### 1AC - Contention 1: Disease War

#### We got lucky with COVID – future pandemics will be much worse and existing provisions in TRIPs are not used --- the status quo can’t solve.

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A proponent of IP protections may insist TRIPS already includes built-in exceptions adequate to the task. Article 31 grants governments rights to issue licenses for using a patent during the patent term without a patent holder’s consent. This exception was used 144 times between 2001 and 2016 to create flexibilities for 89 countries.29 In 2017, it was extended to allow licensed countries to export products to countries that lack production capacity. Isn’t that enough?

In reply, Article 31 will not take us very far. While useful for some applications, it is cumbersome. For example, for pharmaceutical products, after applying for an exception, exporting countries must prove products go only to destination nations, are readily identifiable based on variations of colour or shape, and include only product necessary to meet requirements of an eligible country; importing nations must notify the TRIPS

council of receipt. Fulfilling these requirements would needlessly delay the vital task of vaccinating the world.

Finally, critics might point to the case of Moderna, which voluntarily pledged (in October 2020) not to enforce its patents during the pandemic. Since companies have not lined up to produce Moderna’s vaccine, doesn’t that show the ineptitude of temporary waivers? In reply, a single pledge by a single company is a start, but insufficient to catalyse the global changes needed. In conclusion, loosening the grip of IP protections is not a miracle fix, and there are many other bar riers to a safer world. This paper filled a gap in current debates about IP protections for COVID-19 vaccines by focusing on ethics. In the final analysis, a temporary waiver of IP protections is the world’s best bet.

#### Developing countries need assistance – it’s time for the U.S. to step up to the plate and do its job

Stone 21 – Judy Stone is an Infectious Disease specialist; “Covid Vaccine Equity - Developing Countries Need Our Help”; Forbes, May 11, 2021; <https://www.forbes.com/sites/judystone/2021/05/11/vaccine-equitydeveloping-countries-need-our-help/?sh=10939a363ec8> //advay

A few months ago India was doing relatively well and the U.S. was getting crushed by a devastating second Covid-19 wave. Now it’s the reverse. Public health measures were implemented too sporadically (U.S.) and reversed too quickly (both), with predictable results. While the U.S. is beginning to focus attention on the growing catastrophe in India, not enough attention is being given to other areas in the region. Countries like Bangladesh, Nepal, Pakistan, Laos and others in the region may soon be matching the explosive growth of Covid in India. Nepal is one of the poorest countries. Although it has a population of 30 million people, there are only 1595 ICU beds and 480 ventilators throughout the entire country. (This is not much less than in India, at ~1 ICU bed/19,000, but the US has ~1/3800). There are only 80 physicians per 100,000 people, compared to 93 per 100,000 in India or 259 per 100,000 in the US. With a 50% positivity rate for Covid testing, how long do you think those few beds and limited healthcare will last before being completely overwhelmed. Cases in Nepal have increased by 1,645% in the past month. Thailand had a similar rate of increase, with most of their cases being the U.K. variant B.1.1.7, which is known to be more transmissible. Part of the problem in Nepal is that its Prime Minister, Oli, like India’s PM Modi, and Donald Trump had allowed religious festivals and large political gatherings to continue as politically expedient, at the expense of public health and safety. Heavily reliant on tourism to support its economy, Mount Everest has been opened to climbers; there have been outbreaks reported from the base camp although the government has denied this. And much as our former president recommended injecting bleach, PM Oli has reportedly suggested gargling with guava leaves, which is at least less immediately hazardous, although still as useless as treatment. This uncontrolled pandemic will endanger us all by increasing the likelihood of further mutations emerging and spreading globally. India has a new “variant of interest,” called B.1.617⁠, which is also spread more rapidly. The South African variant, B.1.351, is also circulating in India, along with the UK’s B.1.1.7⁠. This—and the huge number of cases—are what prompted the US to ban travel from India. One of the problems in the region is that India’s Serum Institute was to supply much of the area with vaccines. Instead, India is desperate, unable to meet its own country’s needs, and has banned the export of vaccines. Nepal has instead turned to China and Russia, who are engaging in vaccine diplomacy who are donating supplies while the US has been sitting on the sidelines.

#### It’s not too late---COVID will continue across the developing worlds for years to come. Plus, the plan helps for black swan future pandemics.

Brink **Lindsey 21**. Vice President, Niskanen Center; Writes for Brookings, “Why Intellectual Property and Pandemics Don’t Mix,” Brookings, June 3, 2021, <https://www.brookings.edu/blog/up-front/2021/06/03/why-intellectual-property-and-pandemics-dont-mix/>, RJP, **DebateDrills**.

Although focusing on these immediate constraints is vital, we cannot confine our attention to the short term. First of all, the COVID-19 pandemic is far from over. Although Americans can now see the light at the end of the tunnel thanks to the rapid rollout of vaccines, most of the world isn’t so lucky. The virus is [currently raging in India and throughout South America](https://www.nytimes.com/interactive/2021/world/covid-cases.html), overwhelming health care systems and inflicting suffering and loss on a horrific scale. And consider the fact that Australia, which has been successful in suppressing the virus, recently announced it was sticking to plans to keep its borders closed until mid-2022. Criticisms of the TRIPS waiver that focus only on the next few months are therefore short-sighted: this pandemic could well drag on long enough for elimination of patent restrictions to enable new vaccine producers to make a positive difference.

Furthermore, and probably even more important, this is almost certainly not the last pandemic we will face. Urbanization, the spread of factory-farming methods, and globalization all combine to increase the odds that a new virus will make the jump from animals to humans and then spread rapidly around the world. Prior to the current pandemic, the 21st century already saw outbreaks of SARS, H1N1, MERS, and Ebola. Everything we do and learn in the current crisis should be viewed from the perspective of getting ready for next time.

#### A temporary waiver is sufficient---it creates momentum for America to repeat against harsher future pandemics which spills over

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The extraordinary circumstances of a global pandemic demand more than minimal or even moderate social responsibility. Everyone in a position to help must show the high degree of social responsibility the moment calls for. Governments, especially in wealthy nations, should stand up to influence peddling by pharmaceutical companies,26 and should do their part, beginning with WTO members voting for a temporary waiver to IP protections for COVID-19 vaccines.

Against our proposal it might be claimed a temporary waiver is not enough. Manufacturing COVID-19 vaccines requires technical know-how, technology, raw materials and equipment, which are lacking in many LMICs. Pfizer, for example, says its vaccine requires 280 components from 86 suppliers in 19 countries, along with specialised equipment and trained personnel.27 Since it takes more than simply waiving IP to vaccinate the world, what good is a temporary waiver?

In response, we agree temporarily losing the right to exclude companies from manufacturing vaccines is not enough. However, it can help break the logjam, creating a climate favourable to investment, since it removes the threat of being sued or prosecuted. Expedient investment strategies should focus on developing and repurposing existing capacities; Guzman notes that some middle-income countries are already producing COVID-19 vaccines, and some manufacturers in LMICs are already able to manufacture viral vector vaccines, such as AstraZeneca’s, and to contribute to the fill-and-finish stage of vaccine production.28

#### Future pandemics at 10x more deadly - extinction

Ceballos 5/27 Gerardo Ceballos [PhD, Dr Gerardo Ceballos is an ecologist and conservationist at the Universidad Nacional Autonoma de Mexico. He is particularly recognized for his influential work on global patterns of distribution of diversity, endemism, and extinction risk in vertebrates. He is also well-known for his contribution to understanding the magnitude and impacts of the sixth mass extinction.], 5/27/21, “THE SIXTH MASS EXTINCTION AND THE FUTURE OF HUMANITY”, Population Matters, <https://populationmatters.org/news/2021/05/sixth-mass-extinction-and-future-humanity> DD AG

Somewhere, sometime in late 2019, a coronavirus from a wild species, perhaps a bat or a pangolin, infected a human in China. This could have been an obscure event, lost without trace in the annals of history, as it is very likely this has occurred many times in the last centuries. But this particular event was somehow different. The coronavirus became an epidemic first and a pandemic later. Covid-19 became the worst pandemic since the Spanish flu in 1918. The horrific human suffering it has caused, and its economic, social and political impacts, are still unraveling.

The reason Covid-19 and more than forty other very dangerous viruses, such as Lassa fever, HIV and Ebola, have jumped from wild animals to humans in the last four decades is the destruction of natural environments and the trafficking and consumption of wild animals.

The wildlife trade is to satisfy the insatiable and extravagant demand for these species in the Asian market, in countries such as China, Vietnam and Indonesia. The illegal wildlife trade is a gigantic business. It is as lucrative as the drug trade, but without the legal implications. The immense appetite of China and other Asian societies for exotic animals has promoted exponential growth in trade and profits. Wild and domestic animals sold in “wet markets” are kept in unsanitary and unethical conditions. There, feces, urine and food waste from cages at the top spill into cages at the bottom, creating the perfect conditions for viruses to leap from wild animals to domestic animals and humans. Thousands of wildlife species or their products are traded annually.

Wildlife trade is one of several human impacts, including habitat loss and fragmentation, pollution, toxification and invasive species, that have caused the extinction of thousands of species and threaten many more. Indeed, most people are unaware that the current extinction crisis is unprecedented in human history. Extinction occurs when the last individual of a species dies. The UN recently estimated that one million species, such as the panda, the orangutan and the Sumatran rhino, are at risk of extinction.

The second finding is that population extinctions, which are the prelude to species extinctions, are occurring at very fast rates (Ceballos et al., 2017). Around 32 percent of a sample of 27,000 species have declining populations and have experienced massive geographic range contractions. Population extinctions are a very severe and widespread environmental problem which we have called “Biological Annihilation”.

Finally, our third finding indicates that the magnitude of the extinction crisis is underestimated because there are thousands of species on the brink of extinction (Ceballos et al., 2020). Those species will likely become extinct in the near future unless a massive conservation effort is launched soon.

Many times, people have asked me why we should care about the loss of a species. There are ethical, moral, philosophical, religious and other reasons to be concerned. But perhaps the one that is most tangible for most people is the loss of ecosystem services, which are the benefits that humans derive from the proper function of nature. Ecosystem services include the proper mix of gases in the atmosphere that support life on Earth, the quantity and quality of water, pollination of wild crops and plants, fertilization of the soil, and protection against emerging pests and diseases, among many others. Every time a species is lost, ecosystem services are likely to erode and human well-being is reduced.

The loss of so many ecosystems and species is pushing us towards the point of collapse of civilization. The good news is that there is still time to reduce the current extinction crisis. The species and ecosystems that we manage to save in the next 10 – 15 years will define the future of biodiversity and civilization. What it is at stake is the future of mankind.

### 1AC – Contention 2: WTO Credibility

#### The new head of the WTO is on track to push for reform and an increased role in the international arena, but is hindered now due to lack of vaccine agreement by nations that will never agree

Baschuk 4-27 – Bryce Baschuk is a Bloomberg Reporter; ["WTO Chief Pursues a ‘Hectic’ Agenda to Fix World Trade’s Referee"; Bloomberg, April 27, 2021; https://www.bloomberg.com/news/articles/2021-04-27/wto-chief-pursues-a-hectic-agenda-to-fix-world-trade-s-referee](file:///C:\Users\advay\Dropbox\SeptOct\02%20Individual%20Files\Advay%20Chandra\%22WTO%20Chief%20Pursues%20a%20‘Hectic’%20Agenda%20to%20Fix%20World%20Trade’s%20Referee%22;%20Bloomberg,%20April%2027,%202021;%20https:\www.bloomberg.com\news\articles\2021-04-27\wto-chief-pursues-a-hectic-agenda-to-fix-world-trade-s-referee) //advay

The head of the World Trade Organization raised an alarm about the credibility of the multilateral trading system, urging leaders to act fast to bolster the global economy with steps like fairer vaccine distribution and cooperate to resolve longer-term problems like overfishing. During her first two months, WTO Director-General Ngozi Okonjo-Iweala has met with trade ministers around the globe to communicate a message that the WTO is important, it needs to be reformed and it needs to deliver results. So far, she says the reception from world leaders has been positive, but quickly translating that goodwill into substantive outcomes during a global pandemic is just as daunting as she anticipated. “The word I would use to describe it is absolutely hectic,” Okonjo-Iweala said in a phone interview on Tuesday when asked about her first few months in the job. “The challenges we thought were there are there and getting an agreement is not as easy because of longstanding ways of negotiating business positions.” Read More: Arcane WTO Pact Moves to Center of Vaccine Debate: Supply Lines Countries need to move past the notion that one country’s gain in international commerce is another’s loss, she said. “We need to break out of the zero-sum deadlock,” Okonjo-Iweala said. “We need to remind the countries and members that the WTO is here to deliver for people. We can’t take 20 years to negotiate something.” Okonjo-Iweala said her top priority is to use trade to alleviate the pandemic and said her recent meeting with trade ministers and vaccine manufacturers provided a positive step in the right direction. ‘More Pragmatism’ “That meeting yielded quite a lot,” she said. “I see more pragmatism on both sides.” An important component of the WTO’s trade and health agenda is a proposal from India and South Africa that seeks to temporarily waive enforcement of the WTO’s rules governing intellectual property for vaccines and other essential medical products. Read More: U.S. Trade Chief Meets Pfizer, AstraZeneca About Vaccine Supply As of this week there are fresh signals that the Biden administration, which currently opposes a waiver to the WTO agreement on Trade-Related Aspects of Intellectual Property Rights, wants vaccine manufacturers like Pfizer Inc. and AstraZeneca Plc to help ramp up U.S. pandemic assistance to the rest of the world. “There is movement,” Okonjo-Iweala said. “Are we there yet? No, but there is a little bit of change in the air among members. I think hopefully we will be able to come to some sort of a framework for the WTO ministers to bless.” “We don’t have time,” she added. “People are dying.” Okonjo-Iweala said this month’s vaccine meeting also revealed areas where the developing world can increase its capacity to produce more doses rather than waiting for rich countries to send them their excess supplies. She said various emerging markets such as India, Pakistan, Bangladesh, Senegal, Indonesia and Egypt already have some capacity to begin producing vaccines for people living in developing economies.

#### A U.S. patent waiver through WTO mechanism is necessary to revitalize WTO’s credibility, create momentum for further reform, and solve stalemates in current talks

Meyer 6-18-21 – David Meyer is the Editor of CEO Daily and a senior writer on Fortune’s European team. Author of the digital rights primer, Control Shift: How Technology Affects You and Your Rights; “The WTO’s survival hinges on the COVID-19 vaccine patent debate, waiver advocates warn”; Fortune, June 18, 2021. <https://fortune.com/2021/06/18/wto-covid-vaccines-patents-waiver-south-africa-trips/> //advay

The World Trade Organization knows all about crises. Former U.S. President Donald Trump threw a wrench into its core function of resolving trade disputes—a blocker that President Joe Biden has not yet removed—and there is widespread dissatisfaction over the fairness of the global trade rulebook. The 164-country organization, under the fresh leadership of Nigeria's Ngozi Okonjo-Iweala, has a lot to fix. However, one crisis is more pressing than the others: the battle over COVID-19 vaccines, and whether the protection of their patents and other intellectual property should be temporarily lifted to boost production and end the pandemic sooner rather than later. According to some of those pushing for the waiver—which was originally proposed last year by India and South Africa—the WTO's future rests on what happens next. "The credibility of the WTO will depend on its ability to find a meaningful outcome on this issue that truly ramps-up and diversifies production," says Xolelwa Mlumbi-Peter, South Africa's ambassador to the WTO. "Final nail in the coffin" The Geneva-based WTO isn't an organization with power, as such—it's a framework within which countries make big decisions about trade, generally by consensus. It's supposed to be the forum where disputes get settled, because all its members have signed up to the same rules. And one of its most important rulebooks is the Agreement on Trade-Related Aspects of Intellectual Property Rights, or TRIPS, which sprang to life alongside the WTO in 1995. The WTO's founding agreement allows for rules to be waived in exceptional circumstances, and indeed this has happened before: its members agreed in 2003 to waive TRIPS obligations that were blocking the importation of cheap, generic drugs into developing countries that lack manufacturing capacity. (That waiver was effectively made permanent in 2017.) Consensus is the key here. Although the failure to reach consensus on a waiver could be overcome with a 75% supermajority vote by the WTO's membership, this would be an unprecedented and seismic event. In the case of the COVID-19 vaccine IP waiver, it would mean standing up to the European Union, and Germany in particular, as well as countries such as Canada and the U.K.—the U.S. recently flipped from opposing the idea of a waiver to supporting it, as did France. It's a dispute between countries, but the result will be on the WTO as a whole, say waiver advocates. "If, in the face of one of humanity's greatest challenges in a century, the WTO functionally becomes an obstacle as in contrast to part of the solution, I think it could be the final nail in the coffin" for the organization, says Lori Wallach, the founder of Public Citizen's Global Trade Watch, a U.S. campaigning group that focuses on the WTO and trade agreements. "If the TRIPS waiver is successful, and people see the WTO as being part of the solution—saving lives and livelihoods—it could create goodwill and momentum to address what are still daunting structural problems." Those problems are legion. Reform needs Top of the list is the WTO's Appellate Body, which hears appeals in members' trade disputes. It's a pivotal part of the international trade system, but Trump—incensed at decisions taken against the U.S. —blocked appointments to its seven-strong panel as judges retired. The body became completely paralyzed at the end of 2019, when two judges' terms ended and the panel no longer had the three-judge quorum it needs to rule on appeals. Anyone who hoped the advent of the Biden administration would change matters was disappointed earlier this year when the U.S. rejected a European proposal to fill the vacancies. "The United States continues to have systemic concerns with the appellate body," it said. "As members know, the United States has raised and explained its systemic concerns for more than 16 years and across multiple U.S. administrations." At her confirmation hearing in February, current U.S. Trade Representative Katherine Tai reiterated those concerns—she said the appellate body had "overstepped its authority and erred in interpreting WTO agreements in a number of cases, to the detriment of the United States and other WTO members," and accused it of dragging its heels in settling disputes. "Reforms are needed to ensure that the underlying causes of such problems do not resurface," Tai said. "While the U.S. [has] been engaging [with the WTO] it hasn't indicated it would move quickly on allowing appointments to the Appellate Body," says Bryan Mercurio, an economic-law professor at the Chinese University of Hong Kong, who opposes the vaccine waiver. "This is not a good sign. In terms of WTO governance, it's a much more important step than supporting negotiations on an [intellectual property] waiver." It's not just the U.S. that wants to see reform at the WTO. In a major policy document published in February, the EU said negotiations had failed to modernize the organization's rules, the dispute-resolution system was broken, the monitoring of countries' trade policies was ineffective, and—crucially—"the trade relationship between the U.S. and China, two of the three largest WTO members, is currently largely managed outside WTO disciplines." China is one of the key problems here. It became a WTO member in 2001 but, although this entailed significant liberalization of the Chinese economy, it did not become a full market economy. As the European Commission put it in February: "The level at which China has opened its markets does not correspond to its weight in the global economy, and the state continues to exert a decisive influence on China's economic environment with consequent competitive distortions that cannot be sufficiently addressed by current WTO rules." "China is operating from what it sees as a position of strength, so it will not be bullied into agreeing to changes which it sees as not in its interests," says Mercurio. China is at loggerheads with the U.S., the EU and others over numerous trade-related issues. Its rivals don't like its policy of demanding that Chinese citizens' data is stored on Chinese soil, nor do they approve of how foreign investors often have to partner with Chinese firms to access the country's market, in a way that leads to the transfer of technological knowhow. They also oppose China's industrial subsidies. Mercurio thinks China may agree to reforms on some of these issues, particularly regarding subsidies, but "only if it is offered something in return." All these problems won't go away if the WTO manages to come up with a TRIPS waiver for COVID-19 vaccines and medical supplies, Wallach concedes. "But," she adds, "the will and the good faith to tackle these challenges is increased enormously if the WTO has the experience of being part of the solution, not just an obstacle." Wallach points to a statement released earlier this month by Asia Pacific Economic Cooperation (APEC) trade ministers, which called for urgent discussions on the waiver. "The WTO must demonstrate that global trade rules can help address the human catastrophe of the COVID-19 pandemic and facilitate the recovery," the statement read in its section about WTO reform. Okonjo-Iweala's role The WTO's new director general, whose route to the top was unblocked in early 2021 with the demise of the Trump administration, is certainly keen to fix the problems that contributed to the early departure of her predecessor, Brazil's Robert Azevedo. "We must act now to get all our ambassadors to the table to negotiate a text" on the issue of an IP waiver for COVID vaccines, Ngozi Okonjo-Iweala, director general of the World Trade Organization, has said. Dursun Aydemir—Anadolu/Bloomberg/Getty Images Earlier this week, when the U.S. and EU agreed a five-year ceasefire in a long-running dispute over Boeing and Airbus aircraft subsidies, Okonjo-Iweala tweeted: "With political will, we can solve even the most intractable problems." However, Mercurio is skeptical about her stewardship having much of an effect on the WTO's reform process. "Upon taking [over she] stated it was time for delegations to speak to each other and not simply past each other, but at the recent General Counsel meeting delegations simply read prepared statements in what some have described as the worst meeting ever," he says. "On the other hand, Ngozi is very much someone who will actively seek solutions to problems, and in this way different to her predecessor. If the role of mediator is welcomed, she could have an impact not in starting discussions but in getting deals over the finish line."

#### Post Covid WTO legitimacy and credibility are necessary to prevent a downward spiral of protectionism – U.S. action ensures best implementation

Solís 20 – Mireya Solís is director of the Center for East Asia Policy Studies, Philip Knight Chair in Japan Studies, and a senior fellow in the Foreign Policy program at Brookings; “The post COVID-19 world: Economic nationalism triumphant?”; July 10, 2020; <https://www.brookings.edu/blog/order-from-chaos/2020/07/10/the-post-covid-19-world-economic-nationalism-triumphant/> //advay

The damage caused by the worst global health crisis in a century is vast. The new coronavirus has traveled far and fast, infecting more than 8.7 million people and killing more than 460,000. One after another, economies have gone into lockdown to slow down the spread of the disease. The combined supply and demand shocks have ravaged the world economy with the most severe downturn since the Great Depression; anticipated drops to international trade and investment flows of 30% and 40%, respectively; and unemployment spikes in many countries. The pandemic has cost lives and livelihoods and has erased the chances of returning to the status quo ante, but it has also brought little clarity regarding what kind of international order it will usher in. Is the future one of deglobalization, decoupling, and reshoring of economic activity? The pandemic hit an already wounded multilateral trading system. The chances that the World Trade Organization (WTO) can deliver a multilateral round of trade negotiations to slash tariffs across the board and update the trade and investment rulebook are nil. But the WTO has also lost its central role as arbiter of trade disputes among its members. In December 2019, the Appellate Body ceased to function due to the U.S. block of new appointments, citing judicial overreach. At a time of rising protectionism, the erosion of a rules-based mechanism to adjudicate disputes bodes ill. Longstanding challenges to the WTO have been exacerbated by an abdication of leadership from the great powers to ensure its survival. China has been the godchild of globalization, leveraging its accession to the WTO to become workshop for the world and a huge domestic market coveted by foreign firms. But China lost its appetite for economic reform, reinvesting on a state capitalism model that imposes heavy costs on other nations. Unchecked subsidies and privileges awarded to its state-owned enterprises, insufficient protection of intellectual property, foreign investment restrictions, forced technology transfers, and cyber protectionism all make the Chinese government’s self-proclamation as champion of global free trade ring hollow. The Trump administration judges the WTO incapable of tackling the China challenge, but instead of creating coalitions of like-minded countries to bring about effective multilateral trade governance, it appears determined to further harm cripple the international organization. It has offered no blueprint to fix the dispute settlement mechanism, has abused the national security exemption to raise tariffs against allies, and is gearing up for its most fundamental assault to date on the WTO: a tariff reset through which the U.S. may unilaterally abandon its commitments on bound tariffs and apply larger duties to force other countries to open their markets. Trade spats as other countries retaliate in kind is a more likely result. Tariff wars and the battle for technology supremacy have come to define U.S.-China great power competition. After a grueling trade conflict, the United States and China reached a limited trade agreement in January 2020. The deal marked a pause in the tariff war and addressed some non-tariff barriers on foreign direct investment and intellectual property; but it left intact the core of Chinese industrial policy (public subsidies and state-owned enterprises) and retained U.S. duties on $360 billion worth of Chinese products. China’s massive purchase commitments ($200 billion) were quickly rendered unattainable by the severe economic downturn in China due to COVID-19. In fighting for the new economic order, setting standards on cutting-edge technologies will be at the forefront. China is using all the levers of industrial policy to gain technological primacy in areas like AI and quantum computing. Telecom and the battle over 5G offer a preview of quarrels to come. Deeply concerned with the cybersecurity risks that Chinese telecom giants like Huawei pose, the U.S. government placed the company on its Entity List, banning American exports without a license. It has since tightened the restrictions by barring foreign companies from supplying Huawei with products manufactured with American equipment and technology. National security concerns are increasingly encroaching on existing webs of economic interdependence. Wary of China’s acquisition of critical technology, countries like the United States, Australia, and Japan have tightened their screening of foreign direct investment. The pandemic has only exacerbated concerns that weakened companies in strategic sectors are at risk of foreign takeover. COVID-19’s impact on the international trading system is twofold. It has reinforced existing trends such as the deceleration and now drop in the volume of international trade, the rise of economic security as governments expand their toolkit to restrict trade and investment flows, and it has laid bare the fallout in U.S.-China relations. But the pandemic also brought new challenges that exposed the extent to which trade cooperation is in short supply. Export protectionism has risen in prominence with national restrictions on shipments of essential medical supplies and personal protective equipment. The WTO allows for such curbs for public health purposes – provided the measures are temporary and transparent. Few countries, however, have bothered to comply with their notification commitments. The blow comes at a time when the WTO is adrift with the decision of Director General Roberto Azevedo to step down early, opening the search for new leadership in a climate of divisiveness. Graph detailing the number of countries that imposed export restrictions on various categories of medical supplies and devices in response to the coronavirus pandemic. Are we on the eve of a renationalized world economy? That is the aspiration of several American and European public officials who fault extended global supply chains and overdependence on China for the current mishaps in tackling the pandemic. But the view that economic nationalism and reshoring of manufacturing is a fail-safe path to security and prosperity is wrong. For one, it skirts the responsibility of governments to properly stockpile essential medical supplies. Furthermore, the export curbs will be counterproductive, eliminating incentives for producers to expand capacity and increasing the cost of much needed medicines and medical devices. If the recent lockdowns have taught us anything, it is that exclusive reliance on the domestic market is too risky. Diversification of supply, redundancies in the manufacturing chain, and stockpiling programs are better alternatives. In this endeavor, global supply chains are part of the solution, not the problem. COVID-19 will not produce an exodus of foreign companies from the Chinese market. Recent surveys of American companies with operations in China show that most firms intend to stay put. A February survey of Japanese companies conducted by Tokyo Shoko Research shows that only a fraction (4%) are considering exit from China. Therefore, the Japanese government’s $2.2 billion fund to restructure supply chains should be understood as risk management, not decoupling. When international companies map out their business strategies, they must factor in heightened risks – protectionism, national security controls, and economic lockdowns. Hence, efforts by middle powers to offer an interim arbitration mechanism at the WTO to handle trade disputes and to commit to maintaining open supply chains in essential medical goods are the right antidote to rising economic nationalism. As a staunch supporter of rules-based trade and with its decision to forego export protectionism in the current crisis, Japan has much to contribute to these efforts.

#### Trade solves great power competition – mere perceptual regionalism causes militarized crises

Lake 18 – David Lake is a Professor of Social Sciences and Distinguished Professor of Political Science at the University of California, San Diego; "Economic Openness and Great Power Competition: Lessons for China and the United States”; April 30, 2018; <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3171196/> //advay

I develop two central arguments. First, historically, great power competition has been driven primarily by exclusion or fears of exclusion from each power’s international economic zone, including its domestic market. Great powers in the past have often used their international influence to build zones in which subordinate polities – whether these be colonies or simply states within a sphere of influence – are integrated into their economies. These economic zones, in turn, are typically biased in favor of the great power’s firms and investors, with the effect of excluding (in whole or part) the economic agents of other great powers. These other great powers, in response, are then compelled to develop or expand their own exclusive economic zones. The “race” for economic privilege can quickly divide the world up into economic blocs. Like the security dilemma, great powers need not actually exclude one another from their zones; the fear of exclusion alone is enough to ignite the process of division. The race for privilege then draws great powers into over-expanding into unprofitable regions and, more important, militarized competition. Economic and military competition are thus linked, with the former usually driving the latter. The most significant military crises have, historically, been over where to draw the boundaries between economic zones and subsequent challenges to those boundaries. Economic closure and fear of closure have been consistent sources of great power conflict in the past – and possibly will be in the future. The major exception to this trend was the peaceful transfer of dominance in Latin America from Britain to the United States in the late nineteenth century. This suggests that economic closure and great power competition is not inevitable, but a choice of the great powers themselves. Second, this international competition is driven, in turn, by domestic, rent-seeking groups and their economic interests. In all countries, scarce factors of production, import competing sectors, and domestically-oriented firms have concentrated and intense preferences for market restricting policies, including tariffs and the formation of exclusive economic zones. Consumers and free trade-oriented groups have diffuse preferences for market enhancing policies, and thus tend to lose at the ballot box and in the making of national policy. This inequality in preference intensity does not mean protectionists always win; after 1934, the United States insulated itself by shifting authority to the executive and negotiating reductions through broad, multi-product international agreements.8 Yet, as the recent return to economic nationalism of the Trump administration suggests, protectionism often wins out. Rent-seeking is a central tendency, not an inevitable success. Contemporary great power relations are at a critical juncture. As China’s influence expands, the role of special economic interests in China is especially worrisome. In pursuit of stability, political support, or private gains, the government will always be tempted to create economic zones that favor its nationals. In this way, China will be no different than the majority of great powers before it. But, given the expansive role of the state in the Chinese economy, especially its backing of outward foreign investments by its state-owned enterprises (SOEs), and the close ties between business elites and its authoritarian political leaders, however, it will be even harder for China to resist biasing any future economic zone to benefit its own firms. Although China has gained greatly from economic openness, its domestic political system will be prone to rent-seeking demands by important constituents in areas of future influence. Critically, the United States is also moving toward economic closure with the election of President Trump on a platform of economic nationalism. Demands for protection against Chinese goods have been growing over time.9 The “China shock” that followed Beijing’s joining the World Trade Organization was a huge disruption to the international division of labor, U.S. comparative advantage, and especially U.S. industry.10 The Trans-Pacific Partnership, though now defunct, was “marketed” by President Barak Obama as a means of “containing” China, both economically and militarily, but was opposed by virtually all of the candidates in the 2016 presidential election for its trade-enhancing potential. President Trump has already signaled a much more hostile and protectionist stance toward China – as well as calling for the repeal of NAFTA and even questioning the utility of the European Union. Not only has he imposed tariffs on washing machines, solar panels, steel and aluminum, dangerously declaring the latter two issues of national security, he is making exceptions on these tariffs for friends and allies. 11 Implicitly targeting China, these protectionist moves by the administration risk creating preferential trading blocs not seen since the 1930s. He has also now proposed punitive tariffs on over $60 billions of imports from China into the United States.12 Acknowledging his inconsistencies on many policy issues, Trump’s economic nationalism has remained the core of his political agenda. The threat to the liberal international economy is not only that China might seek an economic bloc in the future, but that the United States itself is turning more exclusionary. For each great power to fear that the other might seek to exclude it from its economic zone is not unreasonable. If so, great power competition could break out in the twenty-first century not because of bipolarity or any inevitable tendency toward conflict, but because neither great power can control its own protectionist forces nor signal to the other that it would not exclude it from its economic zone. The British-U.S. case, again, suggests that exclusion and competition are not inevitable, but the current danger of economic closure is real and increasing. This article is synthetic in its theory and merely suggestive in its use of historical evidence. The theory aims to integrate current work on political economy and national security, not to develop a completely original take on this relationship. In turn, rather than testing the theory in any rigorous sense or delving into particular cases to show the theoretical mechanisms at work, so to speak, it surveys selected historical episodes to illustrate central tendencies. It is the recurring pattern across multiple cases that suggests why we should worry today. The remainder of this essay is divided in three primary sections. Section I briefly outlines the analytics of economic openness and great power competition. Section II focuses on historical instances of great power competition, highlighting the role of economic openness as a central cleavage in international politics. Section III examines contemporary policies in and between China and the United States. The conclusion suggests ways that the potential for conflict may be mitigated. The Open Economy Politics of Great Power Competition All states have a tendency towards protectionism at home and exclusive economic zones abroad. A tendency, though, is not an inevitability. The pursuit of protection and economic zones by domestic interests is conditioned by the political coalition in power at any given time and institutions that aggregate and bias the articulation of social groups. 13 The tendency is also influenced, however, by the actions of other countries. Protectionism can sour great power relations, but it is the desire for exclusive economic zones that drives great power competition and, given the possibility of coercion, influences grand strategy. Thus, the theory sketched here integrates insights from international political economy (see below), the literature on domestic politics and grand strategy,14 and systemic theories of international relations.15

#### Independently, WTO cred solves nuclear war – allows an off-track for nuclear weapons

Hamann 09 – Georgia Hamann is a J.D. Candidate, Vanderbilt University Law School, “Replacing Slingshots with Swords: Implications of the Antigua-Gambling 22.6 Panel Report for Developing Countries and the World Trading System”; 2009; // advay

Voluntary compliance with WTO rules and procedures is of the utmost importance to the international trading system.'0 0 Given the increasingly globalized market, the coming years will see an increase in the importance of the WTO as a cohesive force and arbiter of disputes that likely will become more frequent and injurious. 01' The work of the WTO cannot be overstated in a nuclear-armed world, as the body continues to promote respect and even amity among nations with opposing philosophical goals or modes of governance. 10 2 Demagogues in the Unites States may decry the rise of China as a geopolitical threat, 0 3 and extremists in Russia may play dangerous games of brinksmanship with other great powers, but trade keeps politicians' fingers off "the button. ' 10 4 The WTO offers an astounding rate of compliance for an organization with no standing army and no real power to enforce its decisions, suggesting that governments recognize the value of maintaining the international construct of the WTO. 105 In order to promote voluntary compliance, the WTO must maintain a high level of credibility. 106 Nations must perceive the WTO as the most reasonable option for dispute resolution or fear that the WTO wields enough influence to enforce sanctions. 10 7 The arbitrators charged with performing the substantive work of the WTO by negotiating, compromising, and issuing judgments are keenly aware of the responsibility they have to uphold the organization's credibility. 108

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### 1AC – Solvency: Public IP Holiday

#### The patent system for pandemic-related drugs is currently out of balance---there’s spurious over-patenting under the guise of innovation, which paradoxically hurts innovation by juicing profits. A temporary waiver in the U.S. for pandemics rebalance the system.

Brink **Lindsey 21**. Vice President, Niskanen Center; Writes for Brookings, “Why Intellectual Property and Pandemics Don’t Mix,” Brookings, June 3, 2021, <https://www.brookings.edu/blog/up-front/2021/06/03/why-intellectual-property-and-pandemics-dont-mix/>, RJP, **DebateDrills**.

When we take the longer view, we can see a fundamental mismatch between the policy design of intellectual property protection and the policy requirements of effective pandemic response. Although patent law, properly restrained, constitutes one important element of a well-designed national innovation system, the way it goes about encouraging technological progress is singularly ill-suited to the emergency conditions of a pandemic or other public health crisis. Securing a TRIPS waiver for COVID-19 vaccines and treatments would thus establish a salutary precedent that, in emergencies of this kind, governments should employ other, more direct means to incentivize the development of new drugs. Here is the basic bargain offered by patent law: encourage the creation of useful new ideas for the long run by slowing the diffusion of useful new ideas in the short run. The second half of the bargain, the half that imposes costs on society, comes from the temporary exclusive rights, or monopoly privileges, that a patent holder enjoys. Under U.S. patent law, for a period of 20 years nobody else can manufacture or sell the patented product without the permission of the patent holder. This allows the patent holder to block competitors from the market, or extract licensing fees before allowing them to enter, and consequently charge above-market prices to its customers. Patent rights thus slow the diffusion of a new invention by restricting output and raising prices.The imposition of these short-run costs, however, can bring net long-term benefits by sharpening the incentives to invent new products. In the absence of patent protection, the prospect of easy imitation by later market entrants can deter would-be innovators from incurring the up-front fixed costs of research and development. But with a guaranteed period of market exclusivity, inventors can proceed with greater confidence that they will be able to recoup their investment.For the tradeoff between costs and benefits to come out positive on net, patent law must strike the right balance. Exclusive rights should be valuable enough to encourage greater innovation, but not so easily granted or extensive in scope or term that this encouragement is outweighed by output restrictions on the patented product and discouragement of downstream innovations dependent on access to the patented technology.Unfortunately, the U.S. patent system at present is out of balance. Over the past few decades, the expansion of patentability to include software and business methods as well as a general relaxation of patenting requirements have led to wildly excessive growth in these temporary monopolies: the number of patents granted annually has [skyrocketed roughly fivefold](https://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm) since the early 1980s. One unfortunate result has been the rise of “non-practicing entities,” better known as patent trolls: firms that make nothing themselves but buy up patent portfolios and monetize them through aggressive litigation. As a result, a law that is supposed to encourage innovation has turned into a [legal minefield](https://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=4620&context=clr) for many would-be innovators. In the pharmaceutical industry, firms have abused the law by piling up patents for trivial, therapeutically irrelevant “innovations” that allow them to [extend their monopolies](https://www.i-mak.org/wp-content/uploads/2018/08/I-MAK-Overpatented-Overpriced-Report.pdf) and keep raising prices long beyond the statutorily contemplated 20 years. Patent law is creating these unintended consequences because policymakers have been caught in an ideological fog that [conflates “intellectual property” with actual property rights](https://www.niskanencenter.org/wp-content/uploads/2019/09/LT_IPMisnomer-2-1.pdf) over physical objects. Enveloped in that fog, they regard any attempts to put limits on patent monopolies as attacks on private property and view ongoing expansions of patent privileges as necessary to keep innovation from grinding to a halt. In fact, patent law is a tool of regulatory policy with the usual tradeoffs between costs and benefits; like all tools, it can be misused, and as with all tools there are some jobs for which other tools are better suited. A well-designed patent system, in which benefits are maximized and costs kept to a minimum, is just one of various policy options that governments can employ to stimulate technological advance—including tax credits for R&D, prizes for targeted inventions, and direct government support.

#### Thus the plan: The United States of America ought to reduce intellectual property protections for the COVID-19 vaccine. The plan’s implemented through a TRIPS waiver for the U.S.

-- that’s Moderna, Pfizer-BioNTech, Johnson & Johnson/Janssen

#### The plan bolsters the number of vaccines---arguments about supply and logistics are empirically disproven.

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Since consequentialist justifications treat the value of IP as purely instrumental, they are also vulnerable to counterarguments showing that a sought-after goal is not the sole or most important end. During the COVID-19 pandemic, we submit that the vaccinating the world is an overriding goal. With existing IP protections intact, the world has fallen well short of this goal. Current forecasts show that at the current pace, there will not be enough vaccines to cover the world’s population until 2023 or 2024.15 IP protections further frustrate the goal of universal access to vaccines by limiting who can manufacturer them. The WHO reports that 80% of global sales for COVID-19 vaccines come from five large multinational corporations.16 Increasing the number of manufacturers globally would not only increase supply, but reduce prices, making vaccines more affordable to LMICs. It would stabilise supply, minimising disruptions of the kind that occurred when India halted vaccine exports amidst a surge of COVID-19 cases.

It might be objected that waiving IP protections will not increase supply, because it takes years to establish manufacturing capacity. However, since the pandemic began, we have learnt it takes less time. Repurposing facilities and vetting them for safety and quality can often happen in 6 or 7months, about half the time previously thought.17 Since COVID-19 will not be the last pandemic humanity faces, expanding manufacturing capacity is also necessary preparation for future pandemics. Nkengasong, Director of the African Centres for Disease Control and Prevention, put the point bluntly, ‘Can a continent of 1.2billion people—projected to be 2.4billion in 30 years, where one in four people in the world will be African—continue to import 99% of its vaccine?’18

### Framework

***Only* pleasure and pain are intrinsically valuable – all others exist in relation**

**Moen 16** [Ole Martin Moen, Research Fellow in Philosophy at University of Oslo “An Argument for Hedonism” Journal of Value Inquiry (Springer), 50 (2) 2016: 267–281] SJDI

Let us start by observing, empirically, that **a widely shared judgment about intrinsic value and disvalue is that pleasure is intrinsically valuable and pain is intrinsically disvaluable.** **On virtually any proposed list of intrinsic values and disvalues (we will look at some of them below), pleasure is included among the intrinsic values and pain among the intrinsic disvalues.** This inclusion makes intuitive sense, moreover, for **there is something undeniably good about the way pleasure feels and something undeniably bad about the way pain feels, and neither the goodness of pleasure nor the badness of pain seems to be exhausted by the further effects that these experiences might have.** “Pleasure” and “pain” are here understood inclusively, as encompassing anything hedonically positive and anything hedonically negative.2 **The special value statuses of pleasure and pain are manifested in how we treat these experiences in our everyday reasoning about values.** If you tell me that you are heading for the convenience store, **I might ask: “What for?” This is a reasonable question, for when you go to the convenience store you usually do so**, not merely for the sake of going to the convenience store, but **for the sake of achieving something further that you deem to be valuable.** You might answer, for example: “To buy soda.” This answer makes sense, for soda is a nice thing and you can get it at the convenience store. I might further inquire, however: “What is buying the soda good for?” This further question can also be a reasonable one, for it need not be obvious why you want the soda. You might answer: “Well, I want it for the pleasure of drinking it.” **If I then proceed by asking “But what is the pleasure of drinking the soda good for?” the discussion is likely to reach an awkward end. The reason is that the pleasure is not good for anything further; it is simply that for which going to the convenience store and buying the soda is good.**3 As Aristotle observes**: “We never ask [a man] what his end is in being pleased, because we assume that pleasure is choice worthy in itself.**”4 Presumably, a similar story can be told in the case of pains, for if someone says “This is painful!” we never respond by asking: “And why is that a problem?” We take for granted that if something is painful, we have a sufficient explanation of why it is bad. If we are onto something in our everyday reasoning about values, it seems that **pleasure and pain are both places where we reach the end of the line in matters of value.**

#### Thus, the standard is maximizing expected well-being. Prefer additionally –

#### 1] Actor specificity:

#### A] Aggregation – every policy benefits some and harms others, which also means side constraints freeze action.

#### B] No act-omission distinction – choosing to omit is an act itself – governments decide not to act which means being presented with the aff creates a choice between two actions, neither of which is an omission

#### 2] Lexical pre-requisite: threats to bodily security preclude the ability for moral actors to effectively act upon other moral theories since they are in a constant state of crisis that inhibits the ideal moral conditions which other theories presuppose

#### 3] Only consequentialism explains degrees of wrongness—if I break a promise to meet up for lunch, that is not as bad as breaking a promise to take a dying person to the hospital. Only the consequences of breaking the promise explain why the second one is much worse than the first. Intuitions outweigh—they’re the foundational basis for any argument and theories that contradict our intuitions are most likely false even if we can’t deductively determine why.

## 1ar

#### 1. Hijack—only util can account for degrees of wrongness,

#### 2. NC collapses to the AC—if each person has infinite value, having more of that value is a good thing so you have to aggregate

#### 3. Epistemology hijack—epistemology outweighs in terms of fw justifications—it determines how we create knowledge and determine a fw in the first place; only util accounts for all forms of epistemology such as aposteriori knowledge

#### 5. Choice architecture like pulling on a push door proves instinct comes before rationality and maintaining it is an impossible burden

#### Pharma companies don’t own the vaccine---the people do.

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Deontological arguments for retaining IP protections maintain that patent holders are the rightful owners of their inventions and are thus entitled to existing protections. With respect to COVID-19 vaccines, the claim is that pharmaceutical companies own these vaccines, which are the products of their labour; no one can rightfully take what is theirs.

In reply, the public has invested heavily, and these products are theirs’ too. Even when the translational part of product development is carried out by for-profit companies, this would be impossible without enormous upstream public investment. A 2021 review of published research on the technologies used in candidate COVID-19 vaccines, which spanned a range of diverse methodologies, found that these technologies were funded primarily by the public sector, principally governments.19

Beyond government contributions to developing COVID-19 vaccines, there are immeasurable, yet crucial, contributions from others whose shoulders vaccine developers stand on. As Hettinger notes, deontological arguments often give short shrift to the fact that discoveries do not occur in a vacuum but are ‘fundamentally social products.’20 As one grateful physician, who received the Pfizer COVID-19 vaccine, put it, ‘there is a whole chain of human toil that makes this possible’:

My gratitude starts with scientists who years before this pandemic, perfected the ability to extract DNA from viruses, sequence it and transcribe it to RNA… the scientists who identified the segment of that DNA that codes for the spike proteins that the virus uses to invade our cells; those who made the mRNA that corresponds to that DNA sequence, and those who figured out how to create a lipid womb to protect that precious mRNA payload during its perilous journey from factory floor to the depths of our deltoid musculature.21

The physician also thanked people who volunteered for and conducted Pfizer’s trials, approved the vaccine, produced it, made the equipment producers relied on, and everyone else— ‘the pilots of planes and drivers of trucks who transported the vaccine … the workers who made those planes and trucks…and the people who fed them and clothed them and housed them so that they could do this life saving work.’

In sum, the deontological claim that pharmaceutical companies wholly own COVID-19 vaccines do not withstand scrutiny. What they own is limited to the additional value their efforts impart.

### 1AR

#### 1] No link – the Lindsey 21 evidence *in our solvency section is a massive no link to the entire disad – make sure you read it before you make your decision because it will definitely force you to vote aff.* Multiple warrants in our evidence prove the no link:

#### A] The plan seamlessly shifts to a direct support model during pandemics meaning pharma can still innovate but faster --- that solves but avoids the innovation DA because there is no impact to the aff on pharma companies

#### 3] IP is worse for innovation— it only helps countries and prevents innovation via imitation

Chao and Mody 15 – Tiffany E, Department of Surgery, Massachusetts General Hospital, Boston, Massachusetts, USA; Gita N, Program in Global Surgery and Social Change, Harvard Medical School, Boston, Massachusetts, USA; “The impact of intellectual property regulation on global medical technology innovation”; BMJ Journals; 3/5/15’ <https://innovations.bmj.com/content/1/2/49> //advay

Technology innovation has the potential to expand equitable healthcare to underserved populations in global health. At the same time, device patents and their legislation can be barriers to innovation for developing countries. For example, the WHO has developed a ‘Compendium of innovative health technologies for low-resource settings’.1 Most of these technologies are inexpensive to develop, inexpensive to manufacture and relatively easy to use. Nevertheless, the WHO clearly states that inclusion in their Compendium does not necessarily mean “the use of the technologies is…in accordance with the national laws and regulations of any country, including…patent laws.” Of course, it would be a challenge to innovate in the absence of legislation on trademark laws and trade secrets. Since the profitability of devices depends on leveraging existing pathways for device development, manufacturing and distribution, intellectual property (IP) protection is a major aspect of commercialisation of technologies. Certainly investors in new start-ups look for IP protection as a high priority. Regulation of IP, therefore, is necessary to stimulate invention and new technologies. However, for technologies in low-resource settings, IP protection has historically been sparse. The World Intellectual Property Organisation reports that in 2012, high-income countries shared 64.5% of the world's total number of patents, while lower-middle-income countries held only 2.9%, with low-income countries owning only 0.4%.2 This disparity clearly demonstrates limited IP support for frugal innovation emerging from developing countries. Ironically, inventors in low-resource settings are presented with an abundance of important clinical needs and fewer established infrastructure constraints, so that there is a vast untapped potential for innovations to originate in these settings and move to the more developed world (known as reverse innovation).3 Inventors of healthcare devices for the developing world have varying interest in pursuing patent protection of their devices.i High cost, time and logistics are oft-cited reasons for not pursuing patents. Factors influencing the cost include not just the expense of filing (which can be thousands of dollars) but also fees for legal counsel and maintenance of the patent. These costs are a barrier in their own right, and they can also lead to increases in the price of the end product, which can be significant in a highly cost-sensitive market. An additional barrier is limited knowledge of complicated international patent laws with inadequate access to qualified IP lawyers. In cases where out-of-country universities are involved in patenting the technologies, the bureaucracy involved in dealing with the technology transfer office and their inexperience in executing foreign filings is a barrier (though there are counterexamples of very significant university partnerships in developing bottom-of-the-pyramid technologies). Another major reason for limited IP protection of technology for low-resource settings is the spirit behind the innovation in the first place; inventors designing for low-resource settings are often interested in keeping their device design open source, to maximise spread and impact. Also, consumers of the technologies are highly focused on affordability. Prosecution of infringement of IP laws in low-resource settings is limited, and violating IP laws is a pragmatic way for ‘copycats’ to reduce their investment costs in research and development, and quickly sell products, getting healthcare technology to those who need it. Most countries do operate under patent laws compliant with the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement, a framework that requires IP laws to resemble those of de

veloped areas. This agreement applies to all WTO member countries. Therefore, unless a developing country wishes to withdraw from the WTO, its IP laws are required to resemble those in the USA or Europe, leaving little flexibility to tailor to local needs.4 This means that international IP laws are often in the economic interests of developed countries rather than in the innovation interests of other countries.5 As a result of these issues, the most prevalent strategy among global health technologies has often been to develop without regard for IP protection. A major advantage of this approach is that it can allow for open-source innovation, permitting technological learning through imitation. This approach can also eliminate the many costs of foreign protection or patent enforcement, allowing for a frugal approach to the initial development of the technology itself. Furthermore, this approach is most in line with the collaborative spirit of global health innovation. Nevertheless, there do exist some opportunities for frugal approaches to IP. Simplified legislation or pro bono opportunities for counsel allow an effective system of justice for inventors to take full advantage of legislation to promote innovation.6 Grants and other forms of non-dilutive funding enable inventors to develop global health technologies without being overly concerned about licensing or investment opportunities. Some potential legislative changes also could be made, such as creation of public–private partnerships that could facilitate government-funded research to be protected and disseminated at affordable cost in such countries.7 Other existing exemptions in international agreements could be implemented, including research exemptions for experimental uses of IP or government imposed non-exclusive or compulsory licensing.8 While there remains potential for more imaginative IP legislation in developing countries, original technologies continue to be developed in these settings. On the international stage, forums such as the WHO Global Forum on Medical Devices highlight emerging technologies that “impact the continuum of care ranging from screening to diagnosis, treatment and rehabilitation under the Universal Health Coverage Strategy.”9 These platforms demonstrate that despite the hurdles faced by developing economies in capturing the benefits of IP laws, global health technologies can be and will continue to be developed outside of these limitations.

#### 4] Profits are far higher than necessary for innovation.

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Utilitarian arguments set as a goal producing the greatest good to society and hold that IP protections are instrumental to achieving that end. The primary basis for this claim is the belief that the profits IP generates are essential to spur innovation and discovery which in turn, advance society’s interests. Absent such profits, discoveries would languish, and progress would slow.

In reply, even if the final translation of science into marketable products would not occur absent financial incentives, how much money does it take? As noted, in 2021, Pfizer/BioNTech will make 15–30billion US dollars from COVID-19 vaccine sales, Moderna 18–20billion US dollars, and Johnson & Johnson 10billion US dollars. Could these companies earn less and the incentive to innovate remain intact? To determine this, we make an evidence-based distinction between profits necessary to drive innovation and profits exceeding this. To gauge that, consider a study comparing the profits of 35 large pharmaceutical companies with 357 companies in the S&P 500 index between 2000 to 2018.14 It found large pharmaceutical companies had significantly higher profits than other large companies. This suggests curbing pharmaceutical company profits would not necessarily cause innovation to grind to a halt. If profit aligned with comparable large S&P 500 companies, it seems reasonable to think it would sustain innovation.