# 1NC

## OFF

#### Interpretation: medicine means only treatment and cure – affs cannot defend medical interventions, or vaccines, which is distinct

Elbe 10 [Stefan Elbe, director of the Centre for Global Health Policy and a professor of international relations at the University of Sussex. "Security and Global Health," ISBN 0745643744, accessed 8-10-2021, https://www.wiley.com/en-ee/Security+and+Global+Health-p-9780745643731] HWIC

Yet here too we must be careful not to overlook other types of medical intervention simultaneously pursued by the 'social' arm of modern medicine at the population level. Vaccines in particular continue to be particularly important medical interventions that repeatedly surface in a variety of different health security delib- erations. Strictly speaking, vaccines are not medicines because they consist of small concentrations of disease-causing microbes (or their derivatives) used to enhance a person's immuno-response to a future infection. As a public health measure, vaccines have therefore also been largely sidelined in the existing medicalization literature. Yet, generally speaking, vaccines too can be considered as medical interventions. That is certainly how the World Health Organization views them, pointing out that 'vaccines are among the most important medical interventions for reducing illness and deaths' available today (WHO 2009a). Whereas pills and other therapies mark the tools of clinical medicine, vaccines play a crucial part in the arsenal of 'social' medicine and public health. Developing and rolling out of new vaccines against a range of current (and future) diseases therefore represents further evidence of how the rise of health security is also encouraging security to be practised through the introduction of new medical interventions in society.

#### Standards:

#### 1. Limits – allowing any patented medical intervention allows testing methods, scanning machinery, and tracing software – it takes away generics like innovation which are specific to pharmaceutical development, not preventative measures, which takes away our main IP good argument

#### 2. Precision – WHO definitively outweighs on common usage and quals and views vaccines as medical interventions which proves we’re right and consistent with topic lit – debates should mirror international medical consensus.

## OFF

#### Interpretation – the Aff may not specify a specific medicine

#### Medicines is a generic bare plural

**Leslie and Lerner 16** [Sarah-Jane Leslie (Ph.D., Princeton, 2007) is the dean of the Graduate School and Class of 1943 Professor of Philosophy. She has previously served as the vice dean for faculty development in the Office of the Dean of the Faculty, director of the Program in Linguistics, and founding director of the Program in Cognitive Science at Princeton University. She is also affiliated faculty in the Department of Psychology, the University Center for Human Values, the Program in Gender and Sexuality Studies, and the Kahneman-Treisman Center for Behavioral Science and Public Policy], and Adam Lerner, Ph.D, Postgraduate Research Associate in the Department of Philosophy at Princeton University, 4-24-2016, accessed 9-4-2021, "Generic Generalizations (Stanford Encyclopedia of Philosophy)," <https://plato.stanford.edu/entries/generics/>] HWIC

There are some tests that are helpful in distinguishing these two readings. For example, the existential interpretation is upward entailing, meaning that the statement will always remain true if we replace the subject term with a more inclusive term. Consider our examples above. In ([1b](https://plato.stanford.edu/entries/generics/#ex1b)), we can replace “tiger” with “animal” salva veritate, but in ([1a](https://plato.stanford.edu/entries/generics/#ex1a)) we cannot. If “tigers are on the lawn” is true, then “animals are on the lawn” must be true. However, “tigers are striped” is true, yet “animals are striped” is false. ([1a](https://plato.stanford.edu/entries/generics/#ex1a)) does not entail that animals are striped, but ([1b](https://plato.stanford.edu/entries/generics/#ex1b)) entails that animals are on the front lawn (Lawler 1973; Laca 1990; Krifka et al. 1995).

Another test concerns whether we can insert an adverb of quantification with minimal change of meaning (Krifka et al. 1995). For example, inserting “usually” in the sentences in ([1a](https://plato.stanford.edu/entries/generics/#ex1a)) (e.g., “tigers are usually striped”) produces only a small change in meaning, while inserting “usually” in ([1b](https://plato.stanford.edu/entries/generics/#ex1b)) dramatically alters the meaning of the sentence (e.g., “tigers are usually on the front lawn”). (For generics such as “mosquitoes carry malaria”, the adverb “sometimes” is perhaps better used than “usually” to mark off the generic reading.)

#### It applies to this topic – “Member nations ought to reduce IP for covid – therefore, member nations ought to reduce IP for all” is illogical

#### 1] Limits: There’s inf medicines they could specify, coupled with various types of countries. Kills neg burdens – it’s impossible for me to research every possible combination of the 195 countries and medicines.

#### 2] TVA Solves – just read your aff as an advantage to a whole rez aff. We aren’t stopping them from reading new FWs, mechanisms, or advantages. PICs don’t solve – it’s ridiculous to say that neg potential abuse justifies the aff making it impossible for me to win

Drop the debater bc you can’t drop the arg on their advocacy

No rvis – they can dump on theory in the 1ar, chilling us from checking abuse

Competing interps – reasonability is arbtiary and causes race to the bottom

## OFF

#### CP: The TRIPs Council should vote to reduce intellectual property protections for [PLAN], amending TRIPs to mandate the [PLAN]

#### The United States should:

#### --Publicly rescind support for the WTO waiver

#### -- Veto this motion and refuse to comply

#### The remaining member nations should initiate proceedings against the United States through the World Trade Organization Dispute Settlement Body which ought to find against the United States. The United States ought to comply with this ruling.

#### Counterplan competes ---

#### 1] The plan has the “member nations” act individually, while the counterplan is the WTO through the Council and eventually the DSB.

**Collins Dictionary n.d.** “member nations” RJP, DebateDrills https://www.collinsdictionary.com/us/dictionary/english/member-nations

member nations

The [United](https://www.collinsdictionary.com/us/dictionary/english/unite) [Nations](https://www.collinsdictionary.com/us/dictionary/english/nation) is an [international](https://www.collinsdictionary.com/us/dictionary/english/international) organization [comprised](https://www.collinsdictionary.com/us/dictionary/english/comprise) of about 180 member nations.

Sociology (1995)

At the Nato [summit](https://www.collinsdictionary.com/us/dictionary/english/summit), he called on all the member nations to [pledge](https://www.collinsdictionary.com/us/dictionary/english/pledge) to [spend](https://www.collinsdictionary.com/us/dictionary/english/spend) at least 2% of their [national](https://www.collinsdictionary.com/us/dictionary/english/national) [income](https://www.collinsdictionary.com/us/dictionary/english/income) on [defence](https://www.collinsdictionary.com/us/dictionary/english/defence" \o "Definition of defence).

Times, Sunday Times (2015)

The [beneficiaries](https://www.collinsdictionary.com/us/dictionary/english/beneficiary) will not be [limited](https://www.collinsdictionary.com/us/dictionary/english/limit) to EU member nations, but [worldwide](https://www.collinsdictionary.com/us/dictionary/english/worldwide).

Times, Sunday Times (2012)

Definition of 'nation'

nation

(neɪʃən)[Explore 'nation' in the dictionary](https://www.collinsdictionary.com/us/dictionary/english/nation)

COUNTABLE NOUN

A nation is an individual country considered together with its social and political structures.

#### 2] Immediacy

#### Ought and should are used interchangeably.

Anastasia **Koltai 18**. CEO of MyEnglishTeacher, “Difference Between Ought to and Should,” MyEnglishTeacher, September 25, 2018, <https://www.myenglishteacher.eu/blog/difference-between-ought-to-and-should/>, RJP, DebateDrills.

In most cases, SHOULD and OUGHT TO are used interchangeably today. Both SHOULD and OUGHT TO are used to express advice, obligation, or duty.

#### “Should” is immediate

Summers 94 (Justice – Oklahoma Supreme Court, “Kelsey v. Dollarsaver Food Warehouse of Durant”, 1994 OK 123, 11-8, http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn13)

¶4 The legal question to be resolved by the court is whether the word "should"[13](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn13) in the May 18 order connotes futurity or may be deemed a ruling *in praesenti*.[14](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn14) The answer to this query is not to be divined from rules of grammar;[15](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn15) it must be governed by the age-old practice culture of legal professionals and its immemorial language usage. To determine if the omission (from the critical May 18 entry) of the turgid phrase, "and the same hereby is", (1) makes it an in futuro ruling - i.e., an expression of what the judge will or would do at a later stage - or (2) constitutes an in in praesenti resolution of a disputed law issue, the trial judge's intent must be garnered from the four corners of the entire record.[16](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn16)

[CONTINUES – TO FOOTNOTE]

[13](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker2fn13) "*Should*" not only is used as a "present indicative" synonymous with *ought* but also is the past tense of "shall" with various shades of meaning not always easy to analyze. See 57 C.J. Shall § 9, Judgments § 121 (1932). O. JESPERSEN, GROWTH AND STRUCTURE OF THE ENGLISH LANGUAGE (1984); St. Louis & S.F.R. Co. v. Brown, 45 Okl. 143, 144 P. 1075, 1080-81 (1914). For a more detailed explanation, see the Partridge quotation infra note 15. Certain contexts mandate a construction of the term "should" as more than merely indicating preference or desirability. Brown, supra at 1080-81 (jury instructions stating that jurors "should" reduce the amount of damages in proportion to the amount of contributory negligence of the plaintiff was held to imply an *obligation* *and to be more than advisory*); Carrigan v. California Horse Racing Board, 60 Wash. App. 79, [802 P.2d 813](http://www.oscn.net/applications/oscn/deliverdocument.asp?box1=802&box2=P.2D&box3=813) (1990) (one of the Rules of Appellate Procedure requiring that a party "should devote a section of the brief to the request for the fee or expenses" was interpreted to mean that a party is under an *obligation* to include the requested segment); State v. Rack, 318 S.W.2d 211, 215 (Mo. 1958) ("should" would mean the same as "shall" or "must" when used in an instruction to the jury which tells the triers they "should disregard false testimony"). [14](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker2fn14) *In praesenti* means literally "at the present time." BLACK'S LAW DICTIONARY 792 (6th Ed. 1990). In legal parlance the phrase denotes that which in law is *presently* or *immediately effective*, as opposed to something that *will* or *would* become effective *in the future [in futurol*]. See Van Wyck v. Knevals, [106 U.S. 360](http://www.oscn.net/applications/oscn/deliverdocument.asp?box1=106&box2=U.S.&box3=360), 365, 1 S.Ct. 336, 337, 27 L.Ed. 201 (1882).

#### The plan would require US companies to disclose information and waive IP protections---the counterplan has the US resist to avoid political backlash, but that violates WTO disclosure requirements.

Jorge Contreras 21. Presidential Scholar and Professor of Law at the University of Utah with an adjunct appointment in the Department of Human Genetics, JD @ Harvard, “US Support for a WTO Waiver of COVID-19 Intellectual Property – What Does it Mean?” Bill of Health Harvard Law, May 7, 2021, <https://blog.petrieflom.law.harvard.edu/2021/05/07/wto-waiver-intellectual-property-covid/>, RJP, DebateDrills

The proposed WTO IP waiver is significant because it includes trade secrets. Thus, under the waiver’s original language, a country that wished to suspend trade secret protection for COVID-19 technology could do so without violating the TRIPS Agreement. Such a country could also, presumably, mandate that foreign companies operating in the country disclose their proprietary manufacturing, storage, and testing information to local producers under a compulsory license.

The details of this disclosure requirement, and any compensation payable to the originator of the information, would need to be worked out in whatever waiver is eventually adopted by the WTO, but the prospect for a mandatory trade secret transfer — something that would be unprecedented in the international arena — is worth watching carefully. [As reported by Intellectual Asset Management on May 4, 2021](https://www.iam-media.com/coronavirus/brazilian-senate-passes-compulsory-covid-19-know-how-licensing-bill), the Brazilian Congress is currently considering legislation that would nullify the patents of any company that fails to disclose know-how and data related to a compulsory COVID-19 patent license. It will also be interesting to see whether the United States stands behind such a requirement, which goes far beyond the compulsory licensing of patents.

Will the U.S. require companies to share their know-how with others?

As noted above, under the waiver, a country could impose a trade secret disclosure requirement on companies operating within its jurisdiction. But that requirement would have little effect on U.S. vaccine producers who do not, themselves, have material operations overseas. Only the U.S. government could require a U.S.-based company to disclose its trade secrets. Would the U.S. impose such a requirement? This is not known, but I think it’s unlikely. It is one thing for the U.S. to agree not to challenge other countries’ compulsory licensing regimes as violations of TRIPS, but a very different thing for the U.S. to issue a compulsory licensing order of its own, particularly in the area of trade secrets, where it would be met with significant internal opposition.

#### DSB is underutilized currently but using it for major dispute settlement shores it up---that’s key to combat Chinese IP violations.

James **Bacchus 18**. Member of the [Herbert A. Stiefel Center for Trade Policy Studies](https://www.cato.org/herbert-stiefel-center-trade-policy-studies), the Distinguished University Professor of Global Affairs and director of the Center for Global Economic and Environmental Opportunity at the University of Central Florida. He was a founding judge and was twice the chairman—the chief judge—of the highest court of world trade, the Appellate Body of the World Trade Organization in Geneva, Switzerland. “How the World Trade Organization Can Curb China’s Intellectual Property Transgressions,” CATO, March 22, 2018, <https://www.cato.org/blog/how-world-trade-organization-can-curb-chinas-intellectual-property-transgressions>, RJP, DebateDrills.

Quite rightly, President Donald Trump and his Administration are targeting the transgressions of China against US intellectual property rights in their unfolding trade strategy. But why not use the WTO rules that offer a real remedy for the United States without resorting to illegal unilateral action outside the WTO?  
  
Seventeen years after China joined the WTO, China still falls considerably short of fulfilling its WTO obligations to protect intellectual property. About 70 percent of the software in use in China, valued at nearly $8.7 billion, is pirated. The annual cost to the US economy worldwide from pirated software, counterfeit goods, and the theft of trade secrets could be as high as $600 billion, with China at the top of the IP infringement list. China is the source of 87 percent of the counterfeit goods seized upon entry into the United States.  
  
One possible response by the United States is the one the Trump Administration seems to be taking: slapping billions of dollars of tariffs on imports of more than 100 Chinese products through unilateral trade action. Given its protectionist predilections, taking this approach is surely tempting to the Trump Administration. Doing so will, however, harm American workers, businesses, and consumers, and contribute to further turmoil in the global economy.

The results will likely include retaliation by China against the goods and services of American companies and workers; lawful economic sanctions imposed by China on American exports to China after the US lost to China in WTO cases; the hidden tax of higher prices for American consumers; less competitiveness in the US market and in other markets for American companies that depend on Chinese imports as intermediate goods in production; and doubtless still more American and global economic landmines from the downward spiral of tit-for-tat in international trade confrontations.  
  
These tariffs are not only self-defeating and counter-productive; they are also illegal under international law. Where an international dispute falls within the scope of coverage of the WTO treaty, taking unilateral action without first going to WTO dispute settlement for a legal ruling on whether there is a WTO violation is, in and of itself, a violation of the treaty. The WTO treaty establishes mandatory jurisdiction for the WTO dispute settlement system for all treaty-related disputes between and among WTO Members. The WTO Appellate Body has explained, “Article 23.1 of the (WTO Dispute Settlement Understanding) imposes a general obligation to redress a violation of obligations or other nullification or impairment of benefits under the covered agreements only by recourse to the rules and procedures of the DSU, and not through unilateral action.”  
  
Thus, the United States is not permitted by the international rules to which it has long since agreed to be the judge and the jury in its own case. Imposing tariffs on Chinese products without first obtaining a WTO ruling that Chinese actions are inconsistent with China’s WTO obligations is a clear violation by the United States of its WTO obligations to China – as WTO jurists will doubtless rule when China responds to the tariffs by challenging the tariffs in the WTO.  
  
Such a legal loss by the United States, with all its unforeseeable economic and geopolitical consequences, can be avoided while still confronting Chinese IP violations effectively. Before resorting to unilateral action outside the WTO and in violation of international law, the United States should take a closer look at the substantial rights it enjoys under the WTO treaty for protecting US intellectual property against abuse.  
  
Potential remedies in the WTO exist and should not be ignored. These remedies can be enforced through the pressure of WTO economic sanctions. WTO rules do not yet cover all the irritants that must be addressed in US-China trade relations. Even so, instead of just concluding that there are no adequate remedies under WTO rules to help stop IP infringement, the United States should first try to use the remedies in rules we have already negotiated that bind China along with all other WTO Members.  
  
A number of these rules have not yet been tested against China or any other country – which is not proof they will not work. Generally, when tried for the first time, WTO rules have been found to work, and, generally, when China has been found to be acting inconsistently with its WTO obligations, it has complied with WTO rulings. The actual extent of Chinese compliance with WTO judgments can be questioned; in some instances it is seen by some as only “paper compliance.” But whether any one WTO rule can in fact be enforced cannot be known if no WTO Member bothers to try to enforce it.  
  
The WTO rules in the WTO Agreement on the Trade-related Aspects of Intellectual Property Rights – the so-called TRIPS Agreement – are unique among WTO rules because they impose affirmative obligations. Yet, this affirmative aspect of WTO intellectual property rules has been largely unexplored in WTO dispute settlement. In particular, WTO Members have so far refrained from challenging other WTO Members for failing to enforce intellectual property rights.  
  
On enforcement, Article 41.1 of the TRIPS Agreement imposes an affirmative obligation on all WTO Members: “Members shall ensure that enforcement procedures… are available under their law so as to permit effective action against any act of infringement of intellectual property rights covered by this Agreement, including expeditious remedies to prevent infringements and remedies which constitute a deterrent to further infringements. These procedures shall be applied in such a manner as to avoid the creation of barriers to legitimate trade and to provide for safeguards against their abuse.”  
  
Note that this “shall” be done by all WTO Members; it is mandatory for compliance with their WTO obligations. And yet what does this obligation mean by requiring that effective actions against infringements must be “available”? Is this obligation fulfilled by having sound laws on the books, as is generally the case with China? Or must those laws also be enforced effectively in practice, which is often not the case with China?  
  
The Appellate Body has said that “making something *available* means making it ‘obtainable,’ putting it ‘within one’s reach’ and ‘at one’s disposal’ in a way that has sufficient form or efficacy.” Thus, simply having a law on the books is not enough. That law must have real force in the real world of commerce. This ruling by the Appellate Body related to the use of the word “available” in Article 42 of the TRIPS Agreement and to a legal claim seeking fair and equitable access to civil judicial procedures. Yet the same reasoning applies equally to the enforcement of substantive rights under Article 41.  
  
In the past, the United States has challenged certain parts of the overall Chinese legal system for intellectual property protection – and successfully – in WTO dispute settlement. Despite its overall concerns about enforcement by China of US intellectual property rights, the United States has not, however, challenged the Chinese system as a whole in the WTO. Instead of indulging in the illegality of unilateral tariffs outside the legal framework of the WTO, the Trump Administration should initiate a comprehensive legal challenge in the WTO, not merely, as before, to the bits and pieces of particular Chinese IP enforcement, but rather *to the entirety of the Chinese IP enforcement system*.  
  
To be sure, a systemic challenge by the United States to the application of all China’s inadequate measures relating to intellectual property protection would put the WTO dispute settlement system to a test. It would, what’s more, put both China and the United States to the test of their commitment to the WTO and, especially, to a rules-based world trading system.  
  
As Trump’s trade lawyers will hasten to say, a systemic IP case against China in the WTO would also involve a perhaps unprecedented amount of fact-gathering. It would necessitate an outpouring of voluminous legal pleadings. It would, furthermore, force the WTO Members and the WTO jurists to face some fundamental questions about the rules-based trading system. Yet it could also provide the basis for fashioning a legal remedy that would in the end be mutually acceptable to both countries, and could therefore help prevent commercial conflict and reduce a significant obstacle to mutually beneficial US-China relations.

#### Stopping tech stealing is key to avoid war

Timothy R. **Heath 18**. RAND Senior Defense and International Analyst, “Avoiding “Avoiding U.S.-China Competition Is Futile: Why the Best Option Is to Manage Strategic Rivalry”; Asia Policy; Vol 13 No 2; April 2018, RJP, DebateDrills

This article argues that the structural drivers of U.S.-China competition are too deep to resolve through cooperative engagement and that policymakers must instead accept the reality of strategic rivalry and aim to manage it at a lower level of intensity. main argument Rising tensions between China and the U.S. have spurred fears that the two countries could end up in conflict or recreate the Cold War. To avoid these outcomes, analysts have proposed ways to defuse competition and promote cooperation. However, because these arguments do not address the structural drivers underpinning U.S.-China competition, such proposals are unlikely to end the rivalry. Conflict is not inevitable, however, and aggressive strategies that unnecessarily aggravate the sources of rivalry are likely to prove dangerously counterproductive. The best option at this point is, paradoxically, for the U.S. to accept the reality of the growing strategic rivalry and manage it at a lower level of intensity. policy implications • Maintaining a technological edge is critical for the U.S. to successfully manage the rivalry with China. Policies should be pursued to ensure that the U.S. continues to attract and nurture the best science and technology talent and retains its status as the global leader in technology. • To compete with China’s narrative about leading regional integration, the U.S. should both put forth a compelling vision for the region that encompasses widely held economic, security, and political values and continue to bolster its diplomatic and military positions in Asia. • To maintain the U.S.-China rivalry at a stable level, policymakers in both countries should prioritize measures that discourage the mobilization of popular sentiment against the other country and encourage cultural exchanges. • U.S.-China competition will likely become increasingly entwined with rivalries between China and U.S. allies and partners such as Japan and India. U.S. policymakers will need to take into account the independent dynamics of those separate rivalries when managing relations with China. The United States and China find themselves increasingly enmeshed in a strategic rivalry, the basic nature of which remains poorly understood in the United States. To be sure, disagreements between the two countries have gained widespread attention. Disputes involving Chinese confrontations with U.S. allies and partners such as Japan, the Philippines, and Taiwan have frequently grabbed the headlines. At other times, disagreements over Chinese trade practices and U.S. military activities in the South China Sea have occasioned discord. All these sources of conflict are genuine, but they mask the main drivers of rivalry, which are twofold. First, the United States and China are locked in a contest for primacy—most clearly in Asia and probably globally as well. The United States has been the dominant power, and China seeks to eventually supplant it. By definition, two different states cannot simultaneously share primacy at either the regional or global level. Second, economic, demographic, and military trajectories suggest that China has the potential to contend in a significant way for leadership at the global systemic level. At this level, the most decisive competition will be for technological leadership. Should China supplant the United States as the world’s premier country in terms of technology, its claim to regional and global supremacy will be difficult to deny. And once it has gained that supremacy, China will be well positioned to restructure institutional arrangements to privilege itself and disadvantage the United States. Although this competition is occurring simultaneously at both levels, observers have focused primarily on the struggle for primacy at the regional level and overlooked or downplayed the competition at the global systemic level.1 To counter China’s pursuit of regional primacy, the United States has bolstered its alliances in Asia (albeit inconsistently), expanded diplomatic outreach to China and rising powers in Southeast Asia, and revised its military posture—efforts captured by President Barack Obama’s “rebalance to Asia.” President Donald Trump may have abandoned the rebalance, but many of the related initiatives remain more or less in place.2 China’s challenge at the global systemic level, especially in the field of technology, has received less attention. Confidence in the proven U.S. ability to produce new technologies and facile assumptions about the difficulties China will face in promoting innovation in new industries have led many to dismiss the challenge posed by China. **But the contest for technological leadership is actually even more consequential than that for regional primacy.** Should China succeed in surpassing the United States as the world’s technological leader, U.S. diplomacy and military power will not suffice to hold the line either in Asia or around the globe**.** Under those conditions, countries throughout the world, including U.S. allies in Asia, will be forced to come to terms with the new leading economy. Military power projection could be far less relevant as China moves to consolidate its leading status at both the regional and global levels in such a scenario. Accordingly, although the United States cannot abandon its efforts to bolster its diplomatic and military position in Asia, the country must step up its efforts to strengthen its faltering lead in new technology development. While China clearly grasps the stakes, it is not clear that the United States does. For example, China’s government has promoted R&D into quantum computing. The investment appears to be paying off, as the country has leaped ahead of the United States in developing quantum communications.3 Similarly, the U.S. Congress has proposed to dispense with subsidies for the purchase of electric vehicles, even as China pushes ahead in its plan to become the lead producer of this technology.4 And while the U.S. government seeks to restrict immigration and discourage foreign students from attending U.S. universities (and staying after they receive their advanced training), China has revised its policies to welcome foreigners, prioritizing those with science and technology expertise. Moreover, Chinese investment in basic R&D is rapidly catching up to that of the United States.5 Studies have also noted a shrinking U.S. lead in science and technology as such investment is beginning to bear fruit.6 Similarly, the United States has lost its once-undisputed lead in the per capita number of engineers and scientists.7 Understanding the nature of the U.S.-China rivalry at the regional and global systemic levels, as well as how these two levels interact with one another, is essential if the United States is to successfully manage the challenge posed by China in a manner that avoids war. This study aims to contribute to that understanding. The article is organized into the following sections: u pp. 95–102 provide an overview of the growing rivalry between China and the United States, including a discussion of the meaning and role of strategic rivalry in interstate conflict and a comparison with the U.S.-China rivalry during the Cold War. u pp. 102–4 review the dynamics of the rivalry at the regional systemic level. u pp. 104–10 analyze the dynamics of the rivalry at the global systemic level. u pp. 110–15 examine why proposals to avoid rivalry through cooperation or aggressive competition are unlikely to succeed. u pp. 115–19 discuss the idea of strategic rivalry management and offer recommendations on ways to sustain the rivalry at a lower level of intensity the growing rivalry between the united states and china Strains between China and the United States have deepened in the past few years over a proliferating array of issues. President Trump has stepped up accusations against China of unfair trade practices and inadequate pressure on North Korea. He also provoked controversy early in his term when he floated the idea of increasing official contacts with Taiwan, which Beijing considers a renegade province.8 These disputes add to tensions that had expanded under President Obama, who moved to strengthen U.S. alliances in Asia, promote a regional trade pact, criticize Chinese behavior in the cyber and maritime domains, and shift more military assets to the Asia-Pacific as part of the rebalance to Asia strategy.9 China has in turn dismissed U.S. concerns about the construction of artificial islands in the South China Sea, intensified its criticism of U.S. security leadership in Asia, and tightened its grip on disputed maritime territories.10 The baleful state of bilateral relations has spurred plenty of finger-pointing. On the Chinese side, officials denounce the United States’ “Cold War mindset” and warn of conflict if Washington does not adjust its policies.11 A 2015 defense white paper described an “intensifying competition” between the great powers.12 Military officials and many Chinese analysts regard increasing tension between the two countries as unavoidable, although they do not regard war as likely. People’s Liberation Army (PLA) deputy chief of staff Qi Jianguo commented that “no conflict and no confrontation does not mean no struggle” between China and the United States.13 According to Chinese official media, polls in China suggest a large majority believes that the United States intends to pursue a containment policy.14 Reflecting this point of view, Niu Xinchun, a scholar at the China Institutes of Contemporary International Relations, argued that the “greatest obstacle to the further integration of emerging countries such as China into the international system comes from the United States.”15 Western officials and commentators tend to blame China for current strains. Senior U.S. leaders have criticized “assertive” Chinese behavior, while some analysts blame Xi Jinping for pushing a more confrontational set of policies.16 Other Western observers worry that a further souring of relations could lead to conflict.17 But even if war remains unlikely, the deepening tensions increase the risks of miscalculation, crises, and potential military clashes involving the world’s two largest powers. Echoing a view widely held among U.S. foreign policy experts and officials, former CIA director General Michael Hayden has warned that mishandling the U.S.-China relationship could be “catastrophic.”18 Rivalry at the Heart of the U.S.-China Relationship This widespread concern reflects a realistic appraisal of the dangers inherent in the U.S.-China relationship. But developing successful policies to manage an increasingly sensitive and complex situation requires an accurate assessment of the phenomenon of interstate rivalry that lies at the heart of that relationship. Rivalry is a concept that, while widely acknowledged, remains poorly understood. To be sure, most experts take for granted the idea that powerful nations compete for status and influence, and they acknowledge the danger posed by a rising power’s challenge to a status quo power. Yet investigation into the phenomenon of rivalry too often stops at these well-trodden findings. Less often discussed are the conclusions regarding the dynamics of rivalry that experts on conflict studies have arrived at within the past few years. Much of this scholarship draws from improvements to the analyses and data regarding interstate crisis and conflict.19 This research has generated useful and interesting insights regarding the start and conclusion of rivalries, crises, and war, although these remain largely unexplored outside academic circles. Analysts have established, for example, that rivalry is perhaps the most important driver of interstate conflict. As defined by political scientists, “rivals” are states that regard each other as “enemies,” sources of real or potential threat, and as competitors. At the root of rivalries thus lie disputes over incompatible goals and perceptions that countries possess both the ability (real or potential) and the intention to harm each other. Wars have historically tended to be fought by pairings of these states and their allies. Rivals have opposed each other in 77% of wars since 1816 and in over 90% of wars since 1945.20 Not only are rivals more likely to fight than non-rivals, but rivals also have a tendency to be recidivists because they are unable to resolve their political differences on the battlefield. Yet that does not always discourage them from trying to do so repeatedly. Rivals that cannot prevail due to parity frequently compete for advantage by building internal strength through arms racing or by leveraging external power through the strengthening of alliances and partnerships. Rivals are also prone to serial militarized crises**.** Mutual perceptions of each other as hostile enemies and the inconclusive outcome of previous militarized disputes typically fuel a pattern of recurrent crises characterized by deepening resentment, distrust, and growing willingness to risk escalation. Studies have also established that the risk of conflict increases sharply after three episodes of militarized crises.21 Rivalries do not progress in a linear direction, however. Their intensity can wax and wane in response to shocks and other important developments. Periods of relative stability can alternate with turbulent periods of tension and conflict. Similarly, cooperative activities can be interspersed with periods of acute tension and hostility. Nevertheless, the link between rivalry, crises, and interstate conflict is pervasive. Drawing from these sources, one can describe the Sino-U.S. relationship as a rivalry characterized as a competition between two major powers over incompatible goals regarding their status, leadership, and influence over a particular region—in this case principally the Asia-Pacific. The dynamics of this type of strategic rivalry differ in significant ways from the far more numerous rivalries over territory that have characterized conflict between so many countries, especially weaker and poorer ones. In contrast with rivalries over territories, strategic rivals do not necessarily share borders, although allies of one power may be engaged in a territorial dispute with the other major power. Strategic rivalries among major powers tend to be especially long-lived, with the average enduring for about 55 years.22 Strategic rivalries are incredibly complex phenomena that include overlapping and often reinforcing layers of disputes over leadership, status, and territory between the principal rivals and their allies. Such rivalries are almost always multilateral affairs that also involve allies and partners, some of which have their own rivalries with the other side. Competition in the economic, political, and military domains can serve as expressions as well as drivers of rivalry, as can sports and cultural competition. Strategic rivalries can be confined to one region, with the basic conflict reducible in some respects to which rival will occupy the top rung of the regional hierarchy. In other cases, however, a rivalry can span regional and global domains either sequentially or simultaneously. The U.S.-China rivalry, for instance, is already both a regional and, to a lesser extent, a global rivalry, but there is still considerable room for competition to expand. The complex and overlapping nature of the disputes makes strategic rivalries extremely crisis- and conflict-prone. Strategic rivalries come in a grim package deal that includes strained and hostile relations, serial crises, and in some cases wars. The comprehensive and multifaceted nature of the disputes also explains why such rivalries have proved so durable and why their wars have been so devastating. Conflict between strategic rivals has historically occasioned the most destructive wars, of which World Wars I and II are the most recent examples. The fact that experts at the time of each historic episode of systemic conflict consistently underestimated the duration or extent of war offers cold comfort to analysts today who seek to predict the trajectory of any conflict that might involve China and the United States. Comparisons of the Current Environment with the U.S.-China Rivalry during the Cold War How did the two countries arrive at this position? The most widely accepted narrative argues that China’s rapid economic growth has provided the resources with which it can press demands on long unresolved issues such as unification with Taiwan. China and the United States may have enjoyed stable relations in the 1980s when they cooperated on a limited basis against the Soviet Union, but that foundation of cooperation eroded considerably once the Soviet bloc dissolved in the early 1990s. Moreover, China’s rapid growth in economic power has given the country fresh resources to press its own demands on the United States and U.S. allies. By 2010, China’s economy had outpaced that of Japan to become the second-largest in the world.23 The persistence of long-standing sources of antagonism, such as the U.S. security partnership with Taiwan, has both reflected and aggravated a broader competition for leadership. For its own reasons, Washington has resisted Beijing’s demands, and the result has been growing fear and distrust.24 The intensifying rivalry between the rising power and the status quo leader is as old as antiquity itself. Indeed, Graham Allison coined the term “Thucydides trap” to describe such a situation, a term that he subsequently applied to the current U.S.-China situation.25 The popular narrative is not entirely incorrect, yet in some ways it remains incomplete. A closer look at history reminds us that antagonism between China and the United States is not unprecedented. In the 1950s and 1960s, the two countries engaged in an intense strategic competition for status and influence in Asia, one that occasionally burned hot, as it did when they clashed on the Korean Peninsula or more indirectly in Vietnam. This Cold War–era rivalry saw a complex network of competing alliances and partnerships, principally in Asia. The United States supported Taiwan and South Korea in bitter disputes with China and its allies, North Korea and the Soviet Union. This rivalry terminated in the 1970s primarily due to Beijing’s decision to counter a growing Soviet menace and the United States’ decision to pursue China as a potential partner for its own rivalry with the Soviet Union. But the existence of a period of intense U.S.-Chinese tension and competition provides a helpful baseline of comparison. What requires explanation is not the fact that the United States and China are engaged in a rivalry but the difference between today’s rivalry and that of the Cold War. What distinguishes the rivalry today from that of the earlier period is both the closer parity in relative power—albeit still more potential than real—between the two countries and the comprehensiveness, complexity, and systemic nature of the disputes between them. Paradoxically, these features make the current rivalry potentially far more threatening to the United States, despite the fact that so far U.S.-China relations have remained peaceful, and even though the U.S. and Chinese militaries fought each other in the Korean War. The dangerous potential of the current rivalry ultimately owes to the risk that China could rise to the position of global system leader and subordinate the United States accordingly. As has happened in previous power transitions, China as a system leader could exploit existing arrangements to its benefit and to the detriment of the outgoing leader, the United States. Due to the enormous rewards that accrue to a systemic leader and the high costs for the state that loses this position**,** struggles for global leadership have historically proved to be especially destructive. The possibility that China and the United States could find themselves in a similar struggle, while unlikely at this point, cannot be ruled out given the reality of the relative decline in U.S. power and the concomitant increase in Chinese comprehensive national power. At the most basic level, this fact may be measured superficially by the U.S. share of world GDP, which eroded from 40% in 1950 to 16% in 2014, adjusted for purchasing power parity. Over the same period, China’s share expanded from around 5% to 17%.26 An important consequence of the narrowing of the gap in comprehensive power has been an intensifying competition for leadership in the international economic and political order. In this way, the popular discussion of the Thucydides trap correctly recognizes the dangers of the U.S.-China competition. This feature contrasts sharply with the previous episode of rivalry. In the 1950s and 1960s, the asymmetry in power meant that the United States and China competed for influence and even clashed militarily in countries along China’s borders, but rarely elsewhere. As a largely rural, impoverished country, China had little stake in the system of global trade promoted by the industrialized West. Excluded from the United Nations, Maoist China also lacked the institutional ability to influence geopolitics and project power much beyond its immediate environs—and even that capability was sorely handicapped. Outside Asia, the United States faced minimal competition from China and generally regarded the Soviet Union as a more pressing threat. By contrast, the current competition features a China fully enmeshed in a political and economic order led by the United States. While generally supportive of this order, China is also seeking to revise aspects of the regional and international order that it regards as obstacles to the country’s revitalization as a great power. The main theater of this competition for influence and leadership is the Asia-Pacific, as it was in the Cold War, but U.S.-China rivalry increasingly is expanding globally. Moreover, unlike the largely military, regional, and ideological Cold War competition, the current contest is far more multifaceted and comprehensive in nature; it includes military, economic, technological, and political dimensions. The following two sections review the state of the competition at both the regional and the global systemic levels. the u.s.-china rivalry at the regional level At the regional level, U.S.-China competition spans the political, economic, and military realms. Politically, the two countries have feuded over the role of liberal values and ideals, a dispute that widened after the 1989 Tiananmen Square massacre. However, the 1996 Taiwan Strait crisis elevated the potential threat of conflict between the two countries and may therefore be regarded as the starting point of the current rivalry. Coinciding with impressive gains in China’s economic and military power following two decades of market reforms, the standoff saw Washington and Beijing deploy military assets to back up their respective positions regarding Taiwan’s right to hold a presidential election, elevating the risk of a clash. Since then, the competition for political influence and leadership has intensified. In 2011, the United States announced its rebalance to Asia, which was aimed in part at shoring up U.S. alliances, partnerships, and influence.27 Although on the surface Washington has abandoned the effort, the Trump administration has reintroduced a vision for Asia’s economic and security order premised on values favorable to U.S. interests.28 The 2017 National Security Strategy stated, for example, that the United States upholds a “free and open Indo-Pacific.”29 Beijing, by contrast, has increased its efforts to advance a vision for a regional order premised on Chinese leadership. In recent years, China has promoted major economic and geostrategic initiatives to deepen Asia’s economic integration through the Belt and Road Initiative, Asian Infrastructure Investment Bank (AIIB), and other initiatives.30 In 2017, China for the first time issued a white paper that outlined the government’s vision for Asia-Pacific security. The paper stated that China takes the advancement of regional prosperity and stability “as its own responsibility.”31 These policies build on directives issued by Xi Jinping in 2013, when he called for policies to bolster China’s attractiveness as a regional leader.32 Economically, the two countries are competing over the evolution of Asia’s economic future—a region anticipated to drive global growth in coming decades. Both countries are also competing to shape the terms of trade. President Trump may have abandoned the Trans-Pacific Partnership (TPP), but his advisers have advocated other measures to shape favorable trade terms.33 Meanwhile, China has stepped up advocacy of the Regional Comprehensive Economic Partnership, a proposed free trade agreement for the region that excludes the United States.34 China also has promoted the AIIB, while the United States and Japan continue to instead support the Asian Development Bank.35 Militarily, the growing arms race and the establishment of rival security institutions stand among the most obvious manifestations of an increasing competition in this domain. China and the United States have designed an array of military capabilities and doctrines partly aimed at each other. The PLA has developed weapons systems to counter potential U.S. intervention in any contingency along China’s periphery, which the United States has in turn sought to counter with its own innovations, such as the Joint Operational Access Concept.36 U.S. secretaries of defense Chuck Hagel and Ashton Carter outlined a “third offset” strategy to compete with China and Russia in military technology.37 To promote regional security, the United States has strengthened its military alliances and partnerships, while China has strengthened ties with Russia and argued that regional security is best protected through the Shanghai Cooperation Organisation, the Conference on Interaction and Confidence Building Measures in Asia, and other Chinese-led institutions. In 2014, Xi indirectly rebuked the United States for seeking to bolster its security leadership in the region, stating that “it is for the people of Asia to uphold the security of Asia.”38

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#### Current WTO legislation on IP rights promotes innovation

Ezell et al 4/29 Jaci McDole, Stephen Ezell [Stephen Ezell is vice president, global innovation policy, at the Information Technology and Innovation Foundation (ITIF). He focuses on science and technology policy, international competitiveness, trade, manufacturing, and services issues.] 4/29/21, “Ten Ways IP Has Enabled Innovations That Have Helped Sustain the World Through the Pandemic” Information Technology and Innovation Foundation, <https://itif.org/publications/2021/04/29/ten-ways-ip-has-enabled-innovations-have-helped-sustain-world-through> DD AG

Although anti-IP proponents have attacked biopharmaceutical manufacturers particularly hard, the reality is all IP-protected innovations are at risk if these rights are ignored, or vitiated. Certain arguments have shown a desire for the term “COVID-19 innovations” to include everything from vaccines, therapeutics, diagnostics, and PPE to biotechnology, AI-related data, and educational materials.14 This could potentially open the floodgates to invalidate IP protection on many of the innovations highlighted in this report.

However, much of the current discussion concerning IP focuses almost entirely on litigation fears or R&D incentives. Although R&D is an important aspect of IP, as previously mentioned, these discussions ignore the fact that IP protection can be—and often is—used for other purposes, including generating initial capital to create a company and begin manufacturing and, more importantly, using licensing agreements and IP to track the supply chain and ensure quality control of products.

In 2018, Forbes identified counterfeiting as the largest criminal enterprise in the world.15 The global struggle against counterfeit and non-regulated products, which has hit Latin America particularly hard during the pandemic, proves the need for safety and quality assurance in supply chains.16 Some communities already ravaged by COVID-19 are seeing higher mortality rates related to counterfeit vaccines, therapeutics, PPE, and cleaning and sanitizing products.17

Polish authorities discovered vials of antiwrinkle treatment labeled as COVID-19 vaccines. 18 In Mexico, fake vaccines sold for approximately $1,000 per dose.19 Chinese and South African police seized thousands of counterfeit vaccine doses from warehouses and manufacturing plants.20 Meanwhile, dozens of websites worldwide claiming to sell vaccines or be affiliated with vaccine manufacturers have been taken down.21 But the problem is not limited to biopharmaceuticals. The National Intellectual Property Rights Coordination Center has recovered $48 million worth of counterfeit PPE and other products.22

Collaborative efforts between law enforcement and manufacturers have kept numerous counterfeits from reaching the population. In countries with strong IP protection, the chances of counterfeit products reaching the market are significantly lower. This is largely because counterfeiting tends to be an IP-related issue, and these countries generally provide superior means of tracking the supply chain through trademarks, trade secrets, and licensing agreements. This enables greater quality control and helps manufacturers maintain a level of public confidence in their products.

By controlling the flow of knowledge associated with IP, voluntary licensing agreements provide innovators with opportunities to collaborate, while ensuring their partners are properly equipped and capable of producing quality products. Throughout this difficult time, the world has seen unexpected collaborations, especially between biopharmaceutical companies worldwide such as Gilead and Eva Pharma or Bharat Biotech and Ocugen, Inc.

Throughout history, and most significantly in the nineteenth century through the widespread development of patent systems and the ensuing Industrial Revolution, IP has contributed toward greater economic growth.23 This is promising news as the world struggles for economic recovery. A 2021 joint study by the EU Intellectual Property Office (EUIPO) and European Patent Office (EPO) shows a strong, positive correlation between IP rights and economic performance.24 It states that “IP-owning firms represent a significantly larger proportion of economic activity and employment across Europe,” with IP-intensive industries contributing to 45 percent of gross domestic product (GDP) (€6.6 trillion; US$7.9 trillion).25 The study also shows 38.9 percent of employment is directly or indirectly attributed to IP-intensive industries, and IP generates higher wages and greater revenue per employee, especially for small-to-medium-sized enterprises.26 That concords with the United States, where the Department of Commerce estimated that IP-intensive industries support at least 45 million jobs and contribute more than $6 trillion dollars to, or 38.2 percent of, GDP.27

In 2020, global patent filings through the World Intellectual Property Organization’s (WIPO) Patent Cooperation Treaty (PCT) system reached a record 275,900 filings amidst the pandemic, growing 4 percent from 2019.28 The top-four nations, which accounted for 180,530 of the patent applications, were China, the United States, Japan, and Korea, respectively.29 While several countries saw an increase in patent filings, Saudi Arabia and Malaysia both saw significant increases in the number of annual applications, with the top two filing growths of 73 percent and 26 percent, respectively.30

#### COVID waivers would kill incentives for innovation

Hilty et al. 21 (Dr. Reto M. Hilty is Director at the Max Planck Institute for Innovation and Competition in Munich and a professor at Univ. Zurich, with a PhD from Univ. Zurich; Pedro Henrique D. Batista is Doctoral Student and Junior Research Fellow, Legal Manager GRUR Int. in the department Intellectual Property and Competition Law; Dr. Suelen Carls is Senior Research Fellow in the department Intellectual Property and Competition Law at the Max Planck Institute for Innovation and Competition; Dr. Daria Kim is Senior Research Fellow in the department Intellectual Property and Competition Law at the Max Planck Institute; Dr. Matthias Lamping is Senior Research Fellow in the department Intellectual Property and Competition Law at the Max Planck Institute; Peter R. Slowinski, J.S.M. is Doctoral Student and Junior Research Fellow in the department Intellectual Property and Competition Law at the Max Planck Institute, “Covid-19 and the Role of Intellectual Property,” Max Planck Institute for Innovation and Competition, 5/7/21, <https://ipradiodigital.com.ng/wp-content/uploads/2021/05/2021_05_07_Position_statement_Covid_IP_waiver.pdf>) //EG

It is important to consider potential effects of a comprehensive waiver of IP protection on innovation incentives in vaccine development (including emerging variants of Covid-19), as well as in other areas of medical research. As far as vaccine research is concerned, contrary to what was assumed at the beginning of the pandemic,32 recent studies demonstrate that coronaviruses can mutate significantly and at a fast rate.33 Even though some of the existing vaccines have been proven effective, it cannot be excluded that extensive R&D will be required to tackle newly emerging virus variants. A waiver of IP protection could leave the society vulnerable to such emerging variants of Covid-19 if the current IP holders/vaccine developers abandoned research efforts as a result of such a waiver.

In this regard, a waiver of all IP protection related to research on coronaviruses appears to be highly disproportionate in its scope. There is a large number of ongoing research projects directed at the development of vaccines and therapeutics for Covid-19. 34 While IP rights resulting from such projects, including patent applications, do not pose an obstacle to the accessibility of the existing vaccines, a comprehensive waiver of IP rights can hinder such R&D

Moreover, the disincentive effect could go beyond the research on vaccines. It should be emphasised that inventions underlying the first approved vaccines for Covid-19 were developed and filed for patents years before the outbreak (such as Moderna’s mRNA-1273 technology and BioNTech and Pfizer’s BNT162).35 This implies that those inventions resulted from research that, as such, was not directed at vaccines that are currently being deployed as a response to the pandemic. Those platform technologies have a potential to yield numerous therapeutic applications in other medical areas, including cancer treatment. 36 A waiver of IP protection would not serve the interest of the society, as it would create a disincentive for companies to pursue research in those areas.

#### Reductions on IP protections hamper COVID vaccines and spillovers for future medicines

Pipes 3/5 Sally Pipes [Sally C. Pipes is President, CEO, and Thomas W. Smith Fellow in Health Care Policy at the Pacific Research Institute, a California-based think tank founded in 1979.], 3-5-2021, "Intellectual Property Rights Are Key To Fighting Covid-19 And Protecting Public Health," Forbes, <https://www.forbes.com/sites/sallypipes/2021/03/05/intellectual-property-rights-are-key-to-fighting-covid-19-and-protecting-public-health/> DD AG

The record-setting development of multiple Covid-19 vaccines will go down in history as some of medical science's greatest achievements. In less than a year, the competing vaccines went from the drawing board to saving lives around the world. Unfortunately, many liberal policymakers are attacking the system of strong intellectual property rights that underpinned the work of these heroic scientists. If their attacks are successful, then there could be many fewer medical miracles in our future. Later this month, the World Trade Organization is expected to rule on a petition championed by the governments of India and South Africa to suspend patents related to Covid-19 vaccines and treatments. Supporters of this scheme claim it would boost the availability of vaccines in poorer countries. They also argue that governments have helped fund the research that led to the Covid-19 vaccines—so the public has a claim on the fruits of that work. There's no evidence that suspending intellectual property rights will speed up the manufacturing or distribution of Covid vaccines. The process of making these vaccines is hard. The machines that make the particles that go into the shots are highly complex, and their supply is limited. As pharmaceutical researcher Derek Lowe has explained, "There are definitely not dozens of companies who can make enough RNA," the genetic material in the Moderna and Pfizer/BioNTech vaccines that instructs our cells in how to fight the coronavirus. Lowe continues: "And you can count on one hand the number of facilities who can make the critical lipid nanoparticles" that carry the mRNA to our cells. There's a wealth of evidence, on the other hand, that revoking patents will cause drugmakers to put their research and development efforts on hold. Pharmaceutical companies spend an average of 15 years and nearly $3 billion to bring a new medicine to market. Just one-tenth of one percent of potential pharmaceutical compounds ever enter clinical trials in humans. And just 0.02% of those compounds ends up garnering approval and being dispensed to patients. Clearly, developing life-saving medicines is a risky, expensive, and time-consuming endeavor. Few investors would ever consider funding drug research if there were a threat that governments could seize the fruits of that research and prevent them from having a chance to recoup their money. India and South Africa aren't the only countries looking to launch a broadside on the global intellectual property system. The idea has a following here in the United States, too. Last year, attorneys general from 31 states, as well as American Samoa, Guam, and the District of Columbia, called on the federal government to revoke the patent for remdesivir, the antiviral developed by Gilead Sciences that shortened stays in the hospital for patients with Covid-19. The attorneys general argued that the government had a claim on the intellectual property behind the drug, since it had funded early-stage research. Nevermind that the federal government's own experts determined that it didn't "qualify. . . as a joint inventor of the compound." The public's investment in research broadly related to remdesivir totaled about $70 million; Gilead, with no guarantee of any success, risked more than $1 billion developing the drug. Drugmakers have come up with the vaccines that will ultimately save millions of lives and allow the world to return to life as usual. They've also developed ways to get those vaccines to as many people quickly and cheaply—often to the detriment of their bottom line. AstraZeneca, for example, has volunteered not to take any profits during the pandemic and pledged to direct more than 64% of its vaccine doses to developing nations. Johnson & Johnson has promised to allocate up to half a billion vaccines to lower-income countries. All four major vaccine developers—Pfizer, Moderna, AstraZeneca, and Johnson & Johnson—are allowing manufacturers to license their patents for free in order to make more vaccines available as quickly as possible. Suspending patents won't increase the number of vaccines available. It will only prevent the development of new innovative and life-saving drugs—and leave us less prepared for future pandemics. It's an idea that tomorrow's patients will pay for.

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#### CP: The United States federal government should commit to purchasing sufficient doses of COVID-19 vaccines to meet global demand and establish public-private partnerships to expand global vaccine manufacturing capacity.

#### Buying and exporting vaccines solves while avoiding the innovation DA.

Gianna Gancia 21, (IT, ID) is a member of Parliament’s Development Committee, “Why waiving patents on vaccines is not a good idea,” Parliament Magazine, 5-14-2021, https://www.theparliamentmagazine.eu/news/article/why-waiving-patents-on-vaccines-is-not-a-good-idea

In fact, there would be no incentive for pharmaceutical companies to conduct research, not only into COVID-19 (let's not forget that much still needs to be done to achieve an effective and minimally invasive therapeutic treatment in case of infection and severe symptoms) but also for future pandemic crises that, in a globalised world, are unfortunately entirely predictable. But the negative effects would not stop with pandemic crises. What would happen if one day, hopefully very near, an extremely effective anti-cancer drug was discovered by a pharmaceutical company? Would patents be suspended yet again? It is obvious that investment in cancer drug research would be drastically reduced. I strongly believe that the US position is short-sighted in this case, and to align with it would mean thwarting efforts to build an autonomous, strategic, and resilient European pharmaceutical sector. Such a decision would strongly disincentivise private investors and would effectively undermine the European sector's ability to be a world leader in research. We must remember that the United States has contributed very marginally to the export of vaccine doses, unlike the European Union which has exported 200 million doses, as many as the US has administered to its own citizens. Suspending the patents is a very hypocritical decision. If the United States really wants to help eradicate the virus from the world, the only thing they have to do is heavily subsidise, with public money, the production of a large number of vaccines by their pharmaceutical companies. “Giving” the patent to these countries is a cynical way of appearing good and humanitarian, without contributing in any way to actually helping them.

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#### Dems win the Senate now, but it’s close---it determines the Biden presidency.

Shane **Goldmacher 7/17**. Reporter, New York Times, “Democrats See Edge in Early Senate Map as Trump Casts Big Shadow,” The New York Times, July 17, 2021, <https://www.nytimes.com/2021/07/17/us/politics/midterm-elections.html>, RJP, DebateDrills.

Six months into the Biden administration, Senate Democrats are expressing a cautious optimism that the party can keep control of the chamber in the 2022 midterm elections, enjoying large fund-raising hauls in marquee races as they plot to exploit Republican retirements in key battlegrounds and a divisive series of unsettled G.O.P. primaries.

Swing-state Democratic incumbents, like Senators Raphael Warnock of Georgia and Mark Kelly of Arizona, restocked their war chests with multimillion-dollar sums ($7.2 million and $6 million, respectively), according to new financial filings this week. That gives them an early financial head start in two key states where Republicans’ disagreements over former President Donald J. Trump’s refusal to accept his loss in 2020 are threatening to distract and fracture the party.

But Democratic officials are all too aware of the foreboding political history they confront: that in a president’s first midterms, the party occupying the White House typically loses seats — often in bunches. For now, Democrats hold power by only the narrowest of margins in a 50-50 split Senate, with Vice President Kamala Harris serving as the tiebreaker to push through President Biden’s expansive agenda on the economy, the pandemic and infrastructure.

#### The plan is unpopular---it’s seen as soft on China.

Cynthia Hicks 21. Director of Public Affairs at PhRMA focusing on polling and opinion research that supports advocacy communications and strategy. “New polling shows Americans are sounding the alarm on the TRIPS IP waiver,” PhRMA, May 14, 2021, <https://catalyst.phrma.org/new-polling-shows-americans-are-sounding-the-alarm-on-the-trips-ip-waiver>, RJP, DebateDrills

\*\*\*NOTE – the stuff after “include the following” is a picture that couldn’t be pasted. Go to the URL if you want to see it.

2. Americans are concerned that the TRIPS waiver could risk patient safety, sow public confusion, and cede America’s global innovation leadership to China.

Americans worry that waiving intellectual property introduces unnecessary and dangerous risks to safety and vaccine manufacturing. The top concerns – expressed by more than six in ten voters – include the following:

#### China is the key for the midterms---Senate control hinges on it.

Sarah Mucha 21. Politics reporter at Axios, covering the Biden administration and Congress. “Parties pounce on China as midterm issue,” Axios, June 23, 2021, <https://www.axios.com/democrat-republicans-china-2022-midterms-6c242c54-b51b-444e-b9b2-65ff0afb906a.html>, RJP, DebateDrills

Democrats and Republicans in purple states are already leaning into U.S. competition with China as a key issue in the fight to control the Senate in 2022.

Why it matters: American voters hold [increasingly negative feelings](https://www.pewresearch.org/fact-tank/2021/04/12/americans-views-of-asia-pacific-nations-have-not-changed-since-2018-with-the-exception-of-china/) toward the Chinese government, particularly around bilateral economic relations and following the nation’s handling of the COVID-19 outbreak.

President Biden also has made it clear that confronting China remains a foreign policy priority.

[Possibly vulnerable Democratic senators](https://www.axios.com/senate-seats-2022-midterm-elections-aa166e09-65e9-49be-a1f4-428c36a8dad0.html) are capitalizing on the passage of the U.S. Innovation and Competition Act, a sweeping global competition bill focused on China that [recently passed by a rare bipartisan vote](https://www.axios.com/senate-china-competition-bipartisan-e2fa3f88-16d4-4d79-bab0-1b9c6a4f2774.html).

Sen. Raphael Warnock (D-Ga.) visited Kia’s West Point factory in Georgia to address how the bill could address the recent semiconductor shortage and avoid future plant shutdowns, like one the factory experienced.

Sens. Maggie Hassan (D-N.H.) and Mark Kelly (D-Ariz.) wrote op-eds in their local news outlets highlighting the bill's benefits.

The Democratic Senatorial Campaign Committee and state Democratic parties are calling out Republicans like Sens. Ron Johnson (R-Wis.) and Marco Rubio (R-Fla.), both of whom voted against the bill.

They’ve also targeted Republicans running in open Senate seats who have expressed opposition to the bill.

Meanwhile, Rubio has been making a play for China hawks in Florida, Axios’ Lachlan Markay [reported last week](https://www.axios.com/rubios-anti-china-voters-senate-race-florida-7f6539ab-86b8-4d08-a423-0a26598863ea.html).

Rubio, who is up for re-election next year, has been sending campaign emails with subject lines such as, "Dems <3 China," and, "Is it time to stand up to Communist China?" to a list maintained by a nonprofit group called Stand Up to China.

In Arizona, Republicans latched onto [Kelly's ties to a Chinese tech firm](https://www.azcentral.com/story/news/politics/elections/2020/05/14/senate-elections-2020-mark-kelly-business-ties-chinese-tech-firm-under-fire/5187587002/) last year, and it's likely they'll continue to use that strategy.

The senator's team has argued he isn't beholden to Chinese authorities.

Republicans have long branded Democrats as "weak" on China as a line of attack. Expect that to continue through the campaign cycle, as Democratic candidates tout the passage of the U.S. Innovation Act and reframe the narrative.

They plan to focus on increasing the United States' competitive edge with China as a policy priority.

What they’re saying: David Bergstein, a spokesman for the DSCC, said the campaign committee will be “reminding voters that any Republican who refused to back this critical bill was too weak to stand up to China in order to protect and grow good-paying jobs.”

Chris Hartline, spokesman for the NRSC, said in a statement that "no one believes that Joe Biden and Senate Democrats will do what it takes to confront the geopolitical and economic threat posed by (President) Xi (Jinping) and the Chinese Communist Party.

#### GOP control of the Senate will be used to usher in a new wave of Trumpism, crushing democracy.

Morton **Kondracke 21**. Retired executive editor of Roll Call, a former "McLaughlin Group" and Fox News commentator and co-author, with Fred Barnes, of Jack Kemp: The Bleeding Heart Conservative Who Changed America. “Why Democrats Must Retain Control of Congress in 2022,” RealClearPolitics, August 4, 2021, <https://www.realclearpolitics.com/articles/2021/08/04/why_democrats_must_retain_control_of_congress_in_2022_146189.html>, RJP, DebateDrills

The 2020 election demonstrated how fragile our democracy is. As Donald Trump tried, [by means both legal and illegal](https://en.wikipedia.org/wiki/Attempts_to_overturn_the_2020_United_States_presidential_election), to overturn the results of a free and fair election, only the [courts and a thin line of courageous Republican election officials](https://www.brennancenter.org/our-work/research-reports/its-official-election-was-secure) guaranteed that the peoples’ choice prevailed.

But the safeguards are weaker. Although the Supreme Court [upheld](https://www.nbcnews.com/politics/supreme-court/supreme-court-rejects-final-trump-election-challenge-n1260023) the last lower-court dismissal of multiple Trump-inspired lawsuits charging election fraud, in July the court [upheld new voting restrictions](https://www.reuters.com/world/us/voting-rights-breyers-future-spotlight-us-supreme-court-2021-07-01/https:/www.reuters.com/world/us/voting-rights-breyers-future-spotlight-us-supreme-court-2021-07-01/) enacted in Arizona.

And many of the [Republican election officials](https://thehill.com/homenews/state-watch/565657-new-spotlight-on-secretaries-of-state-as-electoral-battlegrounds) who refused to back up Trump’s bogus fraud charges have been [threatened](https://www.brennancenter.org/our-work/policy-solutions/election-officials-under-attack),  [fired, or are being challenged for reelection by Trump followers](https://www.economist.com/united-states/2021/07/03/state-level-republicans-are-reforming-how-elections-are-administered). Meanwhile, [17 Republican-controlled state legislatures](https://www.brennancenter.org/our-work/research-reports/voting-laws-roundup-july-2021) have  joined Arizona in making voting more difficult: In several of them,  legislators are trying to [seize control of election management](https://www.politifact.com/article/2021/jul/14/are-state-legislators-really-seeking-power-overrul/), including power to replace county election officials or even decide how a state’s election results should be certified, regardless of the popular vote.

Republicans claim they are acting restore faith in elections, but—with fraud repeatedly shown to be rare and of no effect in in 2020—Trump and his followers are really [undermining faith](https://www.politico.com/news/2021/05/24/2020-election-republican-official-races-490458) in American elections.

The result of this frenzy of activity in furtherance of Trump’s “Big Lie”—that he won the 2020 election (and that he won in a “landslide,” no less) —is that the preservation of American-style self-government depends on Democrats retaining control of Congress in 2022.

Republicans have shown that they simply can’t be trusted to safeguard democracy. Donald Trump now [owns the Republican Party](https://www.washingtonpost.com/politics/2021/06/11/how-republican-party-became-party-trump/) as GOP politicians up and down the line do his bidding, out of fear or belief.

Even after a mob of Trump supporters invaded the U.S. Capitol on Jan. 6, Republicans in Congress voted overwhelmingly against [impeaching](https://www.politico.com/interactives/2021/trump-second-impeachment-vote-count-house-results-list/) and [convicting](https://www.politico.com/interactives/2021/trump-second-impeachment-senate-vote/) him for his actions and inaction. Eight GOP senators and 147 representatives [voted not to certify](https://www.nytimes.com/2021/01/07/us/politics/republicans-against-certification.htmlhttps:/www.nytimes.com/2021/01/07/us/politics/republicans-against-certification.htmlhttps:/www.nytimes.com/2021/01/07/us/politics/republicans-against-certification.html) Electoral College counts submitted by two states (had they prevailed, there would have more). Then only six GOP senators voted in favor of forming a truly bipartisan 9/11-style commission to investigate the insurrection, [killing the proposal by filibuster](https://www.washingtonpost.com/national-security/january-6-commission-senate/2021/05/28/54e9f692-bf27-11eb-b26e-53663e6be6ff_story.htmlhttps:/www.washingtonpost.com/national-security/january-6-commission-senate/2021/05/28/54e9f692-bf27-11eb-b26e-53663e6be6ff_story.html).  After Democratic House Speaker Nancy Pelosi established a select committee to conduct an investigation, Republican leaders attacked her as responsible for the riot,  [falsely claiming](https://www.nytimes.com/2021/07/27/us/insurrection-pelosi-claims-fact-check.html) she is in charge of security at the Capitol.

Republicans who voted against Trump on any issue relating to Jan. 6 now face [primary opponents](https://www.usatoday.com/story/news/politics/2021/02/28/cpac-donald-trump-expected-claim-leadership-republican-party/6843815002/https:/www.usatoday.com/story/news/politics/2021/02/28/cpac-donald-trump-expected-claim-leadership-republican-party/6843815002/) backed by him and [censure](https://www.voanews.com/usa/us-politics/republican-groups-censure-party-lawmakers-who-voted-impeach-convict-trump) by their state parties. Rep. Liz Cheney, the most vocal Trump critic in the GOP, lost her House leadership post. Trump has even [attacked Senate Minority Leader Mitch McConnell](https://www.politico.com/news/2021/02/16/trump-attacks-mcconnell-in-fiery-statement-469150https:/www.politico.com/news/2021/02/16/trump-attacks-mcconnell-in-fiery-statement-469150), who criticized him after Jan. 6 but also blocked creation of the 9/11 commission. It’s classic authoritarian behavior—demanding [total loyalty](https://www.nytimes.com/2020/02/22/us/politics/trump-disloyalty-turnover.html) from his followers and total control of his faction, and assailing any rivals in power.

Lately, Trump [reportedly](https://www.forbes.com/sites/markjoyella/2021/06/01/maggie-haberman-trump-telling-people-he-expects-to-be-reinstated-as-president-by-august/) has encouraged his followers to believe he can somehow be reinstated as president later this month, and the Department of Homeland Security is [concerned](https://www.cnn.com/2021/06/30/politics/dhs-summer-violence-warnings-conspiracy/index.html) that the violent acts of Jan. 6 may be repeated when he’s not.

The sad, but inevitable conclusion is that if Republicans take control of either chamber in Congress, they will not try to do what’s best for America as a whole. They will do what Trump tells them to do, probably starting with trying to undo everything President Biden and the Democrats in Congress have done during the previous two years.

For starters, if Democrats are to prevail next November, Biden must be seen as a successful moderate-progressive president—one who can defy the historical pattern that presidential parties [almost invariably](https://www.brookings.edu/wp-content/uploads/2017/01/vitalstats_ch2_tbl4.pdf) lose seats in their first midterm election.

The last two Democratic presidents s who launched major initiatives without GOP support, Bill Clinton (tax increases and health care reform) and Barack Obama (Obamacare and anti-recession stimulus spending), suffered historic shellackings in the ensuing midterms—54 House seats and eight Senate seats in 1994, and 63 House and six Senate seats in 2010. Biden, who has multiple big programs in his policy agenda, has smaller Democratic margins in Congress than Clinton and Obama.  In other words, the Democrats must hang on to almost all of their contested districts and states.

McConnell, who earned the moniker [“grim reaper”](https://thehill.com/homenews/senate/555877-mcconnell-returns-as-senate-grim-reaperhttps:/thehill.com/homenews/senate/555877-mcconnell-returns-as-senate-grim-reaperhttps:/thehill.com/homenews/senate/555877-mcconnell-returns-as-senate-grim-reaper) for blocking Obama, was supposed to be a willing negotiating partner for Biden. Instead, the Senate Republican leader has pronounced himself  [“100% focused”](https://www.nbcnews.com/politics/joe-biden/mcconnell-says-he-s-100-percent-focused-stopping-biden-s-n1266443) on defeating Biden’s legislative agenda. So far, Biden has succeeded in passing a $1.9 trillion COVID relief package (with no Republican votes). He is trying to work out a bipartisan $1 trillion [“physical infrastructure”](https://www.cnn.com/2021/07/28/politics/infrastructure-bill-explained/index.html) package. McConnell isn’t the obstruction with this legislation, as Senate negotiators and the White House [sound optimistic](https://www.reuters.com/world/us/us-senators-move-forward-with-infrastructure-bill-sunday-2021-08-01/). But with Rep. Kevin McCarthy openly angling for Pelosi’s job, nothing is certain in the House.

Trump is actively trying to scuttle infrastructure spending. He’s telling Republicans to oppose it, saying passage means letting “the Radical Left play you for weak fools and losers,” and he has [threatened primary challenges](https://www.forbes.com/sites/andrewsolender/2021/07/28/trump-threatens-lots-of-primaries-for-gop-senators-over-infrastructure-deal/?sh=4be66d98276b) against GOP legislators who support it. This, despite his promising to pass a [$2 trillion bill](https://www.politico.com/news/2021/07/28/infrastructure-deal-trump-501287) while president (then never delivering). Republicans who support it obviously want money for roads, bridges and broadband for their constituents.

But they don’t like the contents of Biden’s follow-up proposal—a $3.5 trillion “human infrastructure” program, which would expand Medicare, caregiving for the disabled and elderly, and child care, while funding universal pre-kindergarten, free community college, national paid family leave, and extended child tax credits. And they don’t like the corporate and capital gains tax increases Democrats propose to pay for it all. So the Democratic plan is to pass it as a “budget reconciliation” measure requiring only Democratic votes.

If, next November, the GOP captures one chamber—most likely, the [House](https://centerforpolitics.org/crystalball/articles/forecasting-the-2022-midterm-election-with-the-generic-ballot/)—whatever Biden can get done in his first two years can’t be easily undone, but he will get nothing more passed. If the GOP gets control of both chambers, Republicans will try to reverse anything he has accomplished. He’ll have only his veto pen as protection.  Stalemate from 2023 through 2024—and an unsuccessful-seeming Biden presidency—could reelect Trump (or someone backed by him), in which case constitutional norms and respect for election results and the rule of law would again be in peril.

**Extinction**

**Kasparov 17**

Garry Kasparov, Chairman of the Human Rights Foundation, former World Chess Champion, “Democracy and Human Rights: The Case for U.S. Leadership,” Testimony Before The Subcommittee on Western Hemisphere, Transnational Crime, Civilian Security, Democracy, Human Rights, and Global Women's Issues of the U.S. Senate Committee on Foreign Relations, February 16th, <https://www.foreign.senate.gov/imo/media/doc/021617_Kasparov_%20Testimony.pdf>

As one of the countless millions of people who were freed or protected from totalitarianism by the United States of America, it is easy for me to talk about the past. To talk about the belief of the American people and their leaders that this country was exceptional, and had special responsibilities to match its tremendous power. That a nation founded on freedom was bound to defend freedom everywhere. I could talk about the bipartisan legacy of this most American principle, from the Founding Fathers, to Democrats like Harry Truman, to Republicans like Ronald Reagan. I could talk about how the American people used to care deeply about human rights and dissidents in far-off places, and how this is what made America a beacon of hope, a shining city on a hill. America led by example and set a high standard, a standard that exposed the hypocrisy and cruelty of dictatorships around the world. But there is no time for nostalgia. Since the fall of the Berlin Wall, the collapse of the Soviet Union, and the end of the Cold War, Americans, and America, have retreated from those principles, and **the world has become much worse off as a result**. American skepticism about America’s role in the world deepened in the long, painful wars in Afghanistan and Iraq, and their aftermaths. Instead of applying the lessons learned about how to do better, lessons about faulty intelligence and working with native populations, the main outcome was to stop trying. This result has been a tragedy for the billions of people still living under authoritarian regimes around the world, and it is based on faulty analysis. You can never guarantee a positive outcome— not in chess, not in war, and certainly not in politics. The best you can do is to do what you know is right and to try your best. I speak from experience when I say that the citizens of unfree states do not expect guarantees. They want a reason to hope and a fighting chance. People living under dictatorships want the opportunity for freedom, the opportunity to live in peace and to follow their dreams. From the Iraq War to the Arab Spring to the current battles for liberty from Venezuela to Eastern Ukraine, people are fighting for that opportunity, giving up their lives for freedom. The United States must not abandon them. The United States and the rest of the free world has an unprecedented advantage in economic and military strength today. What is lacking is the will. The will to make the case to the American people, the will to take risks and invest in the long-term security of the country, and the world. This will require investments in aid, in education, in security that allow countries to attain the stability their people so badly need. Such investment is far more moral and far cheaper than the cycle of **terror, war**, refugees, and **military intervention** that results when America leaves a vacuum of power. The best way to help refugees is to prevent them from becoming refugees in the first place. The Soviet Union was an existential threat, and this focused the attention of the world, and the American people. There **existential threat** today is not found on a map, but it **is very real**. The forces of the past are making steady progress against the modern world order. **Terrorist** movements in the Middle East, extremist parties across Europe, a paranoid tyrant in **North Korea threatening nuclear blackmail,** and, at the center of the web, an **aggressive KGB dictator in Russia**. They all want to turn the world back to a dark past because their survival is threatened by the values of the free world, epitomized by the United States. And **they are thriving as the U.S. has retreated**. The global freedom index has declined for ten consecutive years. No one like to talk about the United States as a global policeman, but **this is what happens when there is no cop on the beat. American leadership begins at home**, right here. America cannot lead the world on democracy and human rights if there is no unity on the meaning and importance of these things. **Leadership is required to make that case clearly and powerfully**. Right now, Americans are engaged in politics at a level not seen in decades. It is an opportunity for them to rediscover that making America great begins with believing America can be great. The Cold War was won on American values that were shared by both parties and nearly every American. Institutions that were created by a Democrat, Truman, were triumphant forty years later thanks to the courage of a Republican, Reagan. This bipartisan consistency created the decades of strategic stability that is the great strength of democracies. Strong institutions that outlast politicians allow for long-range planning. In contrast, dictators can operate only tactically, not strategically, because they are not constrained by the balance of powers, but cannot afford to think beyond their own survival. This is why a dictator like Putin has an advantage in chaos, the ability to move quickly. This can only be met by strategy, by long-term goals that are based on shared values, not on polls and cable news. The fear of making things worse has paralyzed the United States from trying to make things better. There will always be setbacks, but the United States cannot quit. The spread of **democracy is the only** proven **remedy for** nearly **every crisis that plagues the world today. War, famine, poverty, terrorism**–all are generated and exacerbated by authoritarian regimes. A policy of America First inevitably puts American security last. American leadership is required because there is no one else, and because it is good for America. There is no weapon or wall that is more powerful for security than America being envied, imitated, and admired around the world. Admired not for being perfect, but for having the exceptional courage to always try to be better. Thank you.

## CASE

### Solvency - Waiver

#### TRIPs waiver doesn’t solve- it doesn’t obligate countries to do anything, just makes it legal.

Mercurio 21 [Bryan; Professor of Law, The Chinese University of Hong Kong; "The IP Waiver for COVID-19: Bad Policy, Bad Precedent," 2021; 1-6. International Review of Intellectual Property and Competition Law.] Justin

It is not only the length of time which is an issue but also the ultimate impact of the waiver. A waiver simply means that a WTO Member would not be in violation of its WTO obligations if it does not protect and enforce the COVID-19-related IPRs for the duration of the waiver. The waiver would thus allow Members to deviate from their international obligations but not obligate Members to suspend protection and enforcement of the IPRs. Members like the US who support the waiver may not implement the necessary domestic legislation to waive IPRs within the jurisdiction. It is questionable whether the US could even legally implement the waiver given that IPRs are a matter of constitutional law.17

### Solvency – Production

#### Squo solves – 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.