### 1

#### Interpretation: medicines is a generic bare plural. The aff may not defend that member nations of the World Trade Organization reduce intellectual property protections for a subset of medicines.

Nebel 19 Jake Nebel [Jake Nebel is an assistant professor of philosophy at the University of Southern California and executive director of Victory Briefs.] , 8-12-2019, "Genericity on the Standardized Tests Resolution," Briefly, https://www.vbriefly.com/2019/08/12/genericity-on-the-standardized-tests-resolution/ SM

Both distinctions are important. Generic resolutions can’t be affirmed by specifying particular instances. But, since generics tolerate exceptions, plan-inclusive counterplans (PICs) do not negate generic resolutions. Bare plurals are typically used to express generic generalizations. But there are two important things to keep in mind. First, generic generalizations are also often expressed via other means (e.g., definite singulars, indefinite singulars, and bare singulars). Second, and more importantly for present purposes, bare plurals can also be used to express existential generalizations. For example, “Birds are singing outside my window” is true just in case there are some birds singing outside my window; it doesn’t require birds in general to be singing outside my window. So, what about “colleges and universities,” “standardized tests,” and “undergraduate admissions decisions”? Are they generic or existential bare plurals? On other topics I have taken great pains to point out that their bare plurals are generic—because, well, they are. On this topic, though, I think the answer is a bit more nuanced. Let’s see why. 1.1 “Colleges and Universities” “Colleges and universities” is a generic bare plural. I don’t think this claim should require any argument, when you think about it, but here are a few reasons. First, ask yourself, honestly, whether the following speech sounds good to you: “Eight colleges and universities—namely, those in the Ivy League—ought not consider standardized tests in undergraduate admissions decisions. Maybe other colleges and universities ought to consider them, but not the Ivies. Therefore, in the United States, colleges and universities ought not consider standardized tests in undergraduate admissions decisions.” That is obviously not a valid argument: the conclusion does not follow. Anyone who sincerely believes that it is valid argument is, to be charitable, deeply confused. But the inference above would be good if “colleges and universities” in the resolution were existential. By way of contrast: “Eight birds are singing outside my window. Maybe lots of birds aren’t singing outside my window, but eight birds are. Therefore, birds are singing outside my window.” Since the bare plural “birds” in the conclusion gets an existential reading, the conclusion follows from the premise that eight birds are singing outside my window: “eight” entails “some.” If the resolution were existential with respect to “colleges and universities,” then the Ivy League argument above would be a valid inference. Since it’s not a valid inference, “colleges and universities” must be a generic bare plural. Second, “colleges and universities” fails the upward-entailment test for existential uses of bare plurals. Consider the sentence, “Lima beans are on my plate.” This sentence expresses an existential statement that is true just in case there are some lima beans on my plate. One test of this is that it entails the more general sentence, “Beans are on my plate.” Now consider the sentence, “Colleges and universities ought not consider the SAT.” (To isolate “colleges and universities,” I’ve eliminated the other bare plurals in the resolution; it cannot plausibly be generic in the isolated case but existential in the resolution.) This sentence does not entail the more general statement that educational institutions ought not consider the SAT. This shows that “colleges and universities” is generic, because it fails the upward-entailment test for existential bare plurals. Third, “colleges and universities” fails the adverb of quantification test for existential bare plurals. Consider the sentence, “Dogs are barking outside my window.” This sentence expresses an existential statement that is true just in case there are some dogs barking outside my window. One test of this appeals to the drastic change of meaning caused by inserting any adverb of quantification (e.g., always, sometimes, generally, often, seldom, never, ever). You cannot add any such adverb into the sentence without drastically changing its meaning. To apply this test to the resolution, let’s again isolate the bare plural subject: “Colleges and universities ought not consider the SAT.” Adding generally (“Colleges and universities generally ought not consider the SAT”) or ever (“Colleges and universities ought not ever consider the SAT”) result in comparatively minor changes of meaning. (Note that this test doesn’t require there to be no change of meaning and doesn’t have to work for every adverb of quantification.) This strongly suggests what we already know: that “colleges and universities” is generic rather than existential in the resolution. Fourth, it is extremely unlikely that the topic committee would have written the resolution with the existential interpretation of “colleges and universities” in mind. If they intended the existential interpretation, they would have added explicit existential quantifiers like “some.” No such addition would be necessary or expected for the generic interpretation since generics lack explicit quantifiers by default. The topic committee’s likely intentions are not decisive, but they strongly suggest that the generic interpretation is correct, since it’s prima facie unlikely that a committee charged with writing a sentence to be debated would be so badly mistaken about what their sentence means (which they would be if they intended the existential interpretation). The committee, moreover, does not write resolutions for the 0.1 percent of debaters who debate on the national circuit; they write resolutions, at least in large part, to be debated by the vast majority of students on the vast majority of circuits, who would take the resolution to be (pretty obviously, I’d imagine) generic with respect to “colleges and universities,” given its face-value meaning and standard expectations about what LD resolutions tend to mean.

#### It applies to medicines:

#### 1] Upward entailment test – spec fails the upward entailment test because saying that nations ought to reduce IPP for one medicine does not entail that those nations ought to reduce IPP for all medicines

#### 2] Adverb test – adding “usually” to the res doesn’t substantially change its meaning because a reduction is permanent

#### Vote neg:

#### 1] Semantics outweigh:

#### T is a constitutive rule of the activity and a basic aff burden – they agreed to debate the topic when they came here

#### Jurisdiction – you can’t vote aff if they haven’t affirmed the resolution

#### It’s the only stasis point we know before the round so it controls the internal link to engagement – there’s no way to use ground if debaters aren’t prepared to defend it

#### 2] Limits – there are countless affs accounting for thousands of medicines – unlimited topics incentivize obscure affs that negs won’t have prep on – limits are key to reciprocal prep burden – potential abuse doesn’t justify foregoing the topic and 1AR theory checks PICs

#### There are over 20,000 affs

FDA 11/18 [(U.S. Food and Drug Administration, federal agency of the Department of Health and Human Service) “Fact Sheet: FDA at a Glance,” 11/18/2020] JL

There are over 20,000 prescription drug products approved for marketing.

FDA oversees over 6,500 different medical device product categories.

There are over 1,600 FDA-approved animal drug products.

There are about 300 FDA-licensed biologics products.

#### 3] Ground – spec guts core generics like innovation that rely on reducing IP for all medicines because individual medicines don’t affect the pharmaceutical industry broadly – also means there is no universal DA to spec affs

#### 4] TVA solves – read as an advantage to whole rez

#### Paradigm issues:

#### 1] Drop the debater – their abusive advocacy skewed the debate from the start

#### 2] Comes before 1AR theory – NC abuse is responsive to them not being topical

#### 3] Competing interps – reasonability invites arbitrary judge intervention and a race to the bottom of questionable argumentation

#### 4] No RVIs – fairness and education are a priori burdens – and encourages baiting – outweighs because if T is frivolous, they can beat it quickly

#### 5] Fairness is a voter ­– necessary to determine the better debater

#### 6] Education is a voter – why schools fund debate

### 2

#### US dominance is secured in biotech now, but China’s closing the gap fast – that allows geopolitical and economic advantages

Scott **Moore** **2020** [(Director of the Penn Global China Program at the University of Pennsylvania. Previously, Moore was a Young Professional and Water Resources Management Specialist at the World Bank Group, and Environment, Science, Technology, and Health Officer for China at the U.S.) “China’s Role In The Global Biotechnology Sector And Implications For U.S. Policy” <https://www.brookings.edu/wp-content/uploads/2020/04/FP_20200427_china_biotechnology_moore.pdf>] TDI //

EXECUTIVE SUMMARY Even by the standards of emerging technologies, **biotechnology has the potential to utterly transform geopolitics, economics**, and society in the 21st century. Yet while the United States has long been the world leader in most segments of the global biotechnology sector, **China is fast becoming a significant player**. This brief assesses the implications of China’s changing role in biotechnology for the United States, which span national security, data security, and economic competitiveness. On current trends the United States is likely to remain the world leader in most biotechnology areas. **However, the gap between China and the U.S. is narrowing in the biotechnology sector,** and U.S. policymakers must boost public investment, liberalize immigration and foreign student visa policies, and enact regulatory reforms to ensure America remains competitive. At the same time, areas like vaccine development and regulation of emerging technologies like synthetic biology present rich opportunities for Sino-U.S. cooperation. INTRODUCTION Thanks to extensive government funding for biomedical research, an unparalleled ability to translate basic research into commercial products and applications, and strong intellectual property protections, the United States has been the dominant global player in developing and commercializing biotechnology for decades.1 This dominance is reflected in the fact that United States accounted for almost half of all biotechnology patents filed worldwide from 1999 to 2013.2 However, in the intervening years, and just as in the case of artificial intelligence and other emerging technologies, other nations, including South Korea and Singapore, have invested heavily in developing their biotechnology sectors and industries. These efforts pale, however, in comparison to those of China, and the sheer size and scale of the Chinese biotechnology industry pose a range of economic, security, and regulatory issues for American policymakers. The determination of China’s one-party state to become a leading player in biotechnology is reflected by the rapid growth in investment in the sector. Some estimates claim that collectively, **China’s** central, local, and provincial **governments have invested over $100 billion in life sciences** research and development. Regardless of the true figure, official encouragement has led to a torrid place of investment. In just the two-year period from 2015 to 2017, venture capital and private equity investment in the sector totaled some $45 billion.3 The value of commercial deals concluded in the fields of biology, medicine and medical machine technology, meanwhile increased from 25.8 billion renminbi (RMB), or $3.6 billion, in 2011 to over 75 billion RMB ($10.6 billion) in 2017.4 Annual research and development expenditures by Chinese pharmaceutical firms, the foundation of the biotechnology sector, rose from some 39 billion RMB in 2014 ($5.5 billion) to over 53 billion RMB (US$7.5 billion) by 2017. Expenditure on new product development among these firms, an important indicator of future growth potential, increased from just over 40 billion RMB ($5.6 billion) to almost 60 billion ($8.4 billion).5 By Western standards, some of these figures are still low. Swiss drugmaker Roche, the world leader in biotechnology research and development, spent some $11 billion in 2018 alone.6 As these figures suggest, the development of China’s biotechnology sector paints a nuanced picture for U.S. policymakers. On one hand, the sector’s rapid growth, and high-level commitment to continued investment, means that China will inevitably become an increasingly important player in the global biotechnology sector, **with implications for national security, economic competitiveness, and regulation**. An executive from In-Q-Tel, the U.S. government’s inhouse national security venture capital fund, warned Congress in a November 2019 hearing, for example, that China “intends to own the biorevolution… and they are building the infrastructure, the talent pipeline, the regulatory system, and the financial system they need to do that.”7 The CEO of European drugmaker AstraZeneca has similarly opined that “Much of [China’s] innovation in the last three to four years has been ‘me too,’ but now on the horizon we can see firstin-class innovation.”8 Yet on the other hand, while China’s biotechnology sector will almost certainly continue to grow in scale, sophistication, and competitiveness, there is little reason to believe on current trends that the United States will lose its edge in the sector. Indeed, the biggest risk to the global competitiveness of the U.S. biotechnology industry likely comes from the prospect of declining public investment and reduced mobility for world-class researchers and industry professionals. Moreover, the COVID-19 crisis underscores both the importance of continued investment in biotechnology and the many challenges to promoting effective international cooperation on global health security. This brief first examines the key policies and actors in China’s biotechnology sector, then offers an assessment of the sector’s current capabilities and future trends, and finally further explores the implications of developments in Chinese biotechnology for U.S. policy.

#### The aff’s waiving of IP for just the U.S. doesn’t solve but it does give away sensitive national security information that allows China to lead ahead in biotech

Josh Rogin 4-8. [(Washington Post Columnist covering National Security Issues.) “Opinion: The wrong way to fight vaccine nationalism” https://www.washingtonpost.com/opinions/global-opinions/the-wrong-way-to-fight-vaccine-nationalism/2021/04/08/9a65e15e-98a8-11eb-962b-78c1d8228819\_story.html ] TDI //

Americans will not be safe from covid-19 until the entire world is safe. That basic truth shows why vaccine nationalism is not only immoral but also counterproductive. But the simplest solutions are rarely the correct ones, **and some countries are using the issue to advance their own strategic interests**. The Biden administration must reject the effort by some nations to turn our shared crisis into their opportunity. As the inequities of vaccine distribution worldwide grow, a group of more than 50 developing countries led by India and South Africa is pushing the World Trade Organization to dissolve all international intellectual property protections for pandemic-related products, which would include vaccine research patents, manufacturing designs and technological know-how. The Trump administration rejected the proposal to waive the agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) for the pandemic when it was introduced in October. Now, hundreds of nongovernmental organizations and dozens of Democratic lawmakers are pushing the Biden administration to support the proposal. But many warn **the move would result in the United States handing over a generation of advanced research** — much of it funded by the U.S. taxpayer — **to** our country’s greatest competitors, above all **China**. In Congress, there’s justified frustration with the United States’ failure to respond to China’s robust vaccine diplomacy, in which Beijing has conditioned vaccine offers to pandemic-stricken countries on their ignoring security concerns over Chinese telecom companies or abandoning diplomatic recognition of Taiwan. There’s also a lot of anger at Big Pharma among progressives for profiting from the pandemic. “We are in a race against time, and unfortunately Big Pharma is standing in the way of speedily addressing this problem,” Rep. Jan Schakowsky (D-Ill.), who supports the effort to waive intellectual property protections, told me in an interview. “I think the real security issue is that while the United States balks in making sure that we help ourselves, that these adversaries will just jump right in.” Schakowsky argued that alternative measures for helping poor countries manufacture vaccines are simply not moving fast enough to save lives and that the United States has a duty to respond. House Speaker Nancy Pelosi (D-Calif.) personally conveyed her support for the waiver to President Biden, Schakowsky said. But Big Pharma is just one piece of the puzzle. Countries such as India and South Africa have been trying to weaken WTO intellectual property protections for decades. **The mRNA technology that underpins the Pfizer and Moderna vaccines was funded initially by the Defense Advanced Research Projects Agency and has national security implications.** Inside the Biden administration, the National Security Council has already convened several meetings on the issue. The waiver is supported by many global health officials in the White House and at the U.S. Agency for International Development, who believe the United States’ international reputation is suffering from its perceived “America First” vaccine strategy. On Wednesday, U.S. Trade Representative Katherine Tai spoke with WTO Director General Ngozi Okonjo-Iweala about the waiver issue. USTR is convening its own interagency meetings on the issue, which many see as a move to reassert its jurisdiction over WTO matters. If and when this does get to Biden’s desk, he will also hear from national security officials who believe that waiving TRIPS would result in the forced transfer of national security-sensitive technology to China, **a country that strives to dominate the biotechnology** ***field*** as part of its Made in China 2025 strategy. **Once countries such as China have this technology, they will apply their mercantilist industrial models to ensure their companies dominate these strategically important industries, potentially erasing thousands of U.S. jobs.** “We would be delivering a competitive advantage to countries that are increasingly viewed as our adversaries, at taxpayer expense, when there are other ways of doing this,” said Mark Cohen, senior fellow at the University of California at Berkeley Law School. **A preferable approach would be to build more vaccine-manufacturing capacity** in the United States and then give those vaccines to countries in need, said Cohen. The U.S. pharmaceutical industry would surely benefit, but **that’s preferable to being dependent on other countries when the next pandemic hits.** “If there’s anything that the pandemic has taught us, it’s that we need to have a robust supply chain, for ourselves and for the world generally,” Cohen said. What’s more, it’s not clear that waiving the TRIPS agreement for the pandemic would work in the first place. Bill Gates and others involved in the current vaccine distribution scheme have argued that it would not result in more vaccines, pointing out that licensing agreements are already successfully facilitating cooperation between patent-holding vaccine-makers and foreign manufacturers. Critics respond that such cooperation is still failing to meet the urgent needs in the developing world. Vaccine equity is a real problem, but waiving intellectual property rights is not the solution. If the current system is not getting shots into the arms of people in poor countries, we must fix that for their sake and ours. But the pandemic and our responses to it have geopolitical implications, whether we like it or not. **That means helping the world and thinking about our strategic interests at the same time.**

#### China will convert biotechnology gains to military advantages, undermining US primacy – specifically true in the context of vaccines

Mercy A. Kuo 2017 [(Executive Vice President at Pamir Consulting.) “The Great US-China Biotechnology and Artificial Intelligence Race” <https://thediplomat.com/2017/08/the-great-us-china-biotechnology-and-artificial-intelligence-race/>] TDI //

Trans-Pacific View author Mercy Kuo regularly engages subject-matter experts, policy practitioners, and strategic thinkers across the globe for their diverse insights into the U.S. Asia policy. This conversation with Eleonore Pauwels – Director of Biology Collectives and Senior Program Associate, Science and Technology Innovation Program at the Wilson Center in Washington D.C. – is the 104th in “The Trans-Pacific View Insight Series.” Explain the motivation behind Chinese investment in U.S. genomics and artificial intelligence (AI). With large public and private investments inland and in the U.S., China plans to become the next AI-Genomics powerhouse, which indicates that these technologies will soon converge in China. China’s ambition is to lead the global market for precision medicine, **which necessitates acquiring strategic tech**nological and human capital in both genomics and AI. And the country excels at this game. A sharp blow in this U.S.-China competition happened in 2013 when BGI purchased Complete Genomics, in California, with the intent to build its own advanced genomic sequencing machines, therefore securing a technological knowhow mainly mastered by U.S. producers. There are significant economic incentives behind China’s heavy investment in the increasing convergence of AI and genomics. This golden combination will drive precision medicine to new heights by developing a more sophisticated understanding of how our genomes function, leading to precise, even personalized, cancer therapeutics and preventive diagnostics, such as liquid biopsies. By one estimate, the liquid biopsy market is expected to be worth $40 billion in 2017. Assess the implications of iCarbonX of Shenzhen’s decision to invest US$100 million in U.S.-company PatientsLikeMe relative to AI and genomic data collection. iCarbonX is a pioneer in AI software that learns to recognize useful relationships between large amounts of individuals’ biological, medical, behavioral and psychological data. Such a data-ecosystem will deliver insights into how an individual’s genome is mutating over time, and therefore critical information about this individual’s susceptibilities to rare, chronic and mental illnesses. In 2017, iCarbonX invested $100 million in PatientsLikeMe, getting a hold over data from the biggest online network of patients with rare and chronic diseases. If successful, this effort could turn into genetic gold, making iCarbonX one of the wealthiest healthcare companies in China and beyond. The risk factor is that iCarbonX is handling more than personal data, but potentially vulnerable data as the company uses a smartphone application, Meum, for customers to consult for health advice. Remember that the Chinese nascent genomics and AI industry relies on cloud computing for genomics data-storage and exchange, creating, in its wake, new vulnerabilities associated with any internet-based technology. This phenomenon has severe implications. How much consideration has been given to privacy and the evolving notion of personal data in this AI-powered health economy? And is our cyberinfrastructure ready to protect such trove of personal health data from hackers and industrial espionage? In this new race, will China and the U.S. have to constantly accelerate their rate of cyber and bio-innovation to be more resilient? Refining our models of genomics data protection will become a critical biosecurity issue. Why is Chinese access to U.S. genomic data a national security concern? **Genomics** and computing research **is inherently dual-use, therefore a strategic advantage in a nation’s security arsenal.** Using AI systems to understand how the functioning of our genomes impacts our health **is of strategic importance for biodefense.** This knowledge will lead to increasing developments at the forefront of medical countermeasures, **including vaccines**, antibiotics, and targeted treatments relying on virus-engineering and microbiome research. Applying deep learning to genomics data-sets could help geneticists learn how to use genome-editing (CRISPR) to efficiently engineer living systems, but also to treat and, even “optimize,” human health, **with potential applications in military enhancements**. A $15 million partnership between a U.S. company, Gingko Bioworks, and DARPA aims to genetically design new probiotics as a protection for soldiers against a variety of stomach bugs and illnesses. China could be using the same deep learning techniques on U.S. genomics data to better comprehend how to develop, patent and manufacture tailored cancer immunotherapies in high demand in the United States. Yet, what if Chinese efforts venture into understanding how to impact key genomics health determinants relevant to the U.S. population? **Gaining access to increasingly large U.S. genomic data-sets gives China a knowledge advantage into leading the next steps in bio-military research.** Could biomedical data be used to develop bioweapons? Explain. Personalized medicine advances mean that personalized bio-attacks are increasingly possible. The combination of AI with biomedical data and genome-editing technologies will help us predict genes most important to particular functions. Such insights will contribute to knowing how a particular disease occurs, how a newly-discovered virus has high transmissibility, but also why certain populations and individuals are more susceptible to it. Combining host susceptibility information with pathogenic targeted design, **malicious actors could engineer pathogens that are tailored to overcome the immune system or the microbiome of specific populations.**

#### Maintenance of the US-led LIO is key to reduce a host of existential threats – establishes great-power peace.

Brands 18. [(Hal Brands is a Henry Kissinger Distinguished Professor at Johns Hopkins University’s School of Advanced International Studies, Scholar at the American Enterprise Institute. “America’s Global Order Is Worth Fighting For, Bloomberg Opinion, Politics & Policy,” August 14, 2018, Bloomberg. <https://www.bloomberg.com/opinion/articles/2018-08-14/america-s-global-order-is-worth-fighting-for>] TDI //

The first argument is easily disposed of. Yes, the postwar world has been thoroughly imperfect, featuring nuclear arms races, genocides, widespread poverty and other scourges. But the world has always been imperfect, and by any meaningful comparison, the last seven decades have been a veritable golden age. The liberal international economic order has led to an explosion of domestic and global prosperity: According to World Bank data, both U.S. and global per capita income have increased roughly three-fold (in inflation-adjusted terms) since 1960, with U.S. gross domestic product increasing nearly six-fold. The U.S. system of alliances and forward military deployments has contributed critically to the longest period of great-power peace in modern history, and the incidence of war and conquest more broadly have dropped dramatically. The number of democracies in the world has increased from perhaps a dozen during World War II to well over 100 today; respect for basic human rights has also reached impressive levels. As a bevy of scholarship has shown, the policies that the U.S. has pursued and the international order it has built have contributed enormously and directly to these outcomes. If the liberal international order can’t be considered a smashing success, no international order could be. The second critique is also overstated. It is true that Washington, like all great powers throughout history, has been willing to bend the rules to get its way. It is hard to reconcile Cold War-era interventions in Guatemala, Chile and other countries with a professed solicitude for human rights and democracy; the Iraq War of 2003 is only one instance in which the U.S. brushed aside the concerns of international organizations such as the U.N. Security Council. Likewise, when the U.S. government determined that the Bretton Woods system of monetary relations no longer suited its interests in the 1970s, it terminated that scheme and insisted on creating a more favorable one. But again, the proper standard here is not sainthood but reality. And the U.S. has generally enlisted its power in the service of universal values such as democracy and human rights; it has, more often than not, promoted a positive-sum international system in which like-minded nations can be secure and wealthy. This goes back to the very beginning of the liberal order: Washington did not seek to hold its defeated adversaries in subjugation after World War II; it rebuilt Japan and western Germany into thriving, democratic allies that became fierce economic competitors to the U.S. The U.S. has taken this approach not simply because it wanted to do good in the world — powerful as this motivation is — but because of a hard-headed desire to do good for itself. In an interdependent global environment, American officials have long calculated, the U.S. cannot divorce its own well-being from that of the wider world. And in contrast to how other great powers — Imperial Japan, for instance, or the Soviet Union — ruled their spheres of influence, American behavior has been positively enlightened. It is this relatively benign behavior that has convinced so many countries to tolerate American leadership — and it is the emergence of a darker form of U.S. hegemony under the Trump administration that so profoundly worries them today. As for the third critique, the premise is right, but the conclusion can easily go too far. It is always dangerous to become so enraptured by past achievements that one loses sight of the need for adaptation in the future. This is particularly true today, because the strength of the liberal order is being tested from within and without, by issues ranging from unequal burden-sharing among American allies to the ambivalence of the American people themselves. There is little evidence to suggest, however, that either American power or the liberal order it supports have eroded so dramatically that Washington’s postwar project cannot be sustained. Quite the contrary — the U.S. is likely to remain the world’s strongest power for decades to come.

### 3

#### Climate Patents and Innovation high now and solving Warming but patent waivers set a dangerous precedent for appropriations - the mere threat is sufficient is enough to kill investment.

Brand 5-26, Melissa. “Trips Ip Waiver Could Establish Dangerous Precedent for Climate Change and Other Biotech Sectors.” IPWatchdog.com | Patents & Patent Law, 26 May 2021, www.ipwatchdog.com/2021/05/26/trips-ip-waiver-establish-dangerous-precedent-climate-change-biotech-sectors/id=133964/. //sid

The biotech industry is making remarkable advancestowards 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](https://www.ipwatchdog.com/2021/04/19/waiving-ip-rights-during-times-of-covid-a-false-good-idea/id=132399/)), 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](https://www.ipwatchdog.com/2021/05/05/tai-says-united-states-will-back-india-southafrica-proposal-waive-ip-rights-trips/id=133224/) 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. 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 compensationand 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 proprietaryknow-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 internationalcollaborations. 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](https://www.bio.org/sites/default/files/2021-04/Climate%20Report_FINAL.pdf). 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 investat the current and required levels**.**

#### Climate change causes extinction --- latest studies.

Sprat and Dunlop 19 (David Spratt and Ian Dunlop, \*Research Director for Breakthrough National Centre for Climate Restoration and co-author of *Climate Code Red: The case for emergency action*; \*\*member of the Club of Rome AND formerly an international oil, gas and coal industry executive, chairman of the Australian Coal Association, chief executive of the Australian Institute of Company Directors, and chair of the Australian Greenhouse Office Experts Group on Emissions Trading, "Existential climate-related security risk: A scenario approach," Breakthrough National Centre for Climate Restoration, 5-30-2019, https://docs.wixstatic.com/ugd/148cb0\_90dc2a2637f348edae45943a88da04d4.pdf, Date Accessed: 7-5-2019, SB)

2050: By 2050, there is broad scientific acceptance that system tipping-points for the West Antarctic Ice Sheet and a sea-ice-free Arctic summer were passed well before 1.5°C of warming, for the Greenland Ice Sheet well before 2°C, and for widespread permafrost loss and large-scale Amazon drought and dieback by 2.5°C. The “hothouse Earth” scenario has been realised, and Earth is headed for another degree or more of warming, especially since human greenhouse emissions are still significant. While sea levels have risen 0.5 metres by 2050, the increase may be 2–3 metres by 2100, and it is understood from historical analogues that seas may eventually rise by more than 25 metres. Thirty-five percent of the global land area, and 55 percent of the global population, are subject to more than 20 days a year of lethal heat conditions, beyond the threshold of human survivability. The destabilisation of the Jet Stream has very significantly affected the intensity and geographical distribution of the Asian and West African monsoons and, together with the further slowing of the Gulf Stream, is impinging on life support systems in Europe. North America suffers from devastating weather extremes including wildfires, heatwaves, drought and inundation. The summer monsoons in China have failed, and water flows into the great rivers of Asia are severely reduced by the loss of more than one-third of the Himalayan ice sheet. Glacial loss reaches 70 percent in the Andes, and rainfall in Mexico and central America falls by half. Semi-permanent El Nino conditions prevail. Aridification emerges over more than 30 percent of the world’s land surface. Desertification is severe in southern Africa, the southern Mediterranean, west Asia, the Middle East, inland Australia and across the south-western United States. Impacts: A number of ecosystems collapse, including coral reef systems, the Amazon rainforest and in the Arctic. Some poorer nations and regions, which lack capacity to provide artificially-cooled environments for their populations, become unviable. Deadly heat conditions persist for more than 100 days per year in West Africa, tropical South America, the Middle East and South-East Asia, which together with land degradation and rising sea levels contributes to 21 perhaps a billion people being displaced. Water availability decreases sharply in the most affected regions at lower latitudes (dry tropics and subtropics), affecting about two billion people worldwide. Agriculture becomes nonviable in the dry subtropics. Most regions in the world see a significant drop in food production and increasing numbers of extreme weather events, including heat waves, floods and storms. Food production is inadequate to feed the global population and food prices skyrocket, as a consequence of a one-fifth decline in crop yields, a decline in the nutrition content of food crops, a catastrophic decline in insect populations, desertification, monsoon failure and chronic water shortages, and conditions too hot for human habitation in significant food-growing regions. The lower reaches of the agriculturally-important river deltas such as the Mekong, Ganges and Nile are inundated, and significant sectors of some of the world’s most populous cities — including Chennai, Mumbai, Jakarta, Guangzhou, Tianjin, Hong Kong, Ho Chi Minh City, Shanghai, Lagos, Bangkok and Manila — are abandoned. Some small islands become uninhabitable. Ten percent of Bangladesh is inundated, displacing 15 million people. According to the Global Challenges Foundation’s Global Catastrophic Risks 2018 report, even for 2°C of warming, more than a billion people may need to be relocated due to sea-level rise, and In high-end scenarios “the scale of destruction is beyond our capacity to model, with a high likelihood of human civilisation coming to an end”. 22

### 4

#### CP Text: Member nations of the World Trade organization should revise TRIPS by

#### Extending patent protection of medicine by 3 weeks

#### Replacing the compulsory licensing provision with a requirement that patent protection is contingent upon drug donation, using previous qualification standards

#### **Revising the parallel import article to prohibit the flow of donated medicine into wealthy markets**

#### Solves equitable medicine access

**Andreassen 14** Tom Andreassen [Tom Andreassen is Ph.D-candidate at the Programme for Applied Ethics at the Norwegian University of Science and Technology, Trondheim]. (2014). Patent Funded Access to Medicines. Developing World Bioethics Volume 15 Number 3 2015 pp 152–161, 15(3). [https://onlinelibrary.wiley.com/doi/10.1111/dewb.12058 //](https://onlinelibrary.wiley.com/doi/10.1111/dewb.12058%20//) ash

Irrespective of the extent to which the TRIPS induced IP protection makes essential drugs unattainable to the poorest, solutions could be sought that utilize the patent system in creating such incentives to promote access, even in the short term. The opportunity to be explored is how an extension of the patent period in certain cases, beyond the time sufficient to recover the inventor company’s expenses and to make for a decent profit, could create funding for free supplies of essential drugs to developing countries according to need and capacity. If such a step, which should be both technically and politically feasible, were to be taken, the developing countries themselves would have an incentive to look for solutions as to how the medicines and treatments could be distributed and delivered.

For reasons thoroughly discussed by others,41 the flexibility provisions in TRIPS have not resulted in any significant improvement of access to drugs among poor populations. Parallel imports, one of the provisions, show no sign of taking on the proportions needed to accommodate the severely poor.42 One other flexibility provision in TRIPS, that of compulsory licensing has proven not to be effective despite the fact that it was reiterated by the WTO ministers at the Doha meeting.43 The voluntary donations made by the pharmaceutical industry are selective instead of comprehensive, thus these cannot secure the human right to basic health for the poor.44 If the donations could be systematized, however, they might come closer to filling that function. Systematic donation of medicines, financed through time-extended patents, could be included in TRIPS, since the Agreement is so closely associated with the current situation of lack of access due to high prices.

As noted above, the recuperation of the investments in a new medicine is largely realized in high cost markets. It is estimated that between 80 and 90 per cent of the sales of patented medicine occur in the OECD countries.45 This is where the recovery of costs in research and development takes place, and not in the developing countries. Jean O. Lanjouw and William Jack have pointed out that the developed countries already offered patents on pharmaceuticals before TRIPS, and that ‘the main result of the harmonization of standards required by TRIPS is to strengthen pharmaceutical patent rights in a group of poorer countries.’46

Lanjouw and Jack comments on the effect of extending the patent period: ‘Lengthening patent protection for a couple of weeks in rich countries, for example, could provide returns equivalent to the introduction of 20-year patents in the developing world.’47 This concerns then the compensation for lost sales in developing countries. Another matter is the cost of producing the needed drugs for free supply. Here it is significant that the patent holder will already have its own, or they have out-licensed, ongoing production. The cost of R&D, marketing and testing for approval, as well as setting up production, will be covered by the ordinary patent period and should therefore be kept outside the calculation of cost for the added production. Details need to be worked out regarding the calculation of the cost and the length of the extended patent period, and the companies will most likely need to accept an authorized auditing instrument verifying the data necessary for the calculations.

The average effective sales protection is, as shown above, ten years. It is safe to assume that the extension needed for added production is a small fraction of that. Indeed it has been said by Harvey Bale, then the director general of the International Federation of Pharmaceutical Manufacturers Associations, that ‘Companies are able, through sales they make in developed countries, to offset the cost of donating drugs to poor countries.’48

Here we see a strong reason to keep the patent institute in place instead of weakening it. If surplus values generated by extended patent protection could be used to make the donations programs comprehensive, then the patent system, instead of cutting people off from access to essential medicines, actually would be the arrangement that made them accessible to people that could not even afford generic medicines. Lanjouw and Jack in fact concludes that certain medicines should be made available to the very poorest countries free of charge.49

An extended patent period would imply that the introduction of generic drugs and the price competition that follows from it would be slightly postponed. The cost for this, in that the price reduction is delayed in wealthier countries, would come as a result of expanded market protection through TRIPS and not from any new demands from patients in developing countries. They are cut off from generic medicines by the Agreement, a trait that needs to be addressed more actively by the Agreement itself.

The criteria for triggering donations of drugs would, taken together, look similar to the rational justification for a compulsory license. They would be i. public noncommercial use or ii. The widespread outbreak of a disease in a WTO country. iii. The country itself has no production capacity or purchasing capacity to meet the need. iv. The country can show plans for distributing the medicines and treatment of patients. v. The first four criteria are confirmed by an independent body like the WTO itself, or more suitably the WHO. Regarding the fourth point, an auditing instrument might be necessary at this end also, assuring the accuracy of the receiving capacity.

In TRIPS the compulsory licensing provision, which has not proven to be effective, should then be replaced by a requirement that patent protection is available in the WTO countries only under the condition that when the criteria are confirmed by WHO to prevail in any (WTO) country, the patentee is obliged to make the necessary drug donations.50 To compensate for the cost, an extension of the patent period is offered.

The receiving country could not ask for more drugs than it can distribute and make effective use of. **Focus would therefore shift to local conditions in the event that essential medicines do not reach where they are critically needed**. Conditions that would need attention could be the host country’s distributive capacity, its allocation of resources to meet an emergency and so forth.51 This access of free medicines would serve as an incentive for governments to provide infrastructure like electricity and clean water as argued by Novak, citing Ellen ‘t Hoen from Doctors Without Borders: ‘We have seen that in countries like Cameroon, Mozambique and Kenya that as the cost of drugs comes down, governments start to talk about infrastructure, and patient access to the drugs goes up.’52

The donated medicine would still be patented and adaptive measures should be built into the agreement to secure that such medicine will not flow into the wealthier markets. This would imply a revision of the parallel import article.53

In the event that the country where the emergency occurs is not capable or for other reasons is unready to receive donated medicine and distribute it, NGOs operating within its borders can act on behalf of national or regional athorities. The NGOs could hand in documentation on the quantity of medicine they are able to deliver to patients and function as the partner of the donation authority (WHO for example) in cases where national health authorities fail their obligation.

The revised TRIPS would serve the interest of not only one party, i.e. society, but also the pharmaceutical industry, which would see a key reason for its poor reputation disappear. The main advantage for this industry would be the abolition of the threat of compulsory licenses and thereby the security and predictability of uninfringeable patents.

The concern for intellectual property rights to essential medicines and the concern for the human right to access such medicine would be better balanced through a revision of TRIPS implying systematized and patent funded drug donations. The biggest gain that would result from the revision, however, might be the shift of focus mentioned above. The attention which has up until now been given to the pharmaceutical industry and the patent law in the WTO would give way to renewed attention to all those other factors that are making medicines inaccessible to the poor, thus providing incentives to their governments, their neighbors and the international institutions to build competence, health institutions and distribution capacity.

### Case

#### A vaccine waiver greenlights counterfeit medicine – independently turns Case.

Conrad 5-18 John Conrad 5-18-2021 "Waiving intellectual property rights is not in the best interests of patients" <https://archive.is/vsNXv#selection-5353.0-5364.0> (president and CEO of the Illinois Biotechnology Innovation Organization in Chicago.)//Elmer

The Biden's administration's support for India and South Africa's proposal before the World Trade Organization to temporarily waive anti-COVID vaccine patents to boost its supply will fuel the **development of counterfeit vaccines and weaken the already strained global supply chain**. The proposal will not increase the effective number of COVID-19 vaccines in India and other countries. The manufacturing standards to produce COVID-19 vaccines are **exceptionally complicated**; it is unlike any other manufacturing process. To ensure patient safety and efficacy, only manufacturers with the **proper facilities and training should produce the vaccine, and they are**. Allowing a temporary waiver that permits compulsory licensing to allow a manufacturer to export counterfeit vaccines will **cause confusion and endanger public health**. For example, between 60,000 and 80,000 children in Niger with fatal falciparum malaria were treated with a counterfeit vaccine containing incorrect active pharmaceutical ingredients, resulting in more than **100 fatal infections.** Beyond the patients impacted, counterfeit drugs erode public confidence in health care systems and the pharmaceutical industry. Vaccine hesitancy is a rampant threat that feeds off of the distribution of misinformation. Allowing the production of vaccines from improper manufacturing facilities further opens the door for antivaccine hacks to stoke the fear fueling **vaccine hesitance**.

**The problem is resources not IP**  
Garde et al 21 Damian Garde [national biotech reporter for STAT], Helen Branswell [writer at STAT covering infectious diseases and global health], Matter Herper [senior writer at STAT covering medicine], May 6, 2021, “Waiver of patent rights on Covid-19 vaccines, in near term, may be more symbolic than substantive " <https://www.statnews.com/2021/05/06/waiver-of-patent-rights-on-covid-19-vaccines-in-near-term-may-be-more-symbolic-than-substantive/> //kangu

Experts suggested the earliest the world could expect to see additional capacity flowing from the waiver — if it’s approved at the World Trade Organization — would be in 2022. Prashant Yadav, a supply chain expert and senior fellow at the Center for Global Development, said the biggest barrier to increasing the global vaccine supply is a lack of raw materials and facilities that manufacture the billions of doses the world needs. Temporarily suspending some intellectual property, as the U.S. proposes to do, would have little effect on those problems, he said. “My take is: By itself, it will not get us much benefit in increased manufacturing capacity,” Yadav said. “But as part of a larger package, it can.” That larger package would include wealthy nations like the U.S. mounting an Operation Warp Speed-style effort to invest in manufacturing in low-income countries, he said, using their vast financial resources to actually produce vaccine doses rather than solely targeting patents. Lawrence Gostin, director of the O’Neill Institute for National and Global Health Law at Georgetown Law, said the waiver is necessary but hardly sufficient. It will likely take months of international infighting before the proposal would take effect, he said, months during which would-be manufacturers would not have the right to start producing vaccines. “We’re not talking about any immediate help for India or Latin America or other countries going through an enormous spread of the virus,” Gostin said. “While they’re going to be negotiating the text, the virus will be mutating.” Even James Love, director of the nonprofit Knowledge Ecology International and a longtime advocate of intellectual property reform, acknowledges a patent waiver would be a valuable first step, not a panacea. The fairly narrow proposal would mostly allow countries to issue compulsory licenses, essentially allowing third-party manufacturers to make and sell other companies’ patented products, while also helping free up some information about how that manufacturing is done. But that, at least, could provide a financial incentive for those third parties to invest in vaccine production. “In our experience, when the legal barriers disappear and there’s a market, capacity increases faster than you would think,” he said. In October, Moderna vowed not to enforce its Covid-19-related patents for the duration of the pandemic, opening the door for manufacturers that might want to copy its vaccine. But to date, it’s unclear whether anyone has, despite the vaccine’s demonstrated efficacy and the worldwide demand for doses. That underscores the drug industry’s case that patents are just one facet of the complex process of producing vaccines. “There are currently no generic vaccines primarily because there are hundreds of process steps involved in the manufacturing of vaccines, and thousands of check points for testing to assure the quality and consistency of manufacturing. One may transfer the IP, but the transfer of skills is not that simple,” said Norman Baylor, who formerly headed the Food and Drug Administration’s Office of Vaccines Research and Review, and who is now president of Biologics Consulting. While there are factories around the world that can reliably produce generic Lipitor, vaccines like the ones from Pfizer and Moderna — using [messenger RNA technology](https://www.statnews.com/2020/10/26/mrna-vaccines-face-their-first-test-in-the-fight-against-covid-19-how-do-they-work/) — require skilled expertise that even existing manufacturers are having trouble sourcing. “In such a setting, imagining that someone will have staff who can create a new site or refurbish or reconfigure an existing site to make mRNA [vaccine] is highly, highly unlikely,” Yadav said. There are already huge constraints on some of the raw materials and equipment used to make vaccines. Pfizer, for instance, had to appeal to the Biden administration to use the Defense Production Act to help it cut the line for in-demand materials necessary for manufacturing. Rajeev Venkayya, head of Takeda Vaccines — which is not producing its own Covid vaccine but is helping to make vaccine for Novavax — said supply shortages are impacting not just Covid vaccine production but the manufacture of other vaccines and biological products as well. “This is an industry-wide … looming crisis that will not at all be solved by more tech transfers,” Venkayya said. He suggested many of the people advocating for this move are viewing the issue through the prism of drug development, where lifting intellectual property restrictions can lead to an influx of successful generic manufacturing.

#### Plan increases price of scarce materials and results in costly, ineffective facilities

Mcmurry-Heath 8/18 (Michelle Mcmurry-Heath, [physician-scientist and president and CEO of the Biotechnology Innovation Organization.], 8-18-2021, “Waiving intellectual property rights would harm global vaccination“, STAT, accessed: 8-19-2021, https://www.statnews.com/2021/08/18/waiving-intellectual-property-rights-compromise-global-vaccination-efforts/) ajs

Covid-19 vaccines are already remarkably cheap, and companies are offering them at low or no cost to low-income countries. Poor access to clinics and transportation are barriers in some countries, but the expense of the shot itself is not. In fact, if the World Trade Organization grants the IP waiver, it could make these vaccines more expensive.

Here’s why. Before Covid-19 emerged, the world produced at most [5.5 billion doses](https://www.barrons.com/articles/a-plan-to-break-the-vaccine-manufacturing-bottleneck-51621952245) of various vaccines every year. Now the world needs an additional [11 billion doses](https://www.who.int/director-general/speeches/detail/director-general-s-opening-remarks-at-the-g7-summit---12-june-2021) — including billions of doses of mRNA vaccines that no one had ever mass-manufactured before — to fully vaccinate every eligible person on the planet against the new disease.

Even as Covid-19 vaccines were still being developed, pharmaceutical companies began retrofitting and upgrading existing facilities to produce Covid-19 vaccines, at a cost of $40 to $100 million each. Vaccine developers also licensed their technologies to well-established manufacturers, like the Serum Institute of India, to further increase production. As a result, almost every facility in the world that can quickly and safely make Covid-19 vaccines is already doing so, or will be in the next few months.

The cutting-edge mRNA vaccines from Moderna and Pfizer-BioNTech face an even bigger capacity issue. Since the underlying technology is new, there are no mRNA manufacturing facilities sitting idle with operators just waiting for licensing agreements to turn on the machines. Nor are there trained personnel to run them or ensure safety and quality control. Embedding delicate mRNA vaccine molecules inside lipid nanoparticle shells at temperatures colder than Antarctica isn’t as easy as following a recipe from Bon Appetit.

Another big barrier to producing more shots is a shortage of raw materials. Suspending intellectual property protections and allowing any manufacturer to try to produce these vaccines, regardless of preparedness or experience, would increase the demand for scarce raw materials, driving up prices and impeding production.

Nor could all companies that suddenly get a green light due to suspended intellectual property rights produce vaccines as cheaply or quickly as existing manufacturers. Building a new vaccine manufacturing facility costs about $700 million, takes many months — if not years — to build and, once opened, requires another [four to six months](https://www.americanprogress.org/issues/healthcare/reports/2020/07/28/488196/comprehensive-covid-19-vaccine-plan/) to start producing vaccine doses. And because negotiations surrounding the WTO waiver, which began this summer, could take until December before they are completed, it wouldn’t be until well into 2023 or later that any additional doses would become available.

That’s slower than our current production rate. According to a report from Duke University’s [Global Health Innovation Center](https://launchandscalefaster.org/covid-19/vaccinemanufacturing), companies are on track to manufacture enough shots in 2021 to fully vaccinate at least 70% of the global population against Covid-19 — the level required to achieve herd immunity.

Covid-19 vaccines are saving millions of lives and protecting trillions of dollars of economic activity for an exceptionally low cost. Israel, for example, which has one of the world’s highest vaccination rates, paid [$23.50 per dose](https://www.timesofisrael.com/israel-said-to-be-paying-average-of-47-per-person-for-pfizer-moderna-vaccines/) for early shipments, for a total of about $315 million. That’s approximately equal to the gross domestic productivity losses incurred during [just two days of shutdowns](https://www.bmj.com/content/372/bmj.n281) in the country.

Many countries are buying shots for under $10 per dose. India and South Africa — the two countries leading the petition to gut IP rights — are paying just $8 and $5.25 per dose, respectively. For reference, a regular flu shot costs about $14 in the United States, and pediatric vaccines average about $55 per dose.

Meanwhile, low-income countries that can’t afford even modest prices are getting their vaccines at no charge. [COVAX](https://www.who.int/initiatives/act-accelerator/covax), the international nonprofit vaccine distributor, aims to deliver 2 billion doses to developing nations by the end of the year.

President Biden vowed to make America the world’s [“arsenal of vaccines.”](https://www.whitehouse.gov/briefing-room/speeches-remarks/2021/05/17/remarks-by-president-biden-on-the-covid-19-response-and-the-vaccination-program-4/) The U.S. has already committed $4 billion to COVAX, has donated more than 100 million vaccine doses abroad, and is on track to donate [500 million more](https://www.npr.org/sections/goatsandsoda/2021/08/03/1023822839/biden-is-sending-110-million-vaccines-to-nations-in-need-thats-just-a-first-step) by the end of summer. Other countries are following the administration’s leadership and ramping up their donations.

#### Infectious diseases don’t cause extinction

Owen Cotton-Barratt 17, et al, PhD in Pure Mathematics, Oxford, Lecturer in Mathematics at Oxford, Research Associate at the Future of Humanity Institute, 2/3/2017, Existential Risk: Diplomacy and Governance, https://www.fhi.ox.ac.uk/wp-content/uploads/Existential-Risks-2017-01-23.pdf

For most of human history, natural pandemics have posed the greatest risk of mass global fatalities.37 However, there are some reasons to believe that natural pandemics are very unlikely to cause human extinction. Analysis of the International Union for Conservation of Nature (IUCN) red list database has shown that of the 833 recorded plant and animal species extinctions known to have occurred since 1500, less than 4% (31 species) were ascribed to infectious disease.38 None of the mammals and amphibians on this list were globally dispersed, and other factors aside from infectious disease also contributed to their extinction. It therefore seems that our own species, which is very numerous, globally dispersed, and capable of a rational response to problems, is very unlikely to be killed off by a natural pandemic.

One underlying explanation for this is that highly lethal pathogens can kill their hosts before they have a chance to spread, so there is a selective pressure for pathogens not to be highly lethal. Therefore, pathogens are likely to co-evolve with their hosts rather than kill all possible hosts.3

#### WTO collapse solves extinction

Hilary 15 John Hilary 2015 “Want to know how to really tackle climate change? Pull the plug on the World Trade Organisation” <http://www.independent.co.uk/voices/want-to-know-how-to-really-tackle-climate-change-pull-the-plug-on-the-world-trade-organisation-a6774391.html> (Executive Director, War on Want)//Elmer

Yet this grandiose plan soon fell victim to its own ambition. The WTO’s first summit after the launch of the Doha Round collapsed in acrimonious failure. The next was marked by pitched battles in the streets of Hong Kong as riot police fought Asian farmers desperately trying to save their livelihoods from the WTO’s free trade agenda. The WTO slipped into a coma. Government ministers must decide this week whether to turn off its life support. The answer is surely yes. It was the WTO’s poisonous cocktail of trade expansion and market deregulation that led to the economic crisis of 2008. Years of export-led growth resulted in a crisis of overproduction that could only be sustained with mountains of debt. The parallel deregulation of financial services meant that this debt soon turned out to be toxic, and the world’s banking system went into freefall. Nor is the WTO fit for purpose on ecological grounds. If last week’s climate talks in Paris taught us anything, it is that we must rethink the model of ever-expanding production and consumption in order to avoid planetary meltdown. Global capitalism may need limitless expansion in order to survive, but the planet is already at the very limits of what it can take. The choice is ours. Worst of all, it is the WTO’s ideology of unrestricted trade and corporate domination that lies behind all the bilateral trade deals that are proliferating at the moment, including the infamous Transatlantic Trade and Investment Partnership (TTIP). We need a radically different model of regulated trade and controlled investment if we are to have any chance of breaking the cycle of economic and ecological crisis. For the planet to survive, the WTO must die.

#### 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.

#### That outweighs—multilateral trade causes wars with a larger impact

Thoma 7 Mark Thoma July 2007 “Trade Liberalization and War” <http://economistsview.typepad.com/economistsview/2007/07/trade-liberaliz.html> (Economics Professor at the University of Oregon)//Elmer

Globalisation is by construction an increase in both bilateral and multilateral trade flows. What then was the net effect of increased trade since 1970? We find that it **generated an increase in the probability of a bilateral conflict by** around **20%** for those **countries separated by less than 1000kms,** the group of countries for **which the risk of disputes that can escalate militarily is the highest.** The effects are much smaller for countries which are more distant. Contrary to what these results (aggravated by our nationality) may suggest, we are not anti-globalisation activists even though we are aware that some implications of our work could be (mis)used in such a way. The result that bilateral trade is pacifying brings several more optimistic implications on globalisation. First, if we think of a world war as a war between two large groups or coalitions of countries, then globalisation makes such a war less likely because it increases the opportunity cost of such a conflict. Obviously, this conclusion cannot be tested but is a logical implication of our results. From this point of view, our work suggests that globalisation may be at the origin of a change in the nature of conflicts, less global and more local. Second, our results do confirm that increased trade flows **created by regional trade agreements** (such as the EU) are indeed **pacifying** as intended. Given that most military conflicts are local, because they find their origins in border or ethnic disputes, **this is not a small achievement**. These beneficial political aspects of regional trade agreements are not usually considered by economists who often focus on the economic distortions brought by their discriminatory nature. Given the huge human and economic costs of wars, this political effect of regional trade agreements should not be discounted. This opens interesting questions on how far these regional trade agreements should extend – a topical issue in the case of the EU. The entry of Turkey in the EU would indeed pacify its relations with EU countries (especially Greece and Cyprus), but also increase the probability of a conflict between Turkey and its non-EU neighbours. However, our simulations suggest that in this case, the first effect dominates the second by a large margin. More generally, our results should be interpreted as a word of caution on some political aspects of globalisation. As it proceeds and weakens the economic ties of proximate countries, those with the highest risk of disputes that can escalate into military conflicts, local conflicts may become more prevalent. Even if they may not appear optimal on purely economic grounds, regional and bilateral trade agreements, by strengthening local economic ties, may therefore **be a necessary political counterbalance to economic globalisation**.