# 1AC Speech

#### The standard is maximizing expected well-being evaluated through comparative worlds.

#### Uncertainty and social contract require governments use util - calc indicts are empirically disproven because governments use util

Gooden, 1995 **(**Robert, philsopher at the Research School of the Social Sciences, Utilitarianism as Public Philosophy. P. 62-63)

Consider, first, the argument from necessity. Public officials are obliged to make their choices under uncertainty, and uncertainty of a very special sort at that. All choices—public and private alike—are made under some degree of uncertainty, of course. But in the nature of things, private individuals will usually have more complete information on the peculiarities of their own circumstances and on the ramifications that alternative possible choices might have on them. Public officials, in contrast, are relatively poorly informed as to the effects that their choices will have on individuals, one by one. What they typically do know are generalities: averages and aggregates. They know what will happen most often to most people as a result of their various possible choices. But that is all. That is enough to allow public policy-makers to use the utilitarian calculus—if they want to use it at all—to choose general rules of conduct. Knowing aggregates and averages, they can proceed to calculate the utility payoffs from adopting each alternative possible general rules.

#### 1. Global health inequality threatens progress in fight vs COVID-19 encouraging vaccine resistant mutations

Fink 7-30-21

(Jenni, chief reporter, https://www.newsweek.com/who-warns-world-blind-understanding-covid-spread-hurting-ability-end-pandemic-1614722)

A lack of testing for COVID-19 in parts of the world is preventing countries from having a clear picture of how the virus is spreading and therefore hurting the world's chances at fighting the virus and ending the pandemic, according to the World Health Organization. Health inequities throughout the world have plagued the global response to COVID-19 from the outset and WHO has pushed higher income countries to help lower income countries in the interest of ending the pandemic. Along with restricted access to vaccines, lower income countries have struggled to have sufficient testing, meaning the virus is likely going undetected in certain areas, further enabling its ability to spread. Low testing rates is "leaving the world blind to understanding where the disease is and how it's changing," Dr. Tedros Adhanom Ghebreyesus, director general of the WHO said on Friday during a press briefing. Without improving global testing rates, Ghebreyesus said the world can't "fight the disease" or mitigate the risk it poses to people around the globe. who blind covid spread cases On Friday, the World Health Organization warned the world is "blind" to how COVID-19 is spreading because of a lack of testing in certain places. WHO Director-General Tedros Adhanom Ghebreyesus attends a daily press briefing on the new coronavirus dubbed COVID-19, at the WHO headquaters on March 2, 2020, in Geneva. FABRICE COFFRINI//AFP/GETTY IMAGES NEWSWEEK NEWSLETTER SIGN-UP > One of Ghebreyesus' biggest frustrations with the pandemic response is the failure to evenly distribute the vaccine around the world. In some countries, like the United States and other higher-income nations, significant portions of the population have been vaccinated. While those large vaccinated populations help reduce the spread of the virus in some areas, other countries, especially those in Africa, haven't been able to vaccinate even 10 percent of their population. This puts the entire world at risk because when the virus is able to spread throughout communities it has the ability to mutate, thereby increasing the possibility that a mutation could evade the vaccines. It's a scenario public health officials have been warning about for months and Ghebreyesus said on Friday that "hard won gains are in jeopardy" or have already been lost because the virus has been able to spread. Nearly 30 countries have high or rising oxygen needs and the shortage of life-saving oxygen could lead to increased deaths. More than 196 million cases of COVID-19 have been reported around the world, according to a Johns Hopkins University tracker, and more than 4.2 million people have died. Ghebreyesus suspected the number of cases would top 200 million within the next two weeks and warned that health systems in many countries are being overwhelmed. Preventing hospitals from exceeding capacity was a massive concern when the pandemic first broke out and a year later, parts of the U.S. are having their health systems strained as the more transmissible Delta variant spreads. On Thursday, Arkansas Governor Asa Hutchinson declared a public health emergency that allows the state to bring in health care workers from outside Arkansas and makes it easier for retired health care workers and medical students to become licensed. The goal is to help alleviate stress on health care systems and Hutchinson said they've had people waiting in ambulances because there wasn't an open spot in a hospital. That strain will only become more exacerbated if a mutation occurs that evades the vaccine, as inoculations have proven effective at helping to keep people out of the hospital. Ghebreyesus warned that more variants will emerge if global access to vaccines and testing doesn't improve. "The pandemic will end when the world chooses to end it. It is in our hands. We have all the tools we need. We can prevent this disease. We can test for it and we can treat it," Ghebreyesus said.

#### 2. Eliminating IP protections is crucial to reduce global vaccine inequality which threatens mutations. Every argument against a waiver is disproven by history

Kumar, PhD, 7-12-21

(Rajeesh, Associate Fellow Manohar Parrikar Institute for Defence Studies and Analysis, https://www.idsa.in/issuebrief/wto-trips-waiver-covid-vaccine-rkumar-120721)

In October 2020, India and South Africa had submitted a proposal to the World Trade Organization (WTO), suggesting a waiver of certain provisions of the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement for the “prevention, containment and treatment of COVID-19”. The proposal seeks the waiver of “the implementation, application, and enforcement of sections 1, 4, 5 and 7 of part II of the TRIPS agreement”, which are stipulations referring to copyright, industrial design, patents, and undisclosed information (trade secrets).1 The proponents of the proposal argue that a waiver will enable timely and equitable access to affordable health products and technologies, including vaccines. Though many member countries had supported and co-sponsored the proposal, a small but influential group of countries, mainly Australia, Canada, the European Union (EU), Japan, the United Kingdom (UK) and the United States (US), opposed it. They argued that existing exceptions under the TRIPS Agreement are sufficient to address the concerns mentioned in the proposal. This resulted in sidelining of the waiver proposal for months. However, on 5 May 2021, the Joseph Biden administration announced its support for waiving intellectual property protections for COVID-19 vaccines.2 It was a significant step towards breaking the seven-month gridlock, and led to many more countries modifying their position on the waiver proposal. On 25 May 2021, the co-sponsors of the waiver proposal submitted a revised proposal that specified the scope of the waiver as applying to “health products and technologies” and also added a section on the proposed duration of the waiver, i.e., three years.3 At present, more than 100 countries, including the US and China support this proposal. The principal opponent of the waiver is the EU and in June 2021, it submitted an alternative proposal to the TRIPS Council, which requested to keep TRIPS’ provisions intact and focused on compulsory licensing and removing vaccine export restrictions to address the concerns raised by India and South Africa.4 The EU proposal also stated that the TRIPS Agreement does not prevent countries from taking measures to protect public health.5 At the meeting of the TRIPS Council on 8–9 June 2021, the member states agreed to text-based negotiations focusing on two proposals tabled by members. The members also decided to hold a series of meetings till the end of July 2021 to take stock of the text-based negotiations. However, the latest developments show that the waiver discussions hit a hurdle due to a split between the developed and developing countries over the negotiation text. This brief discusses how TRIPS becomes a barrier to the equitable access of COVID-19 vaccines. It also examines how a waiver will help India in its fight against COVID-19 at home and abroad. TRIPS and its Exceptions TRIPS, a comprehensive multilateral agreement on Intellectual Property (IP), was an outcome of the Uruguay Round (1986–94) of negotiations of the General Agreement on Tariffs and Trade (GATT). The Agreement came into force on 1 January 1995 and offers a minimum standard of protection for Intellectual Property Rights (IPR).6 In WTO, IPR are divided into two main categories. First, copyright and related rights (Articles 9 to 14, Part II of the TRIPS Agreement). Second, industrial property that includes trademarks, geographical indications, industrial designs, patents, integrated circuit layout designs, and undisclosed information (Articles 15 to 38, Part II of the TRIPS Agreement).7 Article IX.3 and IX.4 of the Marrakesh Agreement Establishing the WTO deals with TRIPS waivers. Article IX.3 says that in “exceptional circumstances” the Ministerial Conference may waive off an obligation imposed on WTO member countries.8 Such a decision requires the support of three-fourths of the WTO membership. According to Article IX.4, any waiver granted for more than one year will be reviewed by the Ministerial Conference. Based on the annual review, the Conference may extend, modify, or terminate the waiver. The TRIPS Agreement provides some flexibility primarily in the form of compulsory licensing and research exceptions through Articles 30 and 31. While Article 30 permits WTO members to make limited exceptions to patent rights, Article 31 provides a detailed exception, provided certain conditions are met. Compulsory licensing is the process of granting a license by a government to use a patent without the patent holder's consent. Article 31 permits granting compulsory license under circumstances such as “national emergencies”, “other circumstances of extreme urgency”, “public noncommercial use”, or against “anti-competitive” practices.9 In addition to these original waivers, the Declaration on the TRIPS Agreement and Public Health, adopted at the 2001 Doha Ministerial Meeting, also recognises some exceptions, for instance, in situations of a public health emergency, member countries have the freedom to determine the grounds upon which compulsory licenses are granted. Similarly, under Article 66.1, the least developed countries (LDCs) are given waivers for implementing TRIPS on pharmaceuticals till 1 January 2033. COVID-19 and TRIPS Waiver Two significant factors rekindled the debate on TRIPS waiver for essential medical products—first, vaccine inequity, and second, the insufficiency of existing waiver provisions in fighting the COVID-19 pandemic. COVID-19 is an exceptional circumstance, and equitable global access to the vaccine is necessary to bring the pandemic under control. However, the world is witnessing quite the reverse, i.e., vaccine nationalism. Vaccine nationalism is “my nation first” approach to securing and stockpiling vaccines before making them available in other countries. A TRIPS waiver would be instrumental in addressing the growing inequality in the production, distribution, and pricing of the COVID-19 vaccines. Vaccine Inequity According to Duke Global Health Innovation Center, which monitors COVID-19 vaccine purchases, rich nations representing just 14 per cent of the world population have bought up to 53 per cent of the most promising vaccines so far. As of 4 July 2021, the high-income countries (HICs) purchased more than half (6.16 billion) vaccine doses sold globally. At the same time, the low-income countries (LICs) received only 0.3 per cent of the vaccines produced. The low and middle-income countries (LMICs), which account for 81 per cent of the global adult population, purchased 33 per cent, and COVAX (COVID-19 Vaccines Global Access) has received 13 per cent.10 Many HICs bought enough doses to vaccinate their populations several times over. For instance, Canada procured 10.45 doses per person, while the UK, EU and the US procured 8.18, 6.89, and 4.60 doses per inhabitant, respectively.11 Source:“Tracking COVID-19 Vaccine Purchases Across the Globe”, Duke Global Health Innovation Center, Updated 9 July 2021. Consequently, there is a significant disparity between HICs and LICs in vaccine administration as well. As of 8 July 2021, 3.32 billion vaccine doses had been administered globally.12 Nonetheless, only one per cent of people in LICs have been given at least one dose. While in HICs almost one in four people have received the vaccine, in LICs, it is one in more than 500. The World Health Organization (WHO) notes that about 90 per cent of African countries will miss the September target to vaccinate at least 10 per cent of their populations as a third wave looms on the continent.13 South Africa, the most affected African country, for instance, has vaccinated less than two per cent of its population of about 59 million. This is in contrast with the US where almost 47.5 per cent of the population of more than 330 million has been fully vaccinated. In Sub-Saharan Africa, vaccine rollout remains the slowest in the world. According to the International Monetary Fund (IMF), at current rates, by the end of 2021, a massive global inequity will continue to exist, with Africa still experiencing meagre vaccination rates while other parts of the world move much closer to complete vaccination.14 This vaccine inequity is not only morally indefensible but also clinically counter-productive. If this situation prevails, LICs could be waiting until 2025 for vaccinating half of their people. Allowing most of the world’s population to go unvaccinated will also spawn new virus mutations, more contagious viruses leading to a steep rise in COVID-19 cases. Such a scenario could cause twice as many deaths as against distributing them globally, on a priority basis. Preventing this humanitarian catastrophe requires removing all barriers to the production and distribution of vaccines. TRIPS is one such barrier that prevents vaccine production in LMICs and hence its equitable distribution. TRIPS: Barrier to Equitable Health Care Access The opponents of the waiver proposal argue that IPR are not a significant barrier to equitable access to health care, and existing TRIPS flexibilities are sufficient to address the COVID-19 pandemic. However, history suggests the contrary. For instance, when South Africa passed the Medicines and Related Substances Act of 1997 to address the HIV/AIDS public health crisis, nearly 40 of world’s largest and influential pharma companies took the South African government to court over the violation of TRIPS. The Act, which invoked the compulsory licensing provision, allowed South Africa to produce affordable generic drugs.15 The Big Pharma also lobbied developed countries, particularly the US, to put bilateral trade sanctions against South Africa.16 Similarly, when Indian company Cipla decided to provide generic antiretrovirals (ARVs) to the African market at a lower cost, Big Pharma retaliated through patent litigations in Indian and international trade courts and branded Indian drug companies as thieves.17 Another instance was when Swiss company Roche initiated patent infringement proceedings against Cipla’s decision to launch a generic version of cancer drug, “erlotinib”. Though the Delhi High Court initially dismissed Roche's appeal by citing “public interest” and “affordability of medicines,” the continued to pressure the generic pharma companies over IPR. 18 Likewise, Pfizer’s aggressive patenting strategy prevented South Korea in developing pneumonia vaccines for children.19 A recent document by Médecins Sans Frontières (MSF), or Doctors Without Borders, highlights various instances of how IP hinders manufacturing and supply of diagnostics, medical equipment, treatments and vaccines during the COVID-19 pandemic. For instance, during the peak of the COVID-19 first wave in Europe, Roche rejected a request from the Netherlands to release the recipe of key chemical reagents needed to increase the production of diagnostic kits. Another example was patent holders threatening producers of 3D printing ventilators with patent infringement lawsuits in Italy.20 The MSF also found that patents pose a severe threat to access to affordable versions of newer vaccines.21 Source:“COVID-19 Vaccine R&D Investments”, Global Health Centre, Graduate Institute, Geneva, Updated 9 July 2021. The opponents of the TRIPS waiver also argue that IP is the incentive for innovation and if it is undermined, future innovation will suffer. However, most of the COVID-19 medical innovations, particularly vaccines, are developed with public financing assistance. Governments spent billions of dollars for COVID-19 vaccine research. Notably, out of $6.1 billion in investment tracked up to July 2021, 98.12 per cent was public funding.22 The US and Germany are the largest investors in vaccine R&D with $2.2 billion and $1.5 billion funding. Source:“COVID-19 Vaccine R&D Investments”, Global Health Centre, Graduate Institute, Geneva, Updated 9 July 2021. Private companies received 94.6 per cent of this funding; Moderna received the highest $956.3 million and Janssen $910.6 million. Moreover, governments also invested $50.9 billion for advance purchase agreements (APAs) as an incentive for vaccine development. A recent IMF working paper also notes that public research institutions were a key driver of the COVID-19 R&D effort—accounting for 70 per cent of all COVID-19 clinical trials globally.23 The argument is that vaccines are developed with the support of substantial public financing, hence there is a public right to the scientific achievements. Moreover, private companies reaped billions in profits from COVID-19 vaccines. Source: Katharina Buchholz, “COVID-19 Vaccines Lift Pharma Company Profits”, Statista, 17 May 2021. One could argue that since the US, Germany and other HICs are spending money, their citizens are entitled to get vaccines first, hence vaccine nationalism is morally defensible. Nonetheless, it is not the case. The TRIPS Agreement includes several provisions which mandates promotion of technology transfer from developed countries to LDCs. For instance, Article 7 states that "the protection and enforcement of IP rights should contribute to the promotion of technological innovation and the transfer and dissemination of technology, to the mutual advantage of producers and users of technical knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations."24 Similarly, Article 66.2 also mandates the developed countries to transfer technologies to LDCs to enable them to create a sound and viable technological base. The LMICs opened their markets and amended domestic patent laws favouring developing countries’ products against this promise of technology transfer. Another argument against the proposed TRIPS waiver is that a waiver would not increase the manufacturing of COVID-19 vaccines. Indeed, one of the significant factors contributing to vaccine inequity is the lack of manufacturing capacity in the global south. Further, a TRIPS waiver will not automatically translate into improved manufacturing capacity. However, a waiver would be the first but essential step to increase manufacturing capacity worldwide. For instance, to export COVID-19 vaccine-related products, countries need to ensure that there are no IP restrictions at both ends – exporting and importing. The market for vaccine materials includes consumables, single-use reactors bags, filters, culture media, and vaccine ingredients. Export blockages on raw materials, equipment and finished products harm the overall output of the vaccine supply chain. If there is no TRIPS restriction, more governments and companies will invest in repurposing their facilities. Similarly, the arguments such as that no other manufacturers can carry out the complex manufacturing process of COVID-19 vaccines and generic manufacturing as that would jeopardise quality, have also been proven wrong in the past. For instance, in the early 1990s, when Indian company Shantha Biotechnics approached a Western firm for a technology transfer of Hepatitis B vaccine, the firm responded that “India cannot afford such high technology vaccines… And even if you can afford to buy the technology, your scientists cannot understand recombinant technology in the least.”25 Later, Shantha Biotechnics developed its own vaccine at $1 per dose, and the UNICEF (United Nations Children’s Emergency Fund) mass inoculation programme uses this vaccine against Hepatitis B. In 2009, Shantha sold over 120 million doses of vaccines globally. India also produces high-quality generic drugs for HIV/AIDS and cancer treatment and markets them across the globe. Now, a couple of Indian companies are in the last stage of producing mRNA (Messenger RNA) vaccines.26 Similarly, Bangladesh and Indonesia claimed that they could manufacture millions of COVID-19 vaccine doses a year if pharmaceutical companies share the know-how.27 Recently, Vietnam also said that the country could satisfy COVID-19 vaccine production requirements once it obtains vaccine patents.28 Countries like the United Arab Emirates (UAE), Turkey, Cuba, Brazil, Argentina and South Korea have the capacity to produce high-quality vaccines but lack technologies and know-how. However, Africa, Egypt, Morocco, Senegal, South Africa and Tunisia have limited manufacturing capacities, which could also produce COVID-19 vaccines after repurposing. Moreover, COVID-19 vaccine IPR runs across the entire value chain – vaccine development, production, use, etc. A mere patent waiver may not be enough to address the issues related to its production and distribution. What is more important here is to share the technical know-how and information such as trade secrets. Therefore, the existing TRIPS flexibilities, such as compulsory and voluntary licensing, are insufficient to address this crisis. Further, compulsory licensing and the domestic legal procedures it requires is cumbersome and not expedient in a public health crisis like the COVID-19 pandemic.

#### 3. Unchecked Covid destroys peaceful norms between US and Northeast Asia particularly-causes *nuclear winter*

RECNA, Research Center for Nuclear Weapons Abolition, Nagasaki University (RECNA), Asia Pacific Leadership Network (APLN) & Nautilus Institute (2021), **6/39/**21

(Pandemic Futures and Nuclear Weapon Risks: The Nagasaki 75th Anniversary pandemic-nuclear nexus scenarios final report, Journal for Peace and Nuclear Disarmament, 4:sup1, 6-39, DOI: 10.1080/25751654.2021.1890867)

The Challenge: Multiple Existential Threats The relationship between pandemics and war is as long as human history. Past pandemics have set the scene for wars by weakening societies, undermining resilience, and exacerbating civil and inter-state conflict. Other disease outbreaks have erupted during wars, in part due to the appalling public health and battlefield conditions resulting from war, in turn sowing the seeds for new conflicts. In the post-Cold War era, pandemics have spread with unprecedented speed due to increased mobility created by globalization, especially between urbanized areas. Although there are positive signs that scientific advances and rapid innovation can help us manage pandemics, it is likely that deadly infectious viruses will be a challenge for years to come. The COVID-19 is the most demonic pandemic threat in modern history. It has erupted at a juncture of other existential global threats, most importantly, accelerating climate change and resurgent nuclear threat-making. The most important issue, therefore, is how the coronavirus (and future pandemics) will increase or decrease the risks associated with these twin threats, climate change effects, and the next use of nuclear weapons in war.5 Today, the nine nuclear weapons arsenals not only can annihilate hundreds of cities, but also cause nuclear winter and mass starvation of a billion or more people, if not the entire human species. Concurrently, climate change is enveloping the planet with more frequent and intense storms, accelerating sea level rise, and advancing rapid ecological change, expressed in unprecedented forest fires across the world. Already stretched to a breaking point in many countries, the current pandemic may overcome resilience to the point of near or actual collapse of social, economic, and political order. In this extraordinary moment, it is timely to reflect on the existence and possible uses of weapons of mass destruction under pandemic conditions – most importantly, nuclear weapons, but also chemical and biological weapons. Moments of extreme crisis and vulnerability can prompt aggressive and counterintuitive actions that in turn may destabilize already precariously balanced threat systems, underpinned by conventional and nuclear weapons, as well as the threat of weaponized chemical and biological technologies. Consequently, the risk of the use of weapons of mass destruction (WMD), especially nuclear weapons, increases at such times, possibly sharply. The COVID-19 pandemic is clearly driving massive, rapid, and unpredictable changes that will redefine every aspect of the human condition, including WMD – just as the world wars of the first half of the 20th century led to a revolution in international affairs and entirely new ways of organizing societies, economies, and international relations, in part based on nuclear weapons and their threatened use. In a world reshaped by pandemics, nuclear weapons – as well as correlated non-nuclear WMD, nuclear alliances, “deterrence” doctrines, operational and declaratory policies, nuclear extended deterrence, organizational practices, and the existential risks posed by retaining these capabilities – are all up for redefinition. A pandemic has potential to destabilize a nuclear-prone conflict by incapacitating the supreme nuclear commander or commanders who have to issue nuclear strike orders, creating uncertainty as to who is in charge, how to handle nuclear mistakes (such as errors, accidents, technological failures, and entanglement with conventional operations gone awry), and opening a brief opportunity for a first strike at a time when the COVID infected state may not be able to retaliate efficiently – or at all – due to leadership confusion. In some nuclear-laden conflicts, a state might use a pandemic as a cover for political or military provocations in the belief that the adversary is distracted and partly disabled by the pandemic, increasing the risk of war in a nuclear-prone conflict. At the same time, a pandemic may lead nuclear armed states to increase the isolation and sanctions against a nuclear adversary, making it even harder to stop the spread of the disease, in turn creating a pandemic reservoir and transmission risk back to the nuclear armed state or its allies. In principle, the common threat of the pandemic might induce nuclear-armed states to reduce the tension in a nuclear-prone conflict and thereby the risk of nuclear war. It may cause nuclear adversaries or their umbrella states to seek to resolve conflicts in a cooperative and collaborative manner by creating habits of communication, engagement, and mutual learning that come into play in the nuclear-military sphere. For example, militaries may cooperate to control pandemic transmission, including by working together against criminal-terrorist non-state actors that are trafficking people or by joining forces to ensure that a new pathogen is not developed as a bioweapon. To date, however, the COVID-19 pandemic has increased the isolation of some nuclear-armed states and provided a textbook case of the failure of states to cooperate to overcome the pandemic. Borders have slammed shut, trade shut down, and budgets blown out, creating enormous pressure to focus on immediate domestic priorities. Foreign policies have become markedly more nationalistic. Dependence on nuclear weapons may increase as states seek to buttress a global re-spatialization6 of all dimensions of human interaction at all levels to manage pandemics. The effect of nuclear threats on leaders may make it less likely – or even impossible – to achieve the kind of concert at a global level needed to respond to and administer an effective vaccine, making it harder and even impossible to revert to pre-pandemic international relations. The result is that some states may proliferate their own nuclear weapons, further reinforcing the spiral of conflicts contained by nuclear threat, with cascading effects on the risk of nuclear war. Developing Pandemic-nuclear Nexus Scenarios How might the COVID-19 pandemic (and future pandemics) create new opportunities or challenges for governments, civil society, and market actors to reduce nuclear risk and resume nuclear disarmament? And how might those challenges and opportunities emerge in Northeast Asia, in particular? In the face of so much uncertainty, a powerful way to obtain navigational guidance and to develop robust strategies is to conduct scenario-based dialogues. Scenarios may be underpinned by analysis, but they rest primarily on eliciting diverse insights through a dialogic process (typically a workshop) that explores the multiple, powerful drivers of complex problems and possible strategies to resolve such problems. Rather than predict any specific future, the goal of developing scenarios is to prepare individuals and organizations for radically divergent, possible futures. A scenario is a tool for ordering one’s perceptions about alternative future environments in which today’s decisions might play out. In practice, scenarios resemble a set of stories built around carefully constructed plots. These stories can express multiple perspectives on complex events and give multiple meaning to these events. The development of such scenarios was the primary goal of the Nagasaki 75th Anniversary Pandemic-Nuclear Nexus Scenarios workshop. Through this project, we wanted to develop an analytic understanding of the interrelated nature of nuclear weapons and global pandemics. We wanted to explore the potential levers and pathways to influence the future. And we wanted to find concrete strategies to reduce the risk of nuclear war and resume disarmament, particularly novel approaches that could engage both state and non-state actors. Shaping the Focal Question At the outset of the Pandemic-Nuclear Nexus Scenarios Project, the organizers framed a focal question that would guide the development of the scenarios: What are the opportunities driven by global pandemics for Northeast Asian governments, civil society, and market actors to reduce nuclear risk and resume nuclear disarmament? This focal question has twin normative values in it: (a) how to reduce the risk of nuclear war arising from the pandemic and (b) how to resume nuclear disarmament under pandemic conditions. Measures to realize (a) might be in opposition to measures to realize (b). They might be independent, or they might be complementary. Discovering opportunities where the measures are synergistic has the highest value; avoiding contradictory measures might be critically important. But forced to choose, we likely must go first and foremost with measures to reduce the risk of nuclear war, as disarmament becomes moot and improbable if nuclear war occurs. As in any scenarios event, we sought to identify robust strategies that could work across the divergent, uncertainty-based scenarios and move each story line toward a higher probability of realizing these two strategic goals. We were particularly interested in prompting discussion on the role of cities as potential new players with regard to nuclear war risk reduction. The challenges of “global nuclear governance” and nuclear disarmament have traditionally been dominated by great powers (that is, nation-states). But given their evident and emerging leading role as “first responders” to the existential threats of the coronavirus pandemic and climate change effects, we wanted to see how cities’ capacity and experience may be useful in relation to nuclear risk and disarmament. The focal question also centers on Northeast Asia, a region that was the site of the first use of nuclear weapons (in Hiroshima and Nagasaki), and that today has thousands of cities, as well as potential for conflict on multiple fronts, including between China and Taiwan, China and the United States, and the ROK and DPRK. Northeast Asia sits at the nexus of relations between the world’s three largest nuclear armed states (China, Russia, and the United States), and it is home to the DPRK, a rapidly developing new nuclear-armed state. Identifying Critical Uncertainties In the first phase of the scenario development process, participants were divided into four groups where they brainstormed a broad range of “critical uncertainties,” variables whose outcomes are both undetermined and important for shaping the near- and long-term future. Participants were asked to consider uncertainties based on different categories (social, technological, environmental, economic, political, military, and epidemiological). Through their initial brainstorm, groups developed a list of dozens of critical uncertainties (see Appendix 2). They were asked to narrow down their lists of uncertainties to those most likely to play a major role in shaping the pandemic-nuclear nexus. They then considered how these uncertainties could unfold along an axis with two diverging outcomes. Following are a few of the drivers participants identified: How might a distanced society affect nuclear strategies? On one end of the spectrum, for example, re-spatialization could lead to greater cooperation as people work across borders, physical and virtual. On the other end, the need to maintain distance could lead to shifts in militaries’ offshore strategies for deterrence/military projection of might and could potentially lead to the increased use of non-conventional (including nuclear) weapons. How will changes in budgets affect dis/armament? The economic recession caused by the pandemic could lead to drastic cuts in funding for the military, including for nuclear weapons. On the other hand, countries’ economic struggles could lead them to increasingly favor investing in nuclear, as opposed to higher-cost conventional weapons. How might pandemics affect global cooperation? The COVID-19 pandemic could serve as an impetus for increased international cooperation and the sharing of global information, which could extend to other areas, including nuclear. On the other hand, questions over the origin of the virus, border closures, and “vaccine competition” could lead to a rise in tensions. How will information sharing evolve? The proliferation of misinformation through diverse media channels (including social media) could erode progress in tackling shared global challenges. Or new systems could emerge that help ensure that information is shared with a high level of transparency and be verified as accurate. Will inequality increase or decrease? Following the economic recession caused by shutdowns aimed at limiting the pandemic, the gap could continue to grow between (and within) societies regarding economic well-being and human health. Or the pandemic may usher in a more redistributive economic system that leads to a decrease in inequality.

#### 4. US-China-Taiwan tensions super high due to trade relations and covid – prevents climate solutions and increasingly high risk of war

#### Reject old interdependence defense that doesn’t consider COVID or the Taiwan strait

Freeman and Scobell PhDs 10/9/21

[Carla Freeman, Ph.D.](https://www.usip.org/people/carla-freeman-phd); [Andrew Scobell, Ph.D.](https://www.usip.org/people/andrew-scobell-phd), 10-9-2021, "What’s Next for U.S.-China Relations Amid Rising Tensions Over Taiwan," United States Institute of Peace, [https://www.usip.org/publications/2021/10/whats-next-us-china-relations-amid-rising-tensions-over-taiwan //](https://www.usip.org/publications/2021/10/whats-next-us-china-relations-amid-rising-tensions-over-taiwan%20//) AW

U.S. National Security Advisor Jake Sullivan and Chinese Communist Party Politburo member Yang Jiechi held a six-hour meeting in Zurich on October 6 in an attempt to manage [“intense competition”](https://www.cnbc.com/2021/10/08/us-china-must-manage-intense-competition-top-biden-advisor-says.html) between their two countries. The meeting took place against a backdrop of growing [Chinese incursions](https://www.economist.com/china/2021/10/09/china-is-ratcheting-up-military-pressure-on-taiwan) of Taiwan’s air defense identification zone and a decision by the Biden administration not to remove Trump-era [tariffs](https://www.nytimes.com/2021/10/04/business/economy/us-china-trade.html) on Chinese goods until Beijing keeps its trade commitments. USIP’s Andrew Scobell and Carla Freeman discuss the outcomes of the Sullivan-Yang meeting and the challenges besetting the U.S.-China relationship. Fighter jets on a runway during a drill at Chiayi, an air force base in southern Taiwan. October 18, 2017. (Bryan Denton/The New York Times) What’s the context surrounding the recent meeting between U.S. National Security Advisor Jake Sullivan and Chinese Communist Party Politburo member Yang Jiechi? What did they discuss and what did they hope to accomplish? Scobell: The October 6 meeting between U.S. National Security Advisor Jake Sullivan and Chinese Communist Party Politburo member Yang Jiechi occurred within the context of the most fraught period in U.S.-China relations in decades. The degree of turmoil in bilateral relations is evident from the fact that this meeting took place on neutral ground in Switzerland rather than allow either side to claim the home-field advantage. Yet, that this dialogue was held at all stands as testament to an abiding desire in both Washington and Beijing to manage bilateral disputes and limit tensions. Indeed, both sides characterized the session in subdued but generally positive terms and pledged to continue to keep the channels of communication open. Both sides have a strong pragmatic interest in maintaining a stable relationship, a desire to avoid military conflict and to see mutual benefit in addressing contentious economic issues. However, a major stumbling block is in the tendency for each set of leaders to perceive that the other side is at fault and hence insist that it must be the one to make concessions. This is compounded by the reality that leaders, whether in Washington or Beijing, do not want to look weak by appearing to “blink first” by offering compromises or concessions. Additionally, Chinese leaders are preoccupied with status and appearances: a desire to stage high-profile events intended to showcase themselves as global statesmen. Hence, for months Beijing has been pushing for an in-person summit or at least a face-to-face meeting between Chinese leader Xi Jinping and President Joe Biden this year, independent of whether this top-level interaction is merited by a real improvement in relations and/or concrete deliverables. Relations between the United States and China are beset by a minefield of disputes across a wide range of issue areas, including not just security, but also trade and technology. While it is not clear whether all these issues were discussed, we do know that among those covered were human rights, Xinjiang, Hong Kong and the South China Sea, as well as Taiwan. There are a number of current flash points between the United States and China. With relations currently at a low point, what’s the biggest risk for escalation? Scobell: The range of contentious issues is so extensive and the sensitivity of many so extreme that it is difficult to identify a single policy issue or geographic location as being most susceptible to escalation. There are so-called flash points located in the western Pacific that could trigger political-military crises leading to confrontation and spiraling into armed conflict. These include not just the Taiwan Strait, but also the South China and East China Seas. These locales have each proven to be chronic hot spots in U.S.-China relations across decades. While tensions in these locations have fluctuated considerably over the years between edgy confrontation, slow boil and relative calm, each remains an enduring flash point with the potential to escalate into war and complicated by the involvement of third parties, including one or more U.S. allies and partners. There is also an array of diplomatic, legal, technological and economic issues that are quite volatile and prone to escalation. Prime examples include a “trade war” and a “hostage standoff.” While the former is well known, the latter is not and emerged in late 2018 when Canada arrested Meng Wanzhou, the CFO of Chinese telecom giant Huawei, at the request of the U.S. government. Shortly thereafter, Beijing detained two Canadian citizens — Michael Spavor, a businessman, and Michael Kovrig, a former diplomat — in China on what appear to be trumped up charges. Officially, these detentions were completely unrelated but the manner in which the standoff was resolved on September 24, 2021, suggests otherwise: within hours of Canada allowing Meng to board a flight to China following her plea deal with the U.S. Department of Justice, Spavor and Kovrig were allowed to depart China and return to Canada. While this de-escalation of this “hostage standoff” is arguably a positive development in the short run, its outcome might incentivize China to consider similar tactics in the future, which could set the stage for future escalation. Where does Taiwan rank in terms of a flash point and how serious are the current tensions in the Taiwan Strait? Freeman: For many decades, Taiwan has been the most serious political-military flash point in U.S.-China relations, and in recent weeks and months the Taiwan Strait has experienced rising tensions with dramatic increases in the frequency and seriousness of provocations by Chinese military aircraft within Taiwan’s air defense identification zone (ADIZ). Tensions between Beijing and Taipei have been acute since Taiwan’s 2016 election of president of Tsai Ing-wen, whose Democratic Progressive Party was founded on a platform favoring independence for the island. Tsai’s Kuomintang predecessor rejected the idea of Taiwan’s independence and pursued growing political interactions across the Taiwan Strait, which were suspended after Tsai became president. Tsai’s effective diplomacy with liberal democracies has frustrated Beijing, including her message that a successful takeover of Taiwan by Beijing will not [only impact regional peace but also the democratic alliance system](https://www.foreignaffairs.com/articles/taiwan/2021-10-05/taiwan-and-fight-democracy). Washington has offered more muscular support for Taipei on a number of fronts in recent years. The Trump administration integrated the island into its Indo-Pacific strategy, expanded arms sales to Taiwan and took other steps that expanded official contacts between Washington and Taipei. The Biden administration has affirmed its own commitment to Taiwan, making clear that it not only supports strengthening Taiwan’s defense capabilities but would like to see Taiwan play a larger international role. As Beijing signals its resolve to “unify” Taiwan by sending unprecedented numbers of warplanes, including bombers, well into Taiwan’s ADIZ, there are rising risks of an accidental collision with Taiwan’s fighter jets monitoring China’s incursions that could spark wider conflict. Sullivan and Yang haven’t met face-to-face since March, when a pre-summit press conference grew contentious. Has that event had any lingering effects on their relations? Scobell: The high-level March meeting in Anchorage, Alaska, was most memorable for its in-front-of-the camera theatrics. Yet, both sides took this public face-off in stride — each side was playing to their respective domestic audiences. As noted above, neither side wants to look weak vis-à-vis the other or appear hesitant to stand up for the honor and interests of their countries. Moreover, this public posturing did not prevent these senior U.S. and Chinese foreign policy officials from holding forthright and substantive discussions behind closed doors. Along with the outward histrionics, the most significant indication of the poor state of bilateral relations was the absence of a joint statement or communique at the conclusion of the March talks. Freeman: Since the March summit in Alaska, subsequent high-level exchanges between Washington and Beijing have had a confrontational tone. A July visit to China by Deputy Secretary of State Wendy Sherman was full of tension as the United States raised concerns about a range of [China’s policies as well as the sensitive topic of the World Health Organization’s investigation into the origins of COVID-19](https://www.politico.com/news/2021/07/26/beijing-demands-biden-adminsitration-500740). Beijing met Sherman with lists of actions it insisted the United States must address before it would consider working cooperatively with Washington in areas where common interest is clear. During a subsequent trip to China by U.S. climate envoy John Kerry, Chinese officials made clear that Beijing would not consider joint efforts on climate action until it was satisfied with the broader bilateral relationship. What has been the immediate outcome of the meeting? Could we expect follow-up talks in the near future? Freeman: Despite the frosty tenor of these meetings, several indications, not least the October 6 meeting between Sullivan and Yang, affirm there is an appetite in both countries for stabilizing the relationship. U.S. trade representative Katherine Tai conveyed in recent remarks an interest in “recoupling” the U.S. and Chinese economies ahead of planned meetings with her counterpart. Deputy Assistant Secretary of Defense Michael Chase has held a number of virtual exchanges with the deputy director of the PLA’s Office for International Military Cooperation. Further talks between the two sides are a likely outcome of the Sullivan-Yang meeting, including a possible virtual meeting between U.S. and Chinese heads of state before the end of the year. Scobell: While the outlook for U.S.-China relations is far from sunny and bright, recent high-level meetings suggest the two countries can, for the foreseeable future, look forward to an extended forecast of dreary and overcast weather punctuated by periodic thunderstorms. But Washington and Beijing also need to constantly scan the skies for looming storm clouds and be ever alert for the potential of severe weather systems forming over the horizon.

#### **5. Goes nuclear**

Davis, 21

Daniel L Davis. (2021, October 5). The US must avoid war with China over Taiwan at all costs. The Guardian. Daniel L Davis is a senior fellow for defense priorities and a former lieutenant colonel in the US army who deployed into multiple combat zones. https://www.theguardian.com/commentisfree/2021/oct/05/the-us-must-avoid-war-with-china-over-taiwan-at-all-costs

Since last Friday, the People’s Republic of China has launched a total of 155 warplanes – the most ever over four consecutive days – into Taiwan’s Air Defense Identification Zone; Ned Price said the state department was “very concerned”. There have been more than 500 such flights through nine months this year, as opposed to 300 all of last year. Before war comes to the Indo-Pacific and Washington faces pressure to fight a potentially existential war, American policymakers must face the cold, hard reality that fighting China over Taiwan risks an almost-certain military defeat – and gambles we won’t stumble into a nuclear war. Bluntly put, America should refuse to be drawn into a no-win war with Beijing. It needs to be said up front: there would be no palatable choice for Washington if China finally makes good on its decades-long threat to take Taiwan by force. Either choose a bad, bitter-tasting outcome or a self-destructive one in which our existence is put at risk. The prevailing mood in Washington among officials and opinion leaders is to fight if China attempts to conquer Taiwan by force. In a speech at the Center for Strategic Studies last Friday, the deputy secretary of defense, Kathleen Hicks, said that if Beijing invades Taiwan, “we have a significant amount of capability forward in the region to tamp down any such potential”. Either Hicks is unaware of how little wartime capacity we actually have forward deployed in the Indo-Pacific or she’s unaware of how significant China’s capacity is off its shores, but whichever the case, we are in no way guaranteed to “tamp down” a Chinese invasion of Taiwan. Earlier this year, Senator Rick Scott and Representative Guy Reschenthaler introduced the Taiwan Invasion Prevention Act which, Representative Reschenthaler said, would authorize “the president to use military force to defend Taiwan against a direct attack”. In the event of an actual attack, there would be enormous pressure to fast-track such a bill to authorize Biden to act. We must resist this temptation. As I have previously detailed, there is no rational scenario in which the United States could end up in a better, more secure place after a war with China. The best that could be hoped for would be a pyrrhic victory in which we are saddled with becoming the permanent defense force for Taiwan (costing us hundreds of billions a year and the equally permanent requirement to be ready for the inevitable Chinese counter-attack). The most likely outcome would be a conventional defeat of our forces in which China ultimately succeeds, despite our intervention – at the cost of large numbers of our jets being shot down, ships being sunk, and thousands of our service personnel killed. But the worst case is a conventional war spirals out of control and escalates into a nuclear exchange.

#### 4. COVID vaccine debate will kill the WTO- there are no alternate causes and solvency is reverse causal

Meyer 6-18-21

(David, Senior Writer, https://fortune.com/2021/06/18/wto-covid-vaccines-patents-waiver-south-africa-trips/)

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." A spokesperson for the WTO Secretariat declined to offer comment on Mlumbi-Peter and Wallach's suggestions that the organization's credibility rests on the vaccine patent waiver issue, but pointed to a May speech in which Okonjo-Iweala said the WTO could help tackle vaccine supply chain monitoring and transparency, helping manufacturers scale up production, and creating a more geographically diversified manufacturing base. In her speech, the WTO chief also said members "must address issues related to technology transfer, knowhow and intellectual property," including the waiver proposal. "We must act now to get all our ambassadors to the table to negotiate a text," she said.

#### 5. Not happening in the squo

Reuters 10-4-21 https://www.reuters.com/business/healthcare-pharmaceuticals/year-after-covid-vaccine-waiver-proposal-wto-talks-are-deadlocked-2021-10-04/

GENEVA, Oct 4 (Reuters) - A year after South Africa and India introduced a novel proposal to temporarily waive intellectual property rights on COVID-19 vaccines and therapies at the World Trade Organization, negotiations are deadlocked and directionless, trade sources said on Monday after a meeting on the topic. More than 100 countries backing the waiver say it will help save lives by allowing developing countries to produce COVID-19 vaccines. But a handful of countries, including some hosting major pharmaceutical firms such as Switzerland, remain opposed. Washington threw its weight behind the proposal in May, raising expectations of a breakthrough that has so far failed to materialise. At a closed-door TRIPS Council meeting on the waiver on Monday, Norway's Dagfinn Sorli seemed frustrated and asked delegates: "Where do we go from here?," according to three trade sources who attended. He urged delegates to come forward quickly with advice on next steps, the sources added. "I definitely need your advice," he told them. Report ad China in the same meeting described the discussions as circular, with no real progress achieved, according to one of the sources attending. India's delegate said that some members had done everything in their power to avoid meaningful engagement, the source added. The meeting was the penultimate scheduled session on the waiver ahead of a major ministerial conference in November-December which provides a rare opportunity for new trade deals, such as on intellectual property, to be finalised. WTO Director-General Ngozi Okonjo-Iweala has identified solutions to vaccine inequity as a priority for the global trade body, which has been facing questions recently about its relevance.

#### 6. The WTO reduces war through peace dividends, interdependence, and rule of law

Baldwin, PhD, and Nakotomi 15

(Richard Baldwin, professor of international economics at the Graduate Institute of International and Development Studies in Geneva, Michitaka, Consulting Fellow at the Research Institute of Economy, Trade and Industry (RIETI) and a Special Adviser to the Japan External Trade Organization (JETRO). <https://cepr.org/sites/default/files/policy_insights/PolicyInsight84.pdf>, July)

The WTO, and the GATT before it, has been one the planet’s precious public goods. The multilateral cooperation supports and encourages trade, which, in turn, fosters peace and rising living standards worldwide. The idea that trade fosters peace was famously expounded by Montesquieu in the 18th century: “The natural effect of commerce is to bring peace. Two nations that negotiate between themselves become reciprocally dependent, if one has an interest in buying and the other in selling. And all unions are based on mutual needs.” 2 Put simply, sellers have little interest in attacking their buyers. Perhaps the most obvious example is how bourgeoning trade between France and Germany flipped the switch from a war-pattern to a peace-pattern. After fighting three increasingly horrifying wars from 1870 to 1945, the French and the Germans are now locked in one of the most intense commercial interactions in the world. At a personal level, this has brought millions of French and Germans into frequent, direct contact. French work for German companies and vice versa, and French firms are excellent customers for German firms and vice versa. The idea that going to war to, for example, would switch the nationality of AlsaceLorraine once again is now insanity. International commerce makes Franco-German war into a ‘mutually assured destruction’ situation. When it comes to why flourishing trade is synonymous with rising living standards, there is little mystery. Trade allows the market’s efficiency enhancing mechanisms to play out on a broader scale. With access to larger markets on the export side and a wider range of high-quality, reasonably priced goods and services on the import side, trade allows nations to allocate resources to where they can be most productive. This enables countries to achieve greater scale and agglomeration economies that are, in turn, pro-innovation, pro-productivity, and pro-growth. Open trade also generates an imperative to innovate. As the Bhagwati-Sutherland Report put it: “Exposed to Japanese car manufacturers’ competition, Detroit car makers recognised that their system of vertical integration was less efficient than a competitive supply chain model. European farmers respond to developing world agricultural imports by moving out of bulk commodities and into boutique and specialist farm goods and foods. India’s car industry has been transformed by external competition to the extent that the worlds’ smallest and cheapest car – the Tata Nano - is a world class Indian innovation”.3 Trade, in other words, is a classic example of winwin cooperation. When all cooperate, all can win. Creating a common interest in multilateral cooperation The GATT promoted such win-win multilateral cooperation by setting up what political scientists refer to as a ‘regime’ – a collection of principles, norms, rules, and procedures around which the expectations of nations and interest groups converged. The result is what could be called the GATT/WTO ‘code of good conduct’. The code fostered a pattern of cooperation which fostered economic success (see Box 1 for a brief description of the code). The resulting economic success was nothing short of spectacular. As the GATT’s mutual-liberalisation process started working its magic, exports of manufactured goods boomed. This made it easy to view the GATT as good for exports, industry, and growth. But the really useful outcome – as far as cooperation is concerned – is the fact that manufactured exports grew two and a half times faster than manufacturing output. This made it very easy to portray multilateral cooperation as win-win. One just could not say that the ‘your’ exports were ‘stealing’ demand from ‘my’ producers. Quite the contrary, export sales around the world were outstripping production growth by a wide margin (Figure 1). All cooperated and all won. Economic success shifts mind sets This success produced a historic shift in the mindset of global political, business, and labour leaders. Recall that in the decades before the GATT, the received wisdom was that a nation should raise protection to protect its industry. Free trade was for starry-eyed idealists; unilateral protection was the savvy way to boost national industry and incomes. All this changed in the 1950s and 1960s. Mutual opening became the winning way; unilateral closing came to be viewed as a failed dogma of olden days. This manifest economic success launched a selfreinforcing cycle. Booming trade and incomes strengthened GATT members’ belief that following the code of conduct was good policy from a purely nationalistic perspective. The cycle spiralled ever higher as the code continued to produce progressive, mutually advantageous trade opening decade after decade. Perhaps even more important than this sea-change in policymakers’ minds was the shift in the thinking and expectations of political pressure groups inside each member. As nations and interest groups came to expect that the rules would be respected, they adopted behaviours that conformed to the rules – thus making rule-compliance almost automatic. Despite trade conflicts being common, the code and the win-win outcomes created a common interest among GATT members in defending multilateral cooperation. It is a precious ‘public good’ for world trade and, more generally, for world peace; multilateral cooperation on anything is a rare commodity these days. More generally, the GATT/WTO has raised respect for the rule of law in the international context almost universally. It is one part of the foundation that supports respect for the concept of international law. Creation of strong dispute settlement mechanism and prohibition of unilateral measures in the WTO further reinforced it. The GATT/WTO is the leading – and probably the only – example of a multilateral and nearuniversal framework of rules and law.

#### Second route to US-China war solvency – WTO dampens tensions

Shaffer, 21

(Gregory Shaffer is Chancellor’s Professor at the University of California, Irvine, and author of the forthcoming book, “Emerging Powers in the World Trading System: The Past and Future of International Economic Law.” <https://thehill.com/opinion/international/559049-the-us-must-engage-with-china-even-when-countering-china>, 6-21)

A policy statement heard around the world is that U.S. engagement with China “has come to an end.” It suggests that the Biden administration is taking a hawkish approach toward China. That stance seemed clear as the U.S. worked the G7 and NATO communiqués to confront China with an “alliance of democracies.” Yet, peeling the layers, one comes to the necessity for a much more complex U.S. approach to China. Rather than ending engagement, the U.S. should be thinking about engagement’s different dimensions. Indeed, Kurt Campbell, coordinator for Indo-Pacific affairs on the National Security Council, who made the remark, implicitly addressed three necessary forms of engagement that have been lacking. First, even when the United States aims to counter China, engagement remains essential. The U.S. will most effectively counter Chinese actions in the South China Sea, the Taiwan Strait, along the border with India, and against allies’ economies, if the U.S. works closely with others. The Trump administration was notoriously unreliable and antagonistic towards allies. The United States and its allies will bolster their position in relation to China if they coordinate — an approach underscored at the recent G7 and NATO summits. ADVERTISEMENT Yet, even in high-conflict situations, diplomacy and bargaining with China also will be important. Trade and technology policies are rife with rivalry and competition. These policies can trigger harmful tit-for-tat escalations if they are not grounded in agreed rules and understandings. These risks become particularly salient when economic and financial crises strike. Third-party institutions such as the World Trade Organization (WTO) can help parties manage their conflicts so that they are not mutually destructive. China will be indispensable in any U.S. effort to update and “reform” WTO rules. Second, the United States needs to work with China to effectively address common global, existential challenges. Campbell mentioned three: climate change, global pandemics, and nuclear proliferation. A signal success of the Obama administration was getting China to make commitments for the first time on emissions, which gave rise to the Paris Agreement. The U.S. also worked with China to stem Iran’s ability to develop nuclear weapons under the Joint Comprehensive Plan of Action. It needs to do the same regarding North Korea’s nuclear program. Even in these areas of mutual concern, competition and rivalry are present. Yet such competition also can lead to mutually beneficial outcomes, such as to provide vaccines globally and to develop green technologies.

#### Plan: Member nations of the World Trade Organization ought to reduce intellectual property protections for medicines for COVID-19

#### 11. Critics of the IP waiver are wrong- it’s the most effective way to combat covid inequality, alternatives fail

Erfani et al, 21

(Parsa Erfani, Fogarty global health scholar1 2, Agnes Binagwaho, vice chancellor2, Mohamed Juldeh Jalloh, vice president3, Muhammad Yunus, chair4, Paul Farmer, professor57, Vanessa Kerry, associate professor810 Harvard Medical School, Boston, USA 2University of Global Health Equity, Rwanda 3Sierra Leone 4Yunus Centre, Bangladesh 5Global Health and Social Medicine, Harvard Medical School, Boston, USA 6Division of Global Health Equity, Brigham and Women’s Hospital, USA 7Partners In Health, USA 8Seed Global Health, USA 9Program in Global Public Policy and Social Change, Harvard Medical School, Boston, USA 10Division of Pulmonary and Critical Care Medicine, Massachusetts General Hospital, USA Intellectual property waiver for covid-19 vaccines will advance global health equity BMJ 2021; 374 doi: https://doi.org/10.1136/bmj.n1837 (Published 03 August 2021) Cite this as: BMJ 2021;374:n1837 https://www.bmj.com/content/374/bmj.n1837.full) The barrier to adequate vaccine supply today is not lack of vaccine options, nor even theoretical production capacity; the problem is the intellectual property (IP) protection governing production and access to vaccines—and ultimately, the political and moral will to waive these protections in a time of global crisis. Without such liberty, there will not be enough vaccine fast enough to prevent the spread of variants, the avoidable deaths, and the continued choking of low and middle income countries (LMICs) through poor health. Beyond donor based models of global vaccine equity As covid-19 became a pandemic, global efforts emerged to help ensure vaccines would be delivered across the globe to the highest risk populations. One of the first was Covax, a risk sharing mechanism in which countries, tiered by means, contribute to collectively source and equitably distribute vaccines globally. The effort, however laudable in intent, has been undercut by vaccine scarcity and underfunding. Covax aims to vaccinate 20% of the population in 92 low and middle income countries by the end of 2021. At the end of April, however, it had shipped only one fifth of its projected estimates and lacked critical resources for distribution.3 LMICs are wary about participating in well worn dynamics of global health aid. Instead, they are mobilising to overcome the fundamental paucity of available vaccines by challenging established global IP rules. At issue is the 1995 Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement, which established minimum protection standards for IP—including patents, industrial designs, trade secrets, and copyright—that all 164 members of the World Trade Organization (WTO) must respect.5 Subsequent rulings (such as the Doha declaration) have strived to clarify safeguards on patents, including compulsory licensing, which allows governments to license patents to a third party without consent (table 1).6 Today, these rules provide strong IP protection for vaccine technologies and affect the quantity and location of vaccine production and availability. Table 1 Licensing of intellectual property View popupView inline In October 2020, South Africa and India submitted a proposal to the WTO to temporarily waive certain provisions of the TRIPS agreement for covid-19 health products and technologies. The waiver would prevent companies that hold the IP for covid-19 vaccines from blocking vaccine production elsewhere on the grounds of IP and allow countries to produce covid-19 medical goods locally and import or export them expeditiously (table 1). Although the proposed IP waiver is supported by over 100 countries, WTO has not reached a consensus on the proposal because of opposition and filibustering by several high income countries, including the UK, Germany, and Japan.7 Waiver opponents argue that the limited capacity of LMICs to produce complex covid-19 vaccines safely is the true barrier to global production, not IP. They suggest that the TRIPS waiver would penalise drug companies, stifle biomedical innovation, and deter future investments in research and development—in sum, that it would reduce returns on investment and dismantle an IP system that provided the goods needed to end the pandemic. Others are concerned that an IP waiver would fuel supply chain bottlenecks for raw materials and undermine ongoing production. Moreover, policy makers argue that a waiver is unnecessary as company driven voluntary licensing—in which companies decide when and how to license their technologies—and existing TRIPS flexibilities (such as country determined compulsory licensing) should suffice in establishing production in LMICs (table 1). They suggest that waiving IP for covid-19 vaccines would provide no meaningful progress, but the data do not support this. What effect would a waiver have? Contrary to detractors’ concerns about the possible effect of a temporary TRIPS waiver, global health analyses suggest that it will be vital to equitable and effective action against covid-19. LMIC’s manufacturing capabilities have been underestimated, even though several LMICs have the scientific and manufacturing capacity to produce complex covid-19 vaccines. India, Egypt, and Thailand are already manufacturing viral vector or mRNA-based covid-19 vaccines,8910 and vaccine production lines could be established within months in some other LMICs,11 offering substantial benefit in a pandemic that will last years.11 Companies in India and China have already developed complex pneumococcal and hepatitis B recombinant vaccines, challenging existing vaccine monopolies.12 The World Health Organization launched an mRNA technology transfer hub in April 2021 to provide the logistical, training, and know-how support needed for manufacturers in LMICs to repurpose or expand existing manufacturing capacity to produce covid-19 vaccines and to help navigate accessing IP rights for the technology.13 Twenty five respondents from LMICs expressed interest, and South Africa was selected as the first hub, with plans to start producing the vaccine through the Biovac Institute in the coming months.14 Removing IP barriers through the waiver will facilitate these efforts, more rapidly enable future hubs, engage a greater number of manufacturers, and ultimately yield more doses faster. Moreover, as the waiver facilitates vaccine production, demand for raw materials and active ingredients will increase. Coupled with pre-emptive planning to anticipate and expand raw material production, the waiver—which encompasses the IP of all covid-19 vaccine-related technology— can offer a path to overcome bottlenecks and expand production of necessary vaccine materials. Current licensing mechanisms inadequate Voluntary licences have not and will not keep pace with public health demand. Since companies determine the terms of voluntary licences, they are often granted to LMICs that can afford them, leaving out poorer regions.10 For example, in South Asia, AstraZeneca has voluntarily licensed its vaccine to the Serum Institute of India, even though the region has multiple capable vaccine manufacturers.9 Many covid-19 vaccine developers have not taken steps towards licensing their technologies, simply because there is limited financial incentive to do so.11 To date, none have shared IP protected vaccine information with the WHO Covid-19 Technology Access Pool (C-TAP) established last year.15 Relying on the moral compass of companies that answer to shareholders to voluntarily license their technologies will have limited effect on vaccine equity. Their market is driven by profit margins, not public health. Compulsory licensing by LMICs will also be insufficient in rapidly expanding vaccine production, as each patent licence must be negotiated separately by each country and for each product based on its own merit. From 1995 to 2016, 108 compulsory licences were attempted and only 53 were approved.6 The case-by-case approach is slow and not suitable for a global crisis that requires swift action. In addition, TRIPS requires compulsory licences to be used predominantly for domestic supply, limiting exports of the licensed goods to nearby low income countries without production capacity.5 Although a “special” compulsory licence system was agreed in the Doha declaration to allow for expeditious exportation and importation (formalised as the article 31bis amendment to TRIPS in 2017), the provision is limited by cumbersome logistical procedures and has been rarely used.16 Governments may also be hesitant to pursue compulsory licences as high income countries have previously bullied them for doing so. Since India first used compulsory licensing for sorafenib tosylate in 2012 (reducing the cancer drug’s price by 97%), the US has consistently pressured the country not to use further compulsory licences.17 During this pandemic, Gilead sued the Russian government for issuing a compulsory licence for remdesivir.18 Furthermore, while compulsory licences are primarily for patents, covid-19 vaccines often have other types of IP, including trade secrets, that are integral for production.19 The emergency TRIPS waiver removes all IP as a barrier to starting production (not just patents) and negates the prolonged time, inconsistency, frequent failure, and political pressure that accompany voluntary licensing and compulsory licensing efforts. It also provides an expeditious path for new suppliers to import and export vaccines to countries in need without bureaucratic limitations. Finally, there is no compelling evidence that the proposed TRIPS waiver would dismantle the IP system and its innovation incentives. The waiver is restricted to covid-19 related goods and is time limited, helping to protect future innovation. It would, however, reduce profit margins on current covid-19 vaccines. With substantial earnings in the first quarter of 2021, many drug companies have already recouped their research and development costs for covid-19 vaccines.20 However, they have not been the sole investors in vaccine development, and they should not be the only ones to profit. Most vaccines received a substantial portion of their direct funding from governments and not-for-profit organisations—and for some, such as Moderna and Novavax, nearly all.21 Decades of publicly funded research have laid the groundwork for current innovations in the background technologies used for vaccines.22 Given that companies were granted upfront risk protection for covid-19 vaccine research and development, a waiver that advances global public health but reduces vaccine profits in a global crisis is reasonable. Knowledge transfer An IP waiver for covid-19 vaccines is integral to boosting vaccine supply, breaking vaccine monopolies, and making vaccines more affordable