slowing growth and intensifying hostility abroad.

China has the money and muscle to challenge the United States in key areas. Thanks to decades of rapid growth, China boasts the world’s largest economy (measured by purchasing power parity), trade surplus, financial reserves, navy by number of ships, and conventional missile force. Chinese investments span the globe, and Beijing is pushing for primacy in such strategic technologies as 5G telecommunications and artificial intelligence (AI). Add in four years of disarray in the U.S.-led world order under President Donald Trump, and it is hardly surprising that Beijing is testing the status quo from the South China Sea to the border with India.

Yet China’s window of opportunity may be closing fast. Since 2007, China’s annual economic growth rate has dropped by more than half, and productivity has declined by ten percent. Meanwhile, debt has ballooned eightfold and is on pace to total 335 percent of GDP by the end of 2020. China has little hope of reversing these trends, because it will lose 200 million working-age adults and gain 300 million senior citizens over the next 30 years. And as economic growth falls, the dangers of social and political unrest rise. Chinese leaders know this: President Xi Jinping has given multiple speeches warning about the possibility of a Soviet-style collapse, and Chinese elites are moving their money and children abroad.

Meanwhile, global anti-China sentiment has soared to levels not seen since the 1989 Tiananmen Square massacre. Nearly a dozen countries have suspended or canceled participation in Belt and Road Initiative (BRI) projects. Another 16 countries, including eight of the world’s ten largest economies, have banned or severely restricted use of Huawei products in their 5G networks. India has been turning hard against China since a clash on their shared border killed 20 soldiers in June. Japan has ramped up military spending, turned amphibious ships into aircraft carriers, and strung missile launchers along the Ryukyu Islands near Taiwan. The European Union has labeled China a “systemic rival”; and the United Kingdom, France, and Germany are sending naval patrols to counter Beijing’s expansion in the South China Sea and Indian Ocean. On multiple fronts, China is facing the blowback created by its own behavior.

HISTORY RHYMES

Many people assume that rising revisionists pose the greatest danger to international security. But historically, the most desperate dashes have come from powers that had been on the ascent but grew worried that their time was running short.

World War I is a classic example. Germany’s rising power formed the strategic backdrop to that conflict, but German fears of decline triggered the ultimate decision for war. Russia’s growing military power and mobility menaced Germany’s eastern flank; new French conscription laws were changing the balance in the West; and a tightening Franco-Russian-British entente was leaving Germany surrounded. German leaders ran such catastrophic risks in the July crisis for fear that geopolitical greatness would elude them if they did not act quickly.

The same logic explains imperial Japan’s fatal gamble in 1941, after the U.S. oil embargo and naval rearmament presented Tokyo with a closing window of opportunity to dominate the Asia-Pacific. In the 1970s, Soviet global expansion peaked as Moscow’s military buildup matured and the slowing of the Soviet economy created an impetus to lock in geopolitical gains.

Given that China is currently facing both a grim economic forecast and a tightening strategic encirclement, the next few years may prove particularly turbulent. The United States obviously needs a long-term strategy to compete with China. But it also needs to blunt a potential surge of Chinese aggression and expansion this decade.

The early Cold War offers a useful parallel. At that time, American leaders understood that winning the long-term struggle against the Soviet Union required not losing crucial battles in the short term. The Marshall Plan, unveiled in 1947, was meant to prevent economic collapse in Western Europe, because such a breakdown might allow Moscow to extend its political hegemony over the entire continent. The creation of NATO and rearmament during the Korean War forged a military shield that allowed the West to thrive. Strategic urgency was the prelude to strategic patience: the United States could exploit its lasting economic and political advantages only if it closed off more immediate vulnerabilities.

Today, the United States again needs a danger-zone strategy, which should be based on three principles. First, focus on denying China near-term successes that would radically alter the long-term balance of power. The most pressing dangers are a Chinese conquest of Taiwan and Chinese preeminence in 5G telecommunications networks. Second, rely on tools and partnerships available now or in the near future rather than assets that require years to develop. Third, focus on selectively degrading Chinese power rather than changing Chinese behavior. Seduction and coercion are out; targeted attrition is in. Such an approach entails greater risk. But the United States must act assertively now to prevent more destabilizing spirals of hostility later.

#### U.S.-China war is likely and goes nuclear.

Kulacki 16 – China Project Manager in the UCS Global Security Program

Gregory Kulacki, “The Risk of Nuclear War with China: A Troubling Lack of Urgency,” Union of Concerned Scientists, 2016, https://www.ucsusa.org/sites/default/files/attach/2016/05/Nuclear-War-with-China.pdf

It is not difficult to imagine situations that could trigger an inadvertent or accidental nuclear war. For example, PRC leaders could underestimate U.S. willingness to use nuclear weapons to stop a conventional war. U.S. leaders could underestimate PRC willingness to retaliate after a tailored U.S. nuclear attack. The PRC could launch a retaliatory nuclear attack if the United States were to launch conventional missile strikes that China mistakenly believed were nuclear. The United States could make the same mistake. Equipment in the command and control network of either nation could be destroyed or malfunction, especially given the interest of both countries in anti-satellite weapons. Decision makers may not have timely access to accurate information in the fog of a conflict.

A PRC decision to move to launch on warning would be especially dangerous. The U.S. and Soviet/Russian experience with warning systems shows that false alarms and unexpected situations occur due to human and technical errors, and they are especially likely early in the deployment and operation of such a system. Errors of this sort increased the risk of a nuclear exchange on multiple occasions for the United States and Russia both during and after the Cold War.

No Technical Exit

As long as both sides remain committed to pursuing technical solutions to their unique strategic problems, they are condemned to continue competing indefinitely. But stalemate is not a stable outcome; rather, it is a perpetual high-wire act. Twenty-four hours a day, 365 days a year, the governments of the United States and China are a few poor decisions away from starting a war that could escalate rapidly and end in a nuclear exchange.

Lack of mutual trust and a growing sense that their differences may be irreconcilable incline both governments to continue looking for military solutions—for new means of coercion that help them feel more secure. Establishing the trust needed to have confidence in diplomatic resolutions to the disagreements, animosities, and suspicions that have troubled leaders of the United States and the PRC for almost 70 years is extremely difficult when both governments take every new effort to up the technological ante as an act of bad faith.

The bilateral dialogues on strategic stability aim to manage the military competition, but they do not seek to end it. Although the two governments work very hard at avoiding conflict, they have yet to find a way out of what Graham Allison called their “Thucydides trap”—the risk of conflict between a rising power and an established power invested in the status quo (Allison 2015). Allison’s warning not to minimize the risks of war is sage advice, even if he does not say how the United States and China can escape the trap he describes.

PRC leaders believe it is possible to prosecute a major war without risking a U.S. nuclear attack. The leaders of the United States believe stopping the PRC from prosecuting such a war may depend, in certain contingencies, on a credible threat to use nuclear weapons—a threat U.S. leaders state they are prepared to execute. These mismatched perceptions increase both the possibility of war and the likelihood it will result in the use of nuclear weapons.

Well-informed U.S. officials tend to dismiss the possibility that the United States and the PRC could wander into a nuclear war. For example, Admiral Dennis Blair, a former Director of National Intelligence whose final military post was Commander in Chief of the U.S. Pacific Command, assured a large gathering of U.S. arms-control experts that “the chances of a nuclear exchange between the United States and China are somewhere between nil and zero.” J. Stapleton Roy, a former U.S. ambassador to the PRC, wholeheartedly agreed (Swaine, Blair, and Roy 2015). Similarly, PRC military strategists and arms control experts believe that the risk of nuclear war with the United States is not an urgent concern even if that risk may not be zero (Cunningham and Fravel 2015).

This lack of urgency is troubling. For example, the United States reportedly told the PRC it would risk military escalation to prevent or stop a proposed PRC island reclamation project in the Scarborough Shoal (Cooper and Douglas 2016). The PRC reportedly responded by committing to move ahead with the project later in 2016 (Chan 2016). This particular contest of wills is part of a steadily increasing number of unresolved diplomatic spats that have escalated to the level of overt military posturing reminiscent of U.S.-Soviet jousting during the Cold War.

The United States and the PRC are decades-old enemies, preparing for war and armed with nuclear weapons. Good faith efforts by the leaders of both nations have failed to stop accelerating preparations for war, including new investments in their nuclear forces. Miscommunication, misunderstanding, or poor judgment could spark a conflict that both governments may find difficult to stop.

### 1NC

#### The biotech industry is strong now---it’s weathered the COVID storm.

Cancherini et al. 21 – Consultant in M`cKinsey’s Brussels office

Laura Cancherini, Joseph Lydon, Jorge Santos da Silva, Alexandra Zemp, “What’s ahead for biotech: Another wave or low tide?,” McKinsey & Company, April 2021, https://www.mckinsey.com/industries/life-sciences/our-insights/whats-ahead-for-biotech-another-wave-or-low-tide

Unlike most industries in these extraordinarily challenging times, biotech is experiencing a high. Executives in many other sectors are becoming more pessimistic about the outlook for their businesses as the global pandemic continues to spread.1 But the search to understand and find treatment or preventive solutions to COVID-19 has focused intense government, media, and public attention on science and medicine, reinforcing the perception that biotech acquisitions and partnerships represent a good investment.

In an effort to understand worldwide biotech financing in the context of the COVID-19 crisis, McKinsey analyzed the sector’s financial performance and interviewed 20 C-level executives from small and midsize biotechs and venture-capital (VC) firms.

The pandemic has had an enormous financial impact on many sectors, but biotech has weathered the storm: after a brief downturn early in the crisis, it recovered quickly (Exhibit 1). Between January 2020 and January 2021, the average share price for European and US biotechs increased at more than twice the rate of the S&P 500, and Chinese biotechs performed more than six times better, with their average share price more than doubling in a year. Overall, biotech is outperforming its sister industry, pharmaceuticals, as well as many household-name consumer-goods and technology companies.

With acquisitions, partnerships, IPOs, and fundraising still increasing, biotech’s star has, if anything, risen higher than it was before the pandemic. The industry’s response to the crisis, its record of innovation, and its reputation as a safe haven for investment have all served it well. But whether biotech can sustain this performance is open to question. This article looks at the industry’s record of growth, its resilience during the global pandemic, and the factors that could determine whether the biotech wave continues.

#### Biotech is key to climate change solutions---waiving IP rights decks it by setting a sweeping precedent that chills innovation.

Brand 21 – Assistant General Counsel and Director of Intellectual Property at the Biotechnology Innovation Organization

Melissa Brand, “TRIPS IP Waiver Could Establish Dangerous Precedent for Climate Change and Other Biotech Sectors,” IP Watchdog, May 2021, https://www.ipwatchdog.com/2021/05/26/trips-ip-waiver-establish-dangerous-precedent-climate-change-biotech-sectors/id=133964/

While the discussions around waiving intellectual property (IP) rights set forth in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) are currently (and somewhat amorphously) limited to COVID-19 related drug and medical products, it is probably shortsighted to ignore the implications for other technologies critical to sustaining our environment and advancing a more healthful world. In fact, if we want to ensure continued investment in these technologies, we should be very concerned about the message conveyed by the international political tide: if you overcome a challenging scientific problem and your solution has the potential to save lives, be prepared to be subjected to intense political pressure and to potentially hand over your technology without compensation and regardless of the consequences.

The biotech industry is making remarkable advances towards climate change solutions, and it is precisely for this reason that it can expect to be in the crosshairs of potential IP waiver discussions. President Biden is correct to refer to climate change as an existential crisis. Yet it does not take too much effort to connect the dots between President Biden’s focus on climate change and his Administration’s recent commitment to waive global IP rights for Covid vaccines (TRIPS IP Waiver). “This is a global health crisis, and the extraordinary circumstances of the COVID-19 pandemic call for extraordinary measures.” If an IP waiver is purportedly necessary to solve the COVID-19 global health crisis (and of course we dispute this notion), can we really feel confident that this or some future Administration will not apply the same logic to the climate crisis? And, without the confidence in the underlying IP for such solutions, what does this mean for U.S. innovation and economic growth? United States Trade Representative (USTR) Katherine Tai was subject to questioning along this very line during a recent Senate Finance Committee hearing. And while Ambassador Tai did not affirmatively state that an IP waiver would be in the future for climate change technology, she surely did not assuage the concerns of interested parties.

International Pressure May Be Influencing Domestic IP Policy

The United States has historically supported robust IP protection. This support is one reason the United States is the center of biotechnology innovation and leading the fight against COVID-19. However, a brief review of the domestic legislation arguably most relevant to this discussion shows just how far the international campaign against IP rights has eroded our normative position. The Clean Air Act, for example, contains a provision allowing for the mandatory licensing of patents covering certain devices for reducing air pollution. Importantly, however, the patent owner is accorded due process and the statute lays out a detailed process regulating the manner in which any such license can be issued, including findings of necessity and that no reasonable alternative method to accomplish the legislated goal exists. Also of critical importance is that the statute requires compensation to the patent holder. Similarly, the Atomic Energy Act contemplates mandatory licensing of patents covering inventions of primary importance in producing or utilizing atomic energy. This statute, too, requires due process, findings of importance to the statutory goals and compensation to the rights holder.

A TRIPS IP waiver would operate outside of these types of frameworks. There would be no due process, no particularized findings, no compensation and no recourse. Indeed, the fact that the World Trade Organization (WTO) already has a process under the TRIPS agreement to address public health crises, including the compulsory licensing provisions, with necessary guardrails and compensation, makes quite clear that the waiver would operate as a free for all.

Forced Tech Transfer Could Be on The Table

When being questioned about the scope of a potential TRIPS IP waiver, Ambassador Tai invoked the proverb “Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime.” While this answer suggests primarily that, in times of famine, the Administration would rather give away other people’s fishing rods than share its own plentiful supply of fish (here: actual COVID-19 vaccine stocks), it is apparent that in Ambassador Tai’s view waiving patent rights alone would not help lower- and middle-income countries produce their own vaccines. Rather, they would need to be taught how to make the vaccines and given the biotech industry’s manufacturing know-how, sensitive cell lines, and proprietary cell culture media in order to do so.

In other words, Ambassador Tai acknowledged that the scope of the current TRIPS IP waiver discussions includes the concept of forced tech transfer. In the context of climate change, the idea would be that companies who develop successful methods for producing new seed technologies and sustainable biomass, reducing greenhouse gases in manufacturing and transportation, capturing and sequestering carbon in soil and products, and more, would be required to turn over their proprietary know-how to global competitors.

While it is unclear how this concept would work in practice and under the constitutions of certain countries, the suggestion alone could be devastating to voluntary international collaborations. Even if one could assume that the United States could not implement forced tech transfer on its own soil, what about the governments of our international development partners? It is not hard to understand that a U.S.-based company developing climate change technologies would be unenthusiastic about partnering with a company abroad knowing that the foreign country’s government is on track – with the assent of the U.S. government – to change its laws and seize proprietary materials and know-how that had been voluntarily transferred to the local company.

Necessary Investment Could Diminish

Developing climate change solutions is not an easy endeavor and bad policy positions threaten the likelihood that they will materialize. These products have long lead times from research and development to market introduction, owing not only to a high rate of failure but also rigorous regulatory oversight. Significant investment is required to sustain and drive these challenging and long-enduring endeavors. For example, synthetic biology companies critical to this area of innovation raised over $1 billion in investment in the second quarter of 2019 alone. If investors cannot be confident that IP will be in place to protect important climate change technologies after their long road from bench to market, it is unlikely they will continue to invest at the current and required levels.

Next on the Chopping Block

It is quite reasonable to be worried about the broad implications of a TRIPS IP waiver precedent. International campaigns to weaken IP rights seem to be taking hold in U.S. domestic policy. The TRIPS IP waiver discussions will not conclude in the near term and will not yield more shots in people’s arms. This is not even truly disputed, as our own administration acknowledges that the goal here is technology transfer abroad. Given the signaling that our Administration believes waiving IP rights is an appropriate measure to end global crises, it is proper to worry that facets of the biotech sector addressing climate change may be next on the chopping block.

#### Biotech innovation is uniquely key to combatting climate change.

McMurry-Heath 21 – Physician-scientist and the president and CEO of the Biotechnology Innovation Organization

Michelle McMurry-Heath, “To help solve climate change, look to the biosciences,” STAT News, May 2021, https://www.statnews.com/2021/05/21/climate-change-solutions-from-biosciences/

President Biden’s pledge to cut U.S. greenhouse gas emissions in half by 2030 is an admirable and ambitious undertaking. It’s nearly double the goal set by President Obama in 2015. And it establishes the United States as a world leader in battling climate change.

But reaching the president’s target in just under 10 years is a monumental task. It’s so big, in fact, that we’ll never get there by government action alone. No amount of vehicle efficiency standards, forest conservation efforts, or gas taxes can fully solve the problem.

We have to science our way out of it.

The biosciences, including biotechnology, will play a pivotal role in the fight against climate change. It is already leading the way on several fronts. According to a report from BIO, the organization I work for, the biotech industry’s green initiatives could mitigate the equivalent of 3 billion tons of carbon dioxide every year by 2030, or about half of the country’s annual CO2 emissions.

Take food, for example.

Food consumption — and production — is central to human existence. Global food production accounts for one-quarter of greenhouse gas emissions. A recent report from an international team of researchers concluded that even if all other fossil fuel emissions were eliminated, emissions from food production alone would prevent us from reaching a key goal of the climate change agreement signed in Paris: preventing the global temperature from rising more than 2 degrees Celsius.

Halting food production isn’t an option, so biotech companies are helping farmers become part of the climate solution. Take, for example, Boston-based Joyn Bio. It is engineering bacteria that pull nitrogen directly from the atmosphere. These microbes then pass the nitrogen to crops like wheat and corn, reducing the need to make, transport, and apply nitrogen fertilizers, which reduces greenhouse gas emissions.

Minnesota-based Acceligen is using a technique it calls precision breeding that improves the health of livestock while reducing their waste, greenhouse gas emissions, and water usage.

Biotechnology can also help protect food from climate change. As fungal and bacterial infections accelerated by human-driven environmental disturbances threaten to wipe out Cavendish bananas, Tropic Biosciences in the United Kingdom is using CRISPR gene-editing technology to engineer infection-resistant bananas.

Companies are also rethinking how food is packaged to reduce plastic pollution and open high-tech paths to broader adoption of biodegradables. This would be a game-changer in the interlinked fight to modulate climate change and protect the oceans.

Globally, 100 million tons of plastic are produced every year, 8 million of which ends up in the oceans. The production of plastic requires at least 8% of the world’s petroleum. Greenhouse gas emissions from plastic production and incineration could rise from the current 850 million tons a year to 3 billion tons a year by 2050. And discarded plastic that ends up in the ocean slowly breaks down in sunlight, releasing greenhouse gases and toxic microplastics.

Georgia-based Danimer Scientific — partnering with the Mars Wrigley candy company — is working on biodegradable packaging that uses plant oils to manufacture “plastic” that dissolves in soil and water. Bioplastics and biopolymers can reduce greenhouse gas emissions reductions by up to 80% more compared to their petroleum-based counterparts.

Fuel is another target for biotechnology. Transportation accounts for the highest percentage of U.S. greenhouse gas emissions. While electric cars are gaining popularity, and the $174 billion allocated to support the transition to electrics in Biden’s American Jobs Plan is important, biofuels — which are carbon neutral — will be needed to help reduce emissions in transportation and need comparable support.

The biotech company Synthetic Genomics, for instance, is utilizing saltwater algae, which convert sunlight and carbon dioxide into biomass, to make sustainable auto fuel. By 2025, 10,000 barrels of the algal biofuel could be produced per day for commercial use.

Biofuels will also play an important role in air travel. While flying accounts for less than 3% of global CO2 emissions a year, on a per-mile calculation it’s the least green form of travel. With the number of air travel passengers expected to double by 2040, the Biden administration is upping the financial incentives — through tax credits — for companies that produce sustainable aircraft fuels.

Biotech firms are already stepping up. Companies like Neste, Gevo, and World Energy are using everything from algae to used or wasted cooking oil to create sustainable jet fuels. LanzaTech recycles carbon from industrial emissions and other sources and turns it into aviation fuel — and has recently partnered with other corporations to bring that fuel to market for commercial airline use.

With help from biotechnology, the U.S. can achieve the climate change goals outlined by the Biden administration and the Paris Agreement. Human progress and technology got us into this mess. That same ingenuity can help get us out.

#### Global warming is an existential threat.

Tonn 21 – Professor of Political Science at the University of Tennesse Knoxville

Bruce E. Tonn, “Anticipation, Sustainability, Futures and Human Extinction: Ensuring Humanity’s Journey into The Distant Future,” Routledge, May 2021, https://www.taylorfrancis.com/books/mono/10.4324/9781003000105/anticipation-sustainability-futures-human-extinction-bruce-tonn

Unfortunately, unlike the aftermath of the Black Plague in the Middle Ages, human population continued to slide, or it should be said that the number of Havenots continued to decrease. Next up was climate change. For aforementioned reasons, the countries of the world had not stemmed the use of fossil fuels and, therefore, had not reduced the emissions of GHG into the atmosphere. Few technologies had been put in place to reduce GHG in the atmosphere or sequester the carbon elsewhere. It was as if the planet extracted revenge through withering droughts in Central China, Northern Africa, and North Central North America, deadly heat waves in Western and Central Europe, implacable sea-level rise in the Asia Pacific region, and apocalyptic storms worldwide. People were literally washed away down rivers and into oceans. Agricultural systems collapsed outside of the wealthy areas of the Haves, which were quickly becoming self-sufficient and hermetically sealed to the world of the Havenots. The built environment and urban infrastructures were pummeled. Another round of diseases, mostly mosquito-borne this time, ravaged the world’s population. The developed world offered no safety net for the rest of the world. The largest losses of population were in Asia and Africa, closely followed by Central and South America. Within another thirty years, another billion people perished.

During the next handful of decades, the remaining humans failed to bond together to rebuild human civilization. In fact, just the opposite happened. Instead of conflicts between nations or even ‘clashes of civilizations’, deadly and widespread violence arose between the Haves and Havenots. At the outbreak of the unrest, the militaries of the world had been deployed to protect the wealth and property of the Haves. First as pandemics roiled the world and then as major economic systems collapsed, the viciousness and desperateness of the attacks of the Havenots against the Haves increased.

The military leaders had a choice: defend the Haves or become allies of the Havenots. The Haves had all the technological advantages (not only their life-prolonging technologies, useful if they could survive the chaos, but also their nanotechnologies, biotechnologies, limited but developing renewable energy technologies, and information technologies). The Havenots had strength in numbers. The majority of the military leaders whose forces were equipped with the most sophisticated weaponry and other advanced technologies made a devil’s bargain with the Haves, security in exchange for the promised long-life and luxury.

A protracted period of violence ensued. Both the Haves and Havenots suffered substantial casualties. Eventually, the Haves and their superior military forces ended up in approximately 5,000 heavily defended enclaves (or lifeboats, from their point of view), with about 1,000 humans in each enclave. Most enclaves were former military bases, although many were former resort islands and other easily defensible haunts of the Haves. The enclaves brought to mind the walled cities of the Middle Ages. Unlike their feudal ancestors, they did not rely upon serfs living outside the walls for their food and materials. Because of their technological prowess, they were, after a period of transition, mostly self-sufficient. The poor and otherwise ‘useless’ and ‘excessive’ inhabitants of the enclaves, mostly lower ranking soldiers but also some weak Haves, were quickly evicted so as not to stress the resources of their systems, which would need to last for centuries.

During this period of violence, the Haves and the military systematically destroyed all advanced technologies outside of the enclaves. This was done so that the Havenots could not develop the capabilities to conquer the remaining enclaves. The military effectively destroyed the remaining energy-producing facilities (including the nuclear power plants), the electricity infrastructure, the worldwide telecommunications infrastructure, shipping and transportation facilities, and even dams and irrigation systems. The result of these attacks was that the Havenots on the outside had little or no technology, no concentrated energy resources, no information technology, no electricity, no water systems, and no advanced weapons. Agricultural productivity approached pre-industrial levels. Plants stressed by heat and drought failed to produce crops. Farm animals and plants regularly fell to agricultural diseases that had previously been preventable. Wild animal stocks were slaughtered with no thought about tomorrow. Accessible stocks of fish in the lakes and oceans were depleted. Leadership and new government structures never re-evolved; anarchy reigned. New pathogens circled the globe with astonishing speed. It was every man, woman, and child for themselves. Over the next century, the reduction in population was steady, and another two billion perished.

Catastrophic changes in the world’s ecosystems coincided with the violence and also plagued the Havenots. In a mad scramble to keep themselves fed, the Havenots severely depleted the world’s stocks of birds and mammals, big and small. This reduction in the number of insect predators led to an explosion in the numbers of destructive insects. Locusts and grasshoppers devastated remaining agricultural crops. In a particularly gruesome twist of fate, the depletion of mammals and birds also reduced the food supplies for mosquitoes around the world. As their predators were eliminated and as their food supplies dwindled, they began to viciously swarm individual humans who lacked shelter. Many did not survive the onslaught.

The Havenots and the Haves alike were killed by immense fires. The dramatic rise in CO2 in the atmosphere and the expansion of ranges of temperate and tropical ecosystems promoted the accelerated growth of plant life all over the planet. Megatons of increased biomass respirated increasing levels of oxygen into the atmosphere. The bacteria that consumed the remaining oil and natural gas reserves also emitted substantial amounts of oxygen into the environment. Indeed, the level of oxygen in the atmosphere quickly began to approach 30%, from a level of about 21% at the turn of the twenty-first century. More plant materials, drought, and oxygen-rich air led to truly horrific conflagrations in North America, Europe, Northern Asia, Southern Africa, and Central and South America. Humans died directly in the fires and also died of asphyxiation if they were in the vicinity of the most massive fires.

Life in the enclaves became decidedly dystopian. The main problem was that no enclave possessed the critical mass of people, knowledge, and materials to maintain their technological base. Technology failed. In most cases, it was impossible to replace and/or fabricate new specialized chips and parts. Because the enclaves had destroyed the globe’s telecommunications infrastructure to deny the Havenots the ability to easily organize, they were unable to communicate with other enclaves. The Haves continued to perceive the Havenots and the ‘outside’, disease-ridden world, to be a threat, although had they left their enclaves they would have known otherwise. This perception kept the Haves sequestered in their enclaves. Over the next 100 years, most of the enclaves collapsed from starvation or were eventually overrun by the Havenots, having failed like the Utopian communities of the eighteenth and nineteenth centuries.

A few enclaves, however, took a different path to extinction. This is because some Haves did achieve part of their vision of Utopia during the hell storm that surrounded them. They did achieve some measure of immortality. In a handful of enclaves, there were Haves who were actually a couple of hundred years old. But they had not planned on the destruction of the rest of the world and their technologies were riddled with bugs.

It was imperative that these Haves strictly control their population. Despite their weaponry, they were essentially trapped in their enclaves. The outside world was disease ridden, chaotic, dangerous, and empty of valuable resources. They had no survival skills beyond their advanced technologies. They could not survive outside of the enclaves. Controlling their population meant that the births needed to be well planned and limited in number, especially since their numbers had been swollen with the ranks of the military.

The major flaw in this strategy is that these Haves, who desperately wanted to be immortal, basically achieved this goal. Through enhanced nutrients, key replacement organs, and medical nanotechnologies, they were able to keep their bodies in excellent condition. They were not afflicted with heart disease or cancer or obesity or diabetes. Their lives within the enclaves were rather safe because Havenots found the risks not worth the effort of confronting these small but deadly enclaves. The Haves did not travel at all nor have many on-site accidents. They were not murdered in the streets, although inevitably some were killed during disputes in their enclaves. They did not commit suicide; they were constitutionally incapable of taking their own lives, having committed themselves to immortality. After a while, the turnover in the enclaves fell to close to zero. No one died. And the enclaves could not afford to allow new births. These Haves were not too worried. After all, they had time on their side, right?

However, as time went on, these super-elders lost the ability to reproduce naturally. The eggs in the female’s ovaries aged and could not be rejuvenated. Also, frozen eggs and sperm turned out to have much shorter shelf lives than had been thought. To reproduce, that left cloning. Although advances in cloning had been impressive, problems with human cloning had not been overcome simply because the practice had been banned by most countries at the beginning of the twenty-first century and had been taboo in the enclaves for most of the time. However, these Haves decided to try to clone humans though they lacked skilled scientists to oversee this process. The results were disastrous. Miscarriages were the most common results. Many fetuses that came to term died shortly after birth. Most were aborted, those that were allowed to go to term died minutes after being born. The very few that lived further were afflicted with cognitive deficiencies, deformed limbs, and, tragically, were infertile. The attempts at cloning were rapidly abandoned.

Another problem that these Haves did not anticipate was the psychological aspects of aging. The minds of these very old people were slowly becoming completely dysfunctional. Of course, they did not suffer from Alzheimer’s or Huntington’s or Parkinson’s diseases. They had genetic tests for these maladies and could prevent or treat these diseases without much effort or risk. What they did suffer from was system overuse and overload. Too many memories over too many years were leading to inefficiencies in memory retention and organization. Sleep no longer was sufficient to help keep their minds organized. As their collective capabilities were eroding at about the same rate, these Haves were unable to recognize what was happening to them. Because of this creeping functional senility, they were also increasingly unable to maintain their other technologies in tip-top shape. Plans to move out of the enclaves vanished. Pictures of health, they were going mad down the path to extinction. Eventually, even these more resilient enclaves perished as their diminished mental capabilities proved insufficient to keep themselves alive.

When the last enclave fell, there were around 500 million Havenots left on earth. Then, what was once referred to as northwest Wyoming exploded in the largest volcanic eruption the earth had witnessed in the past 20 million years. The eruption was 10,000 times the size of the St. Helens eruption. The soot pushed up into the atmosphere severely blocked out the sun everywhere on the earth for several years. Plant life suffered due to the reduction in photosynthesis. Much like what happened several million years ago to the dinosaurs, the number of humans on the earth dropped down to the mere thousands.67

The remaining hunter-gatherer Havenots were exceedingly resourceful. Many were able to scrape by, living in caves, or building shelter from rubble and scavenging for food and water. They had been able to deal with the hell of climate change and seemed poised to deal with this new round of precipitous cooling. Unfortunately, a final sequence of events on a geological scale would soon seal their fate.

The Havenots were a very unlucky lot. Weakened from disease, malnutrition, and inbreeding, they were also becoming very lethargic, light-headed, and disoriented. The shortness of breath was the key symptom explaining this new malady. You see, they were beginning to suffocate because the oxygen levels in the atmosphere had dropped below 20%.

What had happened to the oxygen? The conflagrations had drawn a great deal of oxygen out of the atmosphere. The remnants of civilization were also oxidizing. Old bridges, steel buildings, and especially billions of metal automobiles, trucks, motorcycles, and signs were rusting and rapidly sucking oxygen out of the atmosphere. As the Havenots did not have the technologies in place to produce their own oxygen, they suffered from oxygen deprivation en masse.

Cooling continued to worsen. All the negative feedback effects were in place: severe reduction of sunlight, loss of plant life, reductions in greenhouse gases in the atmosphere, increased radiative cooling, further loss of plant life, further reductions in greenhouse gases, etc. The Arctic Ocean, already refrozen, started its march southward. The Antarctic ice fields rapidly expanded. Glaciers, which had reappeared on the mountain-tops, quickly moved toward the valleys. As a consequence, sea levels dropped precipitously worldwide.

As a result, enormous amounts of rock now stood bare to the elements. Land scrapped clear due to erosion from floods and storms was not revegetated and was also exposed to the elements. These rocks, along with the husk of human civilization, oxidized, drawing ever more oxygen out of the environment. Indeed, large areas of the earth began to resemble the Red Planet, Mars. All remaining aerobic species not only faced a life deprived of sufficient oxygen, but they now faced the prospect of asphyxiation. Within another couple of hundred years, the oxygen in the atmosphere dropped below 19.5%, on its way to a low of 15%. The last human took her last breath in Southern Africa, just like the last Gorgon did over 250 million years ago.68

## Case

### AT: Solvency

#### Squo solves.

Crosby et al. 6-8, Daniel Crosby specializes in international trade, investment and matters related to public international law. A partner in our International Trade practice and the manager of our Geneva office, Daniel helps sovereign and business clients to achieve practical economic objectives around the world by applying and negotiating international agreements. JDSUPRA, June 8, 2021. “Update on the Proposed TRIPS Waiver at the WTO: Where is it Headed, and What to Expect?” <https://www.jdsupra.com/legalnews/update-on-the-proposed-trips-waiver-at-8411942/> brett

Proponents have advanced the proposed TRIPS waiver in the name of meeting global vaccine demand. But even in the absence of a waiver, pharmaceutical manufacturers have continued efforts to expand global production and distribution of COVID-19 vaccines and therapies, with a focus on expanding access to developing countries. For example, Pfizer announced its plan to deliver two billion doses to developing nations over the next 18 months, with one billion doses coming this year.8 One forecast estimates that, by the end of 2021, total global COVID-19 vaccine production may exceed 11 billion doses – an amount potentially sufficient to achieve global herd immunity.9

Several pharmaceutical industry groups have also proposed a five-step plan to “urgently advance COVID-19 equity,” including: (1) increasing dose sharing among countries through COVAX and other mechanisms; (2) optimizing production of vaccines and raw materials; (3) eliminating trade barriers for critical raw materials; (4) supporting country readiness to deploy vaccination programs; and (5) driving further innovation.10

Manufacturers have also continued to partner with other companies in efforts to scale up global production. For example, Moderna recently engaged Samsung Biologics to provide fill-and-finish manufacturing for Moderna’s vaccine.11 Merck and Gilead also each entered into or expanded voluntarily licensing programs with manufacturers in India to produce the companies’ respective COVID-19 antiviral agents molnupiravir and remdesivir.12

Some WTO members have also considered using the existing TRIPS flexibilities to expand their vaccine access. For example, Bolivia has continued to pursue its effort to import the Johnson & Johnson COVID-19 vaccine from Canadian company Biolyse Pharma, under a compulsory license pursuant to TRIPS Article 31bis (if one could be obtained).13

#### Production limitations is the biggest obstacle, not IP – even the biggest producer of vaccines agree

Tom Lee is a Data and Policy Analyst at the American Action Forum and Christopher Holt is the Director of Health Care Policy at the American Action Forum, May 10, 2021 – [“Intellectual Property, COVID-19 Vaccines, and the Proposed TRIPS Waiver”, https://www.americanactionforum.org/insight/intellectual-property-covid-19-vaccines-and-the-proposed-trips-waiver/]//SL

The primary justification for waiving TRIPS is that IP protections cause underutilized manufacturing capacity. By removing TRIPS, developing nations could copy patented drugs and use their own manufacturers to produce vaccines, thereby increasing access. This rationale, however, is flawed. Adar Poonawalla, CEO of the Serum Institute of India—currently the largest producer of COVID-19 vaccine doses in the world—has argued that **access to IP is not limiting vaccine production**, rather it is the time involved in scaling up manufacturing capacity.[[6]](https://www.americanactionforum.org/insight/intellectual-property-covid-19-vaccines-and-the-proposed-trips-waiver/" \l "_edn6) It should also be noted that Moderna has already pledged not to enforce its own COVID-19 vaccine patents during the pandemic.[[7]](https://www.americanactionforum.org/insight/intellectual-property-covid-19-vaccines-and-the-proposed-trips-waiver/" \l "_edn7)

In addition, COVID-19 vaccines such as those produced by Pfizer and Moderna use emerging and very complex technologies and processes. These technologies and processes are essential to producing and increasing scale of COVID-19 vaccines. They are not published in patents but rather kept as trade secrets. The fourth protection mentioned above only prevents theft of trade secrets; it does not allow or disallow a company from keeping trade secrets. Waiving TRIPS therefore does nothing to speed up vaccine production even if there were excess manufacturing capacity, as manufacturers would not receive the essential trade secrets they would need. The issue at present is not underutilized manufacturing capacity, rather scaling up production has been the largest difficulty of vaccine manufacturing. It takes anywhere from 60 to 120 days to produce a single batch of vaccines. Even with manufacturing challenges, between 9.5 and 13.5 billion doses of COVID-19 vaccines are projected to be produced in 2021. Eleven billion doses would be sufficient to vaccinate 70 percent of the world population and reach heard immunity, assuming 2-dose vaccinations.[[8]](https://www.americanactionforum.org/insight/intellectual-property-covid-19-vaccines-and-the-proposed-trips-waiver/" \l "_edn8)

### WTO--turn

#### Conceding WTO Credibility – the WTO is bad – yes the I/L is reverse causal since 1AC Meyer says collapse will happen in the Status Quo and the Plan prevents it.

#### Low WTO causes regional trade – yes trade-off

Isfeld 14 Gordon Isfeld 3-17-2014 business.financialpost.com/2014/03/17/with-rise-of-shot-gun-trade-agreements-is-the-wto-even-relevant-anymore/ “With the rise of 'shot-gun' trade agreements, is the WTO even relevant anymore” //Elmer

OTTAWA — It’s getting awfully crowded out there in the free-trading world. The seemingly endless hunt for new global partners is redefining the traditional and hard-fought rules of engagement between nations. So much so, observers say, the old world order — remember the WTO, and GATT before it — has increasingly become a sideshow to the proliferation of bilateral, **trilateral** **and**, often, **multi-lateral** agreements. Even the term “free trade” no longer accurately describes the “new world” of negotiations — one that encompasses far more than what and how products are permitted to slide under domestic tariff radars. For Canada, we can now add South Korea and the European Union — deals long in the making but only weeks in the signing — after a string of minor agreements since the landmark free trade act 25 years ago with the United States, and later to include Mexico. Now, as the growing mass of country-to-country, region-to-region agreements has made apparent, it’s open season on anything that moves between borders — not only products, investments and intellectual property, but also new rules on competition, and the inclusion of labour laws and environmental guidelines. These are just some of the areas of possible disputes that the World Trade Organization “does not deal with,” said Debra Steger, a professor of law at University of Ottawa, specializing in international trade and development. “These are new models. These are not traditional trade agreements, per se.” Ms. Steger, who worked for the federal government on the Uruguay Round of negotiations that led to formation of the WTO, said the framework of recent deals goes “way beyond subjects that NAFTA dealt with.” “Trade, even in the WTO, isn’t only about tariffs. It’s not just about customs and border measures,” she said. “But it’s not about behind-the-border regulatory matters, like environmental regulation and labour standards, competition policy and human rights, corruption, and on and on it goes.” Free trade, between where ever, has become the go-to issue for politicians, business leaders, public-policy makers and private interest groups. Note, this month’s sudden but long-rumoured announcement by the Harper government of a free-trade deal with South Korea, nearly 10 years after talks began and stumbled, and resumed again. Arguably, the deal was finally done as a result of the resolution to Canada’s drawn-out dispute with Seoul over our beef exports — the so-called “mad cow” disease leading to a ban in that county and others. Of course, the United States, the European Union and Australia, among others, already had agreements in hand with South Korea. A few months earlier, Ottawa inked its EU deal — the Comprehensive Economic and Trade Agreement — which was again the outcome of a seemingly endless circle of negotiations that still left Canada trailing similar pacts by the U.S. and others. Even so, these pacts “affect the WTO and WTO negotiations for a number of reasons. That’s a major problem,” said Ms. Steger. “The major developed countries have gone off and started these efforts to negotiate these big FTAs [free trade agreements] as a response to the declining situation in the Doha Round. The WTO — reborn in 1995 out of the General Agreement and Tariffs and Trade, the original body created in 1948 — has been struggling to maintain its relevance as the global arbiter of trade agreements and dispute resolution. The cachet of the 159-member body, however, has been diminished in recent years as countries moved to seal their own free-trade deals with major partners in the absence, some would argue, of any significant movement by the WTO on its own 2001 trade liberalization initiative, launched in Doha, Qatar. Late last year, members managed to agree to only limited movement on trade under the Doha Round of talks. Even now, details remain to be worked out. “One of the reasons why we’re seeing this sort of shot-gun approach [to trade agreements outside of the WTO] is because a number of countries are concerned that the big global deals are probably next to impossible at this stage, given how the Doha Round went and what we ended up with there, which was next to nothing,” said Douglas Porter, chief economist at BMO Capital Markets in Toronto. “They did manage to reach a tiny deal when all was said and done, but it was very modest in terms of its scope.” The move toward bilateral or multi-lateral agreements “is a symptom of the problems that we were running into at the WTO,” Mr. Porter said. “Important players are probably quietly questioning the future for the WTO…. Is it that death knell for the WTO? I don’t think so. [But] it just means we might not be able to accomplish grand, global deals in the future.” However, “there’s really no other way to approach trade disputes with, say, a country like China, then through that body at this point.” “Even 10 years ago, I think it was more straightforward to come to global trade rules. You had two major players, Europe and the U.S., and a few next tier players, including Japan,” Mr. Porter said. “Now, though, you have all kinds of important big players that have a huge chunk of global trade, and have very different goals and aims, and it might be the nature of the global economy now — the reality that we have many different groups in many different regions. “It might be impossible to square that circle.” Over the course of 25 years, Canada has piled on more than a dozen free trade agreements. The first — taking effect on Jan. 1, 1989 — was with the United States. A heated political issue in the 1988 federal election, which Brian Mulroney’s Conservatives won, the FTA was expanded in 1994 to include Mexico and rebranded as NAFTA. Other free trade deals, though much smaller, were signed in subsequent years, some yet to take effect: Israel, Jordan and Chile, followed later by Costa Rica, Peru, Panama, Honduras and Colombia, leading up to the pacts with EU and South Korea. Negotiations are ongoing for at least another dozen agreements. For countries such as Colombia, which has had an agreement in effect with Canada since 2011, the goal is “to insert our economy into the world economy,” said Alvaro Concha, trade commissioner of Proexport Colombia, based in Toronto. “At the beginning of this decade, we had only our preferential access to over 500 million consumers,” Mr. Concha said. “With all the potential FTAs we’ve been signing with potential markets and with potential partners, we believe that not just the potential buyers of our products, but also the potential investors in our country, we have opened our preferential access to over 1.5 billion consumers.” Likely to push the WTO further into the shadows of global trade will be the Trans Pacific Partnership. “In many ways, the Trans Pacific Partnership will be, if it is successful, an updating of the NAFTA, because the U.S. and Mexico are involved, as well as some [trading] partners we already have within Latin America, like Peru,” said Ms. Steger, at the University of Ottawa. “But [there are] also some key countries in Asia that we don’t have agreements with yet. And some other developed countries in that regional, New Zealand and Australia, that we don’t have agreements with,” she adds. “So that [TPP] agreement is very, very important. It’s also the first major plur-lateral agreement that the world has seen.”

#### Regionalism promotes trade and stops war – avoids their impact because our regionalism is different than protectionist blocs.

Brkić 13, Snježana, and Adnan Efendic. "Regional Trading Arrangements–Stumbling Blocks or Building Blocks in the Process of Global Trade Liberalization?." 5th International Conference «Economic Integration, competition and cooperation», Croatia, Opatija. 2013. papers.ssrn.com/sol3/papers.cfm?abstract\_id=2239275 (Economics Prof at U of Sarajevo) //Elmer

Besides those advocating the optimistic or pessimistic view on regionalism effect on global trade liberalization, some economists, such as Frankel and Wei, hold a neutral position, in a way. Frankel and Wei believe that forms and achievements of international economic integrations can vary and that, for this reason, regionalism can be – depending on circumstances – linked to greater or smaller global trade liberalization. In the years-long period of regional integration development, four periods have been identified during which the integration processes were becoming particularly intensive and which have therefore been named "waves of regionalism". The first wave was taking place during the capitalism development in the second half of the 19th century, in the course of British sovereign domination over the world market. Economic integrations of the time primarily had the form of bilateral customs unions; however, owing to the comparative openness of international trading system based on the golden standard automatism, this period is called the "era of progressive bilateralism". The next two waves of **regionalism** occurred in the years following the world wars. Since the disintegration processes caused by the wars usually spawned economic nationalisms and autarchic tendencies, it is not surprising that post-war regionalisms were marked by discriminatory international economic integrations, primarily at the level of so-called negative integration, with expressedly “beggar-thy-neighbor” policies that resulted in considerable trade deviations. This particularly refers to the regionalism momentum after the First World War, which was additionally burdened by the consequences of Big Economic Crisis. The current wave of regionalism started in late 1980s and spread around the world to a far greater extent than any previous one did: it has covered almost all the continents and almost all the countries, even those which have mis to join all earlier regional initiatives, such as the USA, Canada, Japan and China. Integration processes, however, do not show any signs of flagging. Up till now, over 200 RTAs have been registered with GATT/WTO, more than 150 of them being still in force, and most of these valid arrangement have been made in the past ten years. Specific in many ways, this wave was dubbed "new regionalism". The most specific **characteristics** of new regionalism **include: geographic spread** **of RTAs** **in** terms of **encompassing entire continents;** **greater speed**; integration forms success; deepening of integration processes; **and**, the most important for this theoretical discussion, generally **non-negative impact on outsiders, world economy as a whole, and** the **multilateral liberalization** process. Some theorists (Gilpin) actually distinguish **between** the "**benign**" **and** "**malign**" **regionalism**. On the one hand, **regionalism can advance** the **international economic stability**, multilateral liberalization **and world peace**. On the other, it can have mercantilist features leading to economic well-being degradation and increasing international tensions and conflicts. Analyses of trends within the contemporary integration processes show that they mainly have features of "benign" regionalism. Reasons for this are numerous. **Forces driving** the **contemporary** **regionalism** development **differ from** those that used to drive **earlier** regionalism periods in the 20th century. The **present regionalism emerged in** the period characterized by the **increasing economic inter-dependence** between different world economy subjects, countries attempts to resolve trade disputes and multilateral framework of trade relations. As opposed to the 1930s episode, contemporary regional initiatives represent **attempts to make** the members' **participation in the world economy easier**, rather than make them more distant from it. As opposed to 1950s and 1960s episode, new **initiatives** are **less frequently motivated** **exclusively by political interests**, and are **less frequently** being used **for mercantilist purposes**. After the Second World War, more powerful countries kept using the economic integration as a means to strengthen their political influence on their weaker partners and outsiders. The examples include CMEA and European Community arrangements with its members' former colonies. As opposed to this practice, the new regionalism, mostly driven by common economic interests, yielded less trade diversion than previous one, and has also **contributed to** the **prevention of military conflicts of greater proportions**. Various analyses have shown that many regional integrations in earlier periods resulted in trade deviations, particularly those formed between less developed countries and between socialist countries. In recent years, however, the newly formed or revised regional **integrations** primarily seem to **lead to trade creation**. Contrary to the “beggar thy- neighbor” model of former international economic integrations, the integrations now offer certain advantages to outsiders as well, by stimulating growth and spurring the role of market forces. The analyses of contemporary trends in world economy also speak in favor of the "optimistic" proposition. The structural analysis shows that the world trade is growing and that this growth results both from the increase in intra-regional and from the increase in extra-regional trade value (Anderson i Snape 1994.)28. Actually, the intraregional trade has been growing faster, both by total value and by its share in world GDP. The extra-regional trade share in GDP was increasing in some regions – in North America, Asia-Pacific and Asian developing countries. However, the question arises as to whether the extra-regional trade would be greater without regional integrations or not? The answer would primarily depend both on the estimate of degree of some countries' trade policy restrictedness in such circumstances, and on factors such as geographic distance, transport communications, political relations among states. One should also take into account certain contemporary integration features – the primarily economic, rather than strategic motivation, and continuous expansion, which mostly includes countries that are significant economic partners. With respect to NAFTA, many believe that the negative effects on outsiders will be negligible, since the USA and Canada have actually been highly integrated economies for a long time already, while the Mexican economy is relatively small. The same view was pointed out by the EU, with respect to its expansion. It particularly refers to the inclusion of the remaining EFTA countries, because this will actually only complete, in institutional terms, the EU strong economic ties with these countries. Most EFTA countries have been part of the European economic area (EEA), i.e. the original EC-EFTA agreement, for a few years already, and conduct some 70% of their total international exchange with the Union countries. EU countries are also the most significant foreign-trade partners of Central and East Europe countries, and the recent joining the Union of several of them is not expected to cause a significant trade diversion. Besides, according to some earlier studies, during the previous wave of regionalism, in the 1967-70 period, the creation of trade in EEC was far greater than trade diversion: trade creation ranged from 13 to 23% of total imports, while trade diversion ranged from 1 to 6%. In Latin America, the new regionalism resulted in the faster growth of intra-regional trade, while the extra-regional exports and imports also continued to grow. Since early 1990s, the value of intra-regional imports registered the average annual growth of 18%. In the same time, the extra-regional exports were also growing, although at a lower rate of 9% average a year; its share in the total Latin America exports at the end of decade amounted to 18% as compared to 12% in 1990. In the 1990-1996 period, the intraregional imports grew by some 18% a year. The extra-regional imports were also growing very fast, reaching the 14% rate. These data reflect a great unbalance in the trade with extra-regional markets, since the imports from countries outside the region grew much faster the exports.30 Since the described trends point to the continued growth of extra-regional imports and exports, they also show that regional integration in Latin America has had the open regionalism character. Besides, the pending establishment of FTAA – Free Trade Area of Americas will gather, in the same group, the so-called "natural" trade partners – countries that have had an extremely extensive mutual exchange for years already, and the outsiders are therefore unlikely to be affected by strengthening of regionalism in this part of the world. Contemporary research shows that intra-regional trade is growing, however, same as interdependence between North America and East Asia and between the EU and East Asia. It can also be seen that the biggest and the **most powerful** countries, i.e. **blocs**, **are extremely dependent** **on the rest of the world in terms of trade.** For the EU, besides the intra-European trade, which is ranked first, foreign trade has the vital importance since it accounts for 10% of European GDP. In early 1990s, EU exchanged 40% of its foreign trade with non-members, 16% out of which with North America and East Asia together. EU therefore must keep in mind the rest of the world as well. The growing EU interest in outsiders is confirmed by establishing "The Euro-Med Partnership", which proclaimed a new form of cooperation between the EU and the countries at its South periphery32. Besides, the past few years witnessed a series of inter-regional agreements between the EU on the one hand, and certain groups from other regions on the other (MERCOSUR, CARICOM, ASEAN and GCC). In case of North America the ratio between intra-regional and inter-regional trade is 40:60, and in East Asia, it is 45:55. Any attempt to move towards significantly closed blocs ("fortresses") would require overcoming the significant inter-dependence between major trading blocs. Besides the analysis of contemporary trends in extra- and intra-regional trade, other research was conducted that was supposed to point to the reasons why the **new regionalism has** mainly a **non-negative impact on** outsiders and **global liberalization**. The distinctive features of new regionalism were also affected to characteristics of international economic and political environment it sprouted in. In the 1980s, economic nationalisms were not so expressed as in the interventionism years following the Second World War; however, the neo-liberalism represented by GATT activities did not find the "fertile ground” in all parts of the world. Regionalism growth in the circumstances of multilateral system existence is, among other things, the consequence of distrust in multilateralism. „The revival of the forces of regionalism stemmed from frustration with the slow pace of multilateral trade liberalization... If the world trade regime could not be moved ahead, then perhaps it was time for deeper liberalization within more limited groups of like-minded nations... Such efforts would at least liberalize some trade... and might even prod the other nations to go along with multilateral liberalization.“33 Kennedy's round and Tokyo round of trade negotiations under GATT auspices brought a certain progress in the global trade liberalization. However, the 1980s witnessed significant changes in the world economy that the GATT trade system was not up to. Besides. GATT had not yet managed to cover the entire trade in goods, since there were still exceptions in the trade in agricultural and textile products that particularly affected the USA and developing countries. GATT system of conflict resolutions, and its organizational and administrative mechanism in general also required revision. In this vacuum that was created in promoting trade and investment multilateralism from the point when GATT inadequacy became obvious until the start of the Uruguay round and the establishment of World Trade Organization, the wave of regionalism started spreading across the world again. Prodded by the Single European Act and the success of European integration, many countries turned to an alternative solution – establishment of new or expansion and deepening of the existing economic integrations. Even the USA, the multilateralism bastion until then, made a radical turn in their foreign-trade policy and started working on designing a North American integration.

### India

#### *Zero risk* of India-Pakistan conflict---*deterrence*.

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This minimalist approach is changing, however. Today, India is increasing all aspects of its nuclear weapons capability. For example, India is expanding fissile material production: India and Pakistan are the only countries in the world that are currently believed to be doing so (Crail 2011). India probably possesses enough weapons-grade plutonium to produce 100—130 nuclear warheads. It is increasing its production capacity with projects such as an unsafeguarded fast breeder reactor under construction near Kalpakkam (Kristensen and Norris 2012). The Indians are also improving their weapons-delivery capabilities. For example, the Agni V intermediate range ballistic missile, which the Indians recently tested, will have a range of approximately 5000 km, enabling it to reach targets anywhere in China. The BRAHMOS cruise missile, jointly developed with Russia, will be able to strike targets at ranges of 300—500km with conventional or nuclear warheads at supersonic speeds (Rahyuhin 2012). The Indians are also working to acquire sea-based launch capabilities, in addilion to land- and air-based platforms, to ensure that they are able to field a full nuclear triad (Davenport 2012; Kristensen and Norris 2012: 96). India is doing this mainly for security-related reasons — reasons largely unconnected with its oft-cited nemesis, Pakistan. Although analysts tend to focus their attention on the Indo-Pakistani conflict, the Pakistanis do not pose a serious, long-term strategic threat to India. The rivalry between the two countries is, of course, real. They have fought four wars against each other and they continue to battle one another over the territory of Kashmir, where Pakistan supports an anti-Indian insurgency; they have also trained sizable nuclear arsenals on one another.10 Nonetheless, Pakistan suffers from too many handicaps to pose a significant strategic threat. These include economic stagnation, sectarian and ethnic violence, a relatively small territorial and population base, and a dysfunctional government that is increasingly unable to provide its people with basic public goods (Lieven 201 1: 3—40; Bajoria 2009). In the military realm, Pakistan possesses highly capable conventional and nuclear forces. These forces, however, are mainly defensive and seek to prevent India from leveraging its superior conventional military capabilities to attack Pakistan." In addition to its strategic nuclear arsenal, Pakistan is developing a battlefield nuclear capacity consisting of small, short-range weapons stationed close to the Indo-Pakistani border. This will increase the likelihood of nuclear escalation in the event of any Indo- Pakistani conventional confrontation and may discourage India from undertaking aggressive military action against Pakistan (Khan 2011: 279; Basrur 2011). There is little likelihood, however, even with the addition of a battlefield capability, that Pakistan will be able to use its nuclear weapons to capture significant portions of Indian territory, to erode India's nuclear second-strike capability, or otherwise to achieve coercive leverage over India.

### AT: COVID war

#### COVIDs gone on for a year now -- no escalation means it’s extremely unlikely to trigger.

#### No war from COVID.

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The situation in Iraq illustrates how the coronavirus threat and policy responses to the pandemic could lead to an increase in violent conflict. But elsewhere in the world, researchers who tally conflict-event counts see stagnant or even falling numbers. And in some countries, conflict trends don’t appear to be responding to covid-19 at all. My research with Jeff Bloem documents considerable differences in the frequency of conflict events across several countries in recent months. Our findings suggest that the pandemic-conflict relationship seen in Iraq does not appear to exist in many other countries. How we did our research We used the Armed Conflict Location and Event Data (ACLED), a database that counts the number of conflict events daily around the world. For 2019 and 2020, ACLED includes more than 100 countries in Africa, Asia, Latin America and Eastern Europe — and tracks three categories of violent conflict: battles, violence against civilians and explosions/remote violence. We examine trends in the number of conflict events over time. To see whether the trend changes in response to covid-19, we look at what happened after the World Health Organization declared a global pandemic (March 11) or the country declared a lockdown. The relationship between pandemics and conflict is theoretically unclear. In some countries, job losses from the covid-19 pandemic mean people have fewer income-generating options — that can make participation in violence seem a more viable alternative. But if market disruptions and reduced global demand are driving down the value of natural resources such as oil wells, then we may see less conflict over control of such resources. We then conducted case studies based on our knowledge of countries with high rates of violent conflict before covid-19. These include countries with active civil wars (such as Syria) as well as countries with violent militia groups (such as the Philippines). Conflict during the coronavirus pandemic varies greatly Worldwide, we didn’t observe an increase in violent conflict. If anything, conflict has decreased, as the figure below shows.

Chart, line chart

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Violent conflict between March and August 2020 was 23 percent lower than violent conflict during the same period in 2019. Comparing these time periods, battles are down 20 percent and remote violence and bombings are down 40 percent. But violence against civilians — the deliberate attack of unarmed noncombatants by armed groups — continued at similar rates globally. Do these results suggest that covid-19 is fueling reductions in conflict? Probably not — in Syria, for instance, other factors may explain the declines. On March 5, Turkey and Russia brokered a cease-fire agreement covering the Idlib province in Syria. Idlib is the final front of the Syrian government campaign, so this cease fire led to a dramatic decline in violent events nationwide. But the Idlib cease fire wasn’t motivated by covid-19, and would have taken place anyway, pandemic or no pandemic. So even when violence is falling in the covid-19 era, we have to recognize that declines could be driven by events that happened to take place around the same time as the pandemic’s arrival. The same could be true in cases where violent conflict increased — these upticks in violence could have little to do with covid-19. In the ongoing war between Libya’s Government of National Accord (GNA) and the Libyan National Army (LNA), the number of violent events rose steadily in the first half of 2020. The trend line does not change at all when Libya started to respond to covid-19 in March. Libya’s daily violent-incident counts began to fall in late spring, which corresponds with the GNA’s successful seizure of critical holdings from the LNA militia. These results suggest that the GNA and LNA continued their campaigns relatively undeterred by the pandemic. Conflict eventually declined — but this largely reflects the LNA’s retreat. What about other countries? In places with active rebel groups and militias, such as the Philippines and Iraq, we find mixed results. Reports from both countries suggest that rebel groups and government officials (in the Philippines, but not Iraq) are increasing attacks to take advantage of the opportunities in the covid-19 climate. We see little if any change in the number of violent-conflict events per day in the Philippines. But we do see evidence of escalating conflict in Iraq (see figure), much of it attributed to a rise in Islamic State activity. What happens in the Philippines is not an exception. While violent conflict rose in Nigeria for some time, trends are relatively unchanged in Somalia and Congo. These mixed outcomes suggest that there’s still much to learn about pandemics and conflict.

### africa

#### No great power war over Africa---deterrence solves, and resource interests don’t cause escalation

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There is little credible potential for a Sino-American conflict over resources in Africa. Contrary to popular and perennial assumptions about resource wars, industry and energy analysis sources project adequate supply of conventional hydrocarbons beyond 2035.6 Given reservoir depletion curves, any tightening of supply would be gradual. The adequacy of supply is further augmented when tertiary production and unconventional sources are considered (such as shale and tar sands). U.S. strength in unconventional sources, and potential energy independence, further reduces the likelihood of a conflict. Even in a future with vastly inflated hydrocarbon prices, these costs pale in comparison to those associated with a Sino-American war, the economic costs of which likely fall more heavily on China than the United States.7 Global hydrocarbon resources are distributed via a fungible global market, with many stakeholders and moderate diversity of supply. This enables importing states to buy a predictable supply of hydrocarbons at reasonable and competing prices over long contracts. African sources do not constitute a majority of this supply chain, and supposed victory in a theoretical great-power resource war would not guarantee security of resource supply.

In sum, the potential for either China or the United States to be willing to enter war with a nuclear adversary over African oil, let alone other, less valuable resources, is extraordinarily small.8