# 1NC R1 St Marks

## 1

### CP

#### CP text: The member nations of the WTO should:

#### ---Loan an additional 4 billion dollars of additional funding to close the pre-purchase gap of 350 million vaccines to achieve world-wide immunity

#### ---The World Bank should relax the conditions to receive a loan as per Goldberg 21

#### ---Eliminate export restriction on critical medicines during pandemics.

#### The CP solves pandemics better—the aff misidentifies the problem.

Goldberg 20 [PINELOPI KOUJIANOU; Former World Bank Group chief economist and editor-in-chief of the American Economic Review, Professor of Economics at Yale University; “Forget the Vaccine Patent Waiver,” Project Syndicate; 5/13/21; <https://www.project-syndicate.org/commentary/wto-vaccine-waiver-is-beside-the-point-by-pinelopi-koujianou-goldberg-2021-05>] Justin

What’s the issue, then? According to Agarwal and Reed, it is that companies are reluctant to activate their existing production capacity without pre-purchase commitments. There is currently a large gap between the number of doses that could be produced and the number that have been pre-ordered. And, as one would expect, this gap is unevenly distributed. High-income countries have ordered more doses than they need and thus will end up with a surplus, whereas lower-income countries are far behind in pre-purchasing vaccines. Under these circumstances, efforts to increase capacity by relaxing patent protections would do nothing to accelerate vaccinations in lower-income countries. A far more promising strategy is to help lower-income countries purchase vaccines, while channeling surplus doses from richer countries to wherever they are needed most. To a large extent, this strategy is already being implemented, thanks to the efforts of the COVAX Advanced Market Commitment facility, together with concessional loans by multilateral institutions such as the World Bank, and regional initiatives such as the one being led by the African Union. Remarkably, Agarwal and Reed show that the COVAX AMC facility and the AU initiative already have ensured that most African countries have ordered enough vaccines to cover at least 50% of their populations. Still, three critical challenges remain. First, closing the pre-purchase gap of 350 million vaccines will requires an additional $4 billion – a trivial cost relative to the potential benefit of achieving worldwide immunity. Providing this support, either through additional funding for the COVAX AMC facility or by sending surplus vaccines to developing countries as soon as possible, should not be too difficult or costly for high-income countries to manage. Second, the World Bank needs to relax its conditions for extending loans for vaccine pre-purchases. Currently, such loans can be used only for vaccines approved by three stringent regulatory authorities (SRAs) in three different regions. Among these are Japan and certain Western countries, which naturally prioritize approval of vaccines intended for their own populations. They have little incentive to grant emergency-use authorization to alternative vaccines that have shown high efficacy in Phase 3 clinical trials, such as Bharat Biotech’s Covaxin (India), and Gamaleya’s Sputnik V (Russia), and Sinovac Biotech’s CoronaVac (China). Extending the list of national regulators classified as SRAs would go a long way toward increasing lending for vaccine purchases.1 Finally, existing vaccine manufacturers will be unable to meet their production targets if vaccine nationalism gives rise to export restrictions on critical inputs and raw materials. We saw such behavior early in the pandemic with respect to personal protective equipment, but the resulting export restrictions proved short-lived. One hopes the same will be true for vaccines. International cooperation and coordination will be crucial in the coming months. There are many ways for advanced economies to assist poorer countries in vaccinating their populations as soon as possible. But relaxing patent protections – however appealing the idea may be in other contexts – is not one of them. The focus should be on providing additional funding and less restrictive lending for pre-ordering vaccines, and on funneling surpluses from high-income countries to the rest of the world.

#### It allows for purchasing commitments.

1AC Lindsey 21 [Brink Lindsey has written on a wide range of topics including trade policy, globalization, American social and cultural history, and the nature of human capital. His current research focuses on economic growth and the policy barriers that impede it. "Why intellectual property and pandemics don’t mix." <https://www.brookings.edu/blog/up-front/2021/06/03/why-intellectual-property-and-pandemics-dont-mix/>] Recut Justin

What approach to encouraging innovation should we take instead? How do we incentivize drug makers to undertake the hefty R&D costs to develop new vaccines without giving them exclusive rights over their production and sale? The most effective approach during a public health crisis is direct government support: public funding of R&D, advance purchase commitments by the government to buy large numbers of doses at set prices, and other, related payouts. And when we pay drug makers, we should not hesitate to pay generously, even extravagantly: we want to offer drug companies big profits so that they prioritize this work above everything else, and so that they are ready and eager to come to the rescue again the next time there’s a crisis.

It was direct support via Operation Warp Speed that made possible the astonishingly rapid development of COVID-19 vaccines and then facilitated a relatively rapid rollout of vaccine distribution (relative, that is, to most of the rest of the world). And it’s worth noting that a major reason for the faster rollout here and in the United Kingdom compared to the European Union was the latter’s misguided penny-pinching. The EU bargained hard with firms to keep vaccine prices low, and as a result their citizens ended up in the back of the queue as various supply line kinks were being ironed out. This is particularly ironic since the Pfizer-BioNTech vaccine was developed in Germany. As this fact underscores, the chief advantage of direct support isn’t to “get tough” with drug firms and keep a lid on their profits. Instead, it is to accelerate the end of the public health emergency by making sure drug makers profit handsomely from doing the right thing.

Patent law and direct support should be seen not as either-or alternatives but as complements that apply different incentives to different circumstances and time horizons. Patent law provides a decentralized system for encouraging innovation. The government doesn’t presume to tell the industry which new drugs are needed; it simply incentivizes the development of whatever new drugs that pharmaceutical firms can come up with by offering them a temporary monopoly. It is important to note that patent law’s incentives offer no commercial guarantees. Yes, you can block other competitors for a number of years, but that still doesn’t ensure enough consumer demand for the new product to make it profitable.

## 2

### DA

#### Pharma innovation high now—monetary incentive is the biggest factor.

**Swagel 21** Phillip L. Swagel, Director of the Congressional budget office 4-xx-2021, "Research and Development in the Pharmaceutical Industry," Congressional Budget Office, <https://www.cbo.goc/publication/57126#_idTextAnchor020> SJ//DA

**Every year, the U.S. pharmaceutical industry develops a variety of new drugs that provide valuable medical benefits. Many of those drugs are expensive and contribute to rising health care costs for the private sector and the federal government. Policymakers have considered policies that would lower drug prices and reduce federal drug expenditures. Such policies would probably reduce the industry’s incentive to develop new drugs.** In this report, the Congressional Budget Office assesses trends in spending for drug research and development (R&D) and the introduction of new drugs. CBO also examines factors that determine how much drug companies spend on R&D: expected global revenues from a new drug; cost to develop a new drug; and federal policies that affect the demand for drug therapies, the supply of new drugs, or both. What Are Recent Trends in Pharmaceutical R&D and New Drug Approvals? T**he pharmaceutical industry devoted $83 billion to R&D expenditures in 2019. Those expenditures covered a variety of activities, including discovering and testing new drugs, developing incremental innovations such as product extensions, and clinical testing for safety-monitoring or marketing purposes. That amount is about 10 times what the industry spent per year in the 1980s, after adjusting for the effects of inflation.** The share of revenues that drug companies devote to R&D has also grown: **On average, pharmaceutical companies spent about one-quarter of their revenues (net of expenses and buyer rebates) on R&D expenses** in 2019, which is **almost twice as large a share of revenues as they spent in 2000.** That revenue share is larger than that for other knowledge-based industries, such as semiconductors, technology hardware, and software. The number of new drugs approved each year has also grown over the past decade. On averace, the Food and Drug Administration (FDA) approved 38 new drugs per year from 2010 through 2019 (with a peak of 59 in 2018), which is 60 percent more than the yearly average over the previous decade. **Many of the drugs that have been approved in recent years are “specialty drugs.” Specialty drugs generally treat chronic, complex, or rare conditions, and they may also require special handling or monitoring of patients**. Many specialty drugs are biologics (large-molecule drugs based on living cell lines), **which are costly to develop, hard to imitate, and frequently have high prices.** Previously, most drugs were small-molecule drugs based on chemical compounds. Even while they were under patent, those drugs had lower prices than recent specialty drugs have. Information about the kinds of drugs in current clinical trials indicates that much of the industry’s innovative activity is focused on specialty drugs that would provide new cancer therapies and treatments for nervous-system disorders, such as Alzheimer’s disease and Parkinson’s disease. **What Factors Influence Spending for R&D?** Drug companies’ R&D spending decisions depend on three main factors: Anticipated lifetime global revenues from a new drug, **Expected costs to develop a new drug**, and Policies and programs that influence the supply of and demand for prescription drugs. Various considerations inform companies’ expectations about a drug’s revenue stream, including the anticipated prices it could command in different markets around the world and the expected global sales volume at those prices (given the number of people who might use the drug). The prices and sales volumes of existing drugs provide information about consumers’ and insurance plans’ willingness to pay for drug treatments. Importantly, when drug companies set the prices of a new drug, they do so to maximize future revenues net of manufacturing and distribution costs. A drug’s sunk R&D costs—that is, the costs already incurred in developing that drug—do not influence its price. **Developing new drugs is a costly and uncertain process, and many potential drugs never make it to market. Only about 12 percent of drugs entering clinical trials are ultimately approved for introduction by the FDA. In recent studies, estimates of the average R&D cost per new drug range from less than $1 billion to more than $2 billion per drug**. Those estimates include the costs of both laboratory research and clinical trials of successful new drugs as well as expenditures on drugs that do not make it past the laboratory-development stage, that enter clinical trials but fail in those trials or are withdrawn by the drugmaker for business reasons, or that are not approved by the FDA. Those estimates also include the company’s capital costs—the value of other forgone investments—incurred during the R&D process. Such costs can make up a substantial share of the average total cost of developing a new drug. The development process often takes a decade or more, and during that time the company does not receive a financial return on its investment in developing that drug. The federal government affects R&D decisions in three ways. First, it increases demand for prescription drugs, which encourages new drug development, by fully or partially subsidizing the purchase of prescription drugs through a variety of federal programs (including Medicare and Medicaid) and by providing tax preferences for employment-based health insurance. Second, the federal government increases the supply of new drugs. It funds basic biomedical research that provides a scientific foundation for the development of new drugs by private industry. Additionally, tax credits—both those available to all types of companies and those available to drug companies for developing treatmentscof uncommon diseases—provide incentives to invest in R&D. Similarly, deductions for R&D investment can be used to reduce tax liabilities immediately rather than over the life of that investment. Finally, the patent system and certain statutory provisions that delay FDA approval of generic drugs provide pharmaceutical companies with a period of market exclusivity, when competition is legally restricted. During that time, they can maintain higher prices on a patented product than they otherwise could, which makes new drugs more profitable and thereby increases drug companies’ incentives to invest in R&D. Third, some federal policies affect the number of new drugs by influencing both demand and supply. For example, federal recommendations for specific vaccines increase the demand for those vaccines and provide an incentive for drug companies to develop new ones. Additionally, federal regulatory policies that influence returns on drug R&D can bring about increases or decreases in both the supply of and demand for new drugs. Trends in R&D Spending and New Drug Development Private spending on pharmaceutical R&D and the approval of new drugs have both increased markedly in recent years, resuming a decades-long trend that was interrupted in 2008 as generic versions of some top-selling drugs became available and as the 2007–2009 recession occurred. **In particular, spending on drug R&D increased by nearly 50 percent between 2015 and 2019.** Many of the drugs approved in recent years are high-priced specialty drugs for relatively small numbers of potential patients. By contrast, the top-selling drugs of the 1990s were lower-cost drugs with large patient populations. R&D Spending R&D spending in the pharmaceutical industry covers a variety of activities, including the following: Invention, or research and discovery of new drugs; Development, or clinical testing, preparation and submission of applications for FDA approval, and design of production processes for new drugs; Incremental innovation, including the development of new dosages and delivery mechanisms for existing drugs and the testing of those drugs for additional indications; Product differentiation, or the clinical testing of a new drug against an existing rival drug to show that the new drug is superior; and Safety monitoring, or clinical trials (conducted after a drug has reached the market) that the FDA may require to detect side effects that may not have been observed in shorter trials when the drug was in development. In real terms**, private investment in drug R&D among member firms of the Pharmaceutical Research and Manufacturers of America (PhRMA), an industry trade association, was about $83 billion in 2019, up from about $5 billion in 1980 and $38 billion in 2000**.1 Although those spending totals do not include spending by many smaller drug companies that do not belong to PhRMA, the trend is broadly representative of R&D spending by the industry as a whole.2 A survey of all U.S. pharmaceutical R&D spending (including that of smaller firms) by the National Science Foundation (NSF) reveals similar trends.3 Although total R&D spending by all drug companies has trended upward, small and large firms generally focus on different R&D activities. **Small companies not in PhRMA devote a greater share of their research to developing and testing new drugs,** many of which are ultimately sold to larger firms (see Box 1). By contrast, a greater portion of the R&D spending of larger drug companies (including those in PhRMA) is devoted to conducting clinical trials, developing incremental “line extension” improvements (such as new dosages or delivery systems, or new combinations of two or more existing drugs), and conducting postapproval testing for safety-monitoring or marketing purposes.

#### The aff crushes innovation in the pharma sector—incentivizes them to focus on non-important issues.

Glassman 21 [Amanda; 5/6/21; Executive vice president and a senior fellow at the Center for Global Development, a nonpartisan, nonprofit think tank in Washington and London; “*Big Pharma Is Not the Tobacco Industry*,” Barron, <https://www.barrons.com/articles/big-pharma-is-not-the-tobacco-industry-51620315693>] Justin

But here is the crux of the problem: The pharmaceutical industry is not the tobacco industry. They are not merchants of death. The companies are amoral and exist to make money, but their business is not fundamentally immoral. Big Pharma (mostly) develops and sells products that people need to survive and thrive. Their products improve health and welfare. Fights over access to medicines are possible because medicines exist in the first place—medicines that were usually developed by Big Pharma. And yes, the pharmaceutical industry benefits from public subsidy and publicly financed foundational research. But the companies also put their own capital at risk to develop new products, some of which offer enormous public benefits. In fact, several of them did just that in the pandemic: invested their own money to develop patented manufacturing technologies in record time. Those technologies are literally saving the world right now. Public funding supported research and development, but companies also brought their own proprietary ingenuity and private investments to bear toward solving the world’s singular, collective challenge. Their reward should be astronomical given the insane scale of the health and economic benefits these highly efficacious vaccines produce every day. Market incentives sent a clear signal that further needed innovation—greater efficacy, single doses, more-rapid manufacturing, updated formulations, fast boosters, and others—would be richly rewarded. Market incentives could also have been used to lubricate supply lines and buy vaccines on behalf of the entire world; with enough money, incredible things can happen. But activist lobbying to waive patents—a move the Biden administration endorsed yesterday—sends exactly the opposite signal. It says that the most important, valuable innovations will be penalized, not rewarded. It tells innovators, don’t bother attacking the most important global problems; instead, throw your investment dollars at the next treatment for erectile disfunction, which will surely earn you a steady return with far less agita. It is worth going back to first principles. What problem are we trying to solve? We have highly efficacious vaccines that we would like to get out to the entire world as quickly as possible to minimize, preventable disease and deaths address atrocious inequities, and enable the reopening of society, trade, and commerce. Hundreds of millions of people have been plunged into poverty over the past year; in the developing world, the pandemic is just getting started. What is the quickest way to get this done? Vaccine manufacturing is not just a recipe; if you attack and undermine the companies that have the know-how, do you really expect they’ll be eager to help you set up manufacturing elsewhere? Is the plan to march into Pfizer and force its staff to redeploy to Costa Rica to build a new factory? Do the U.S. administration or activists care that this decision could take years to negotiate at the World Trade Organization, and will likely be litigated for years thereafter? Does it make sense to eliminate the incentive for private companies to invest in vaccine R&D or in the response to the next health emergency? And if the patent waiver is only temporary and building a factory takes months or years, will anyone bother to do so, even if they could? No, none of it makes sense. Worse still, we could solve the policy problem more easily by harnessing market incentives for the global good by ponying up cash to vaccinate the entire world. No confiscation necessary.

#### Innovation checks future disease – extinction

Engelhardt 8 [H. Tristram. Innovation and the pharmaceutical industry: critical reflections on the virtues of profit. M & M Scrivener Press, 2008 (doctorate in philosophy (University of Texas at Austin), M.D. (Tulane University), professor of philosophy (Rice University), and professor emeritus at Baylor College of Medicine)] Recut Justin

Many are suspicious of, or indeed jealous of, the good fortune of others. Even when profit is gained in the market without fraud and with the consent of all buying and selling goods and services, there is a sense on the part of some that something is wrong if considerable profit is secured. There is even a sense that good fortune in the market, especially if it is very good fortune, is unfair. One might think of such rhetorically disparaging terms as "wind-fall profits". There is also a suspicion of the pursuit of profit because it is often embraced not just because of the material benefits it sought, but because of the hierarchical satisfaction of being more affluent than others. The pursuit of profit in the pharmaceutical and medical-device industries is tor many in particular morally dubious because it is acquired from those who have the bad fortune to be diseased or disabled. Although the suspicion of profit is not well-founded, this suspicion is a major moral and public-policy challenge. Profit in the market for the pharmaceutical and medical-device industries is to be celebrated. This is the case, in that if one is of the view (1) that the presence of additional resources for research and development spurs innovation in the development of pharmaceuticals and med-ical devices (i.e., if one is of the view that the allure of profit is one of the most effective ways not only to acquire resources but productively to direct human energies in their use), (2) that given the limits of altruism and of the willingness of persons to be taxed, the possibility of profits is necessary to secure such resources, (3) that the allure of profits also tends to enhance the creative use of available resources in the pursuit of phar-maceutical and medical-device innovation, and (4) if one judges it to be the case that such innovation is both necessary to maintain the human species in an ever-changing and always dangerous environment in which new microbial and other threats may at any time emerge to threaten human well-being, if not survival (i.e., that such innovation is necessary to prevent increases in morbidity and mortality risks), as well as (5) in order generally to decrease morbidity and mortality risks in the future, it then follows (6) that one should be concerned regarding any policies that decrease the amount of resources and energies available to encourage such innovation. One should indeed be of the view that the possibilities for profit, all things being equal, should be highest in the pharmaceutical and medical-device industries. Yet, there is a suspicion regarding the pursuit of profit in medicine and especially in the pharmaceutical and medical-device industries.

## 3

### DA

#### WTO consensus on fishing subsidies likely now but requires negotiations- consensus is key to solving overfishing- the brink is now.

Koop 21 [Fermin; Argentine journalist specializing in the environment with experience across diverse publications; “WTO Inches Towards a Deal to End Harmful Fishing Subsidies,” Maritime-Executive; 7/30/21; <https://www.maritime-executive.com/editorials/wto-inches-towards-a-deal-to-end-harmful-fishing-subsidies>] Justin

After more than 20 years of negotiations, the World Trade Organization (WTO) has moved a step closer to an agreement on ending harmful fishing subsidies. The deal would set new rules for the global fishing industry and limit government funding that contributes to unsustainable fishing and the depletion of global fish stocks. In a meeting with government ministers and heads of national delegations, WTO members vowed to finish the negotiations before the WTO’s Twelfth Ministerial Conference (MC12) in late November, and to empower their delegations in Geneva to do so. Members also said the negotiating text currently on the table can be used as the basis to strike a final agreement. “It’s been a successful day,” WTO chief Ngozi Okonjo-Iweala told reporters at the close of the meeting. “In 20 years of negotiations, this is the closest we have ever come towards reaching an outcome – a high-quality outcome that would contribute to building a sustainable blue economy. I feel new hope.” The talks’ chair, Santiago Wills, was also upbeat: “I believe that the answers today have given us the ingredients to reach a successful conclusion. Members now want to move to text-based negotiations. Twenty years has been long enough. If we continue [negotiating] for another 20 years, there won’t be any fish left.” Negotiators at the WTO had been tasked with eliminating subsidies for illegal, unreported and unregulated (IUU) fishing and prohibiting certain subsidies that contribute to overcapacity and overfishing. Talks have been going on since 2001 but differences between governments have hindered progress. 2020 had been set as a deadline to strike an agreement, but talks were delayed due to Covid-19 restrictions and the US presidential elections. A deadline was then set for this July, which was again missed. Now, Okonjo-Iweala, appointed as head of the WTO in March, aims to reach an agreement by year-end in what will be a key test for the organization’s credibility, with members deadlocked on other fronts. “In international negotiations of this type only two things are relevant. The nitty-gritty to make sure everybody is on the same page, and the spirit that prevails. If Ngozi and Wills reflected correctly what happened in the meeting, we can say there’s cautious optimism over an agreement,” Remi Parmentier, director of environmental consultancy The Varda Group, told China Dialogue Ocean. A potential agreement At the meeting, ministers discussed an eight-page draft agreement, which lists a range of subsidy bans and some conditions for exemptions for poorer countries, all of which are yet to be finalised. While some delegations like the EU were positive, several ministers expressed reservations over the content of the text. “Clearly, it will lead to capacity constraints for developing countries, while advanced nations will continue to grant subsidies,” Indian trade minister Piyush Goyal said at the meeting, regarding one part of the text. Pakistan described the draft as “regressive and unbalanced,” while the African coalition said “significant gaps” remain. Countries’ differences were acknowledged by Ngozi and Wills at the meeting. Nevertheless, they remain optimistic and said the issues would be resolved once countries move into text-based negotiations. The agreement on fishing subsidies will require a consensus among all member states, according to WTO rules. The draft deal essentially proposes three categories of prohibited subsidies; those that support IUU fishing, affect overfished stocks, or lead to overcapacity and overfishing. While this may sound simple, the political, economic and cultural complexities represent real challenges. One of the main issues has been the demand for developing countries and the poorest nations to receive so-called special and differential treatment. While this is widely accepted for the poorest countries, demands from self-identified developing countries to be exempt from subsidy constraints has proven to be difficult to accept. Many of the major fishing nations are considered developing countries by the WTO, including China, which has one of the world’s biggest fishing fleets. China’s minister of commerce, Wang Wentao, expressed China’s “support for the conclusion of [fishing subsidies] negotiations before the end of MC12.” Speaking at the meeting on 15 July, Wang stressed that concluding the negotiations would represent a major contribution from the WTO to the United Nations’ 2030 Sustainable Development Goals. “As a developing country and a major fishing power, China will take on obligations commensurate with our level of development," he said. At the meeting, Wang also introduced China’s emphasis on green development in future policies on fishing subsidies and its “zero-tolerance” policy towards IUU. Isabel Jarrett, manager of The Pew Charitable Trusts’ project to end harmful fisheries subsidies, told China Dialogue Ocean that an agreement “with too many loopholes” would undermine the WTO’s sustainability goals. The final text has to ensure that governments aren’t allowed to subsidize “irresponsible practices that can hurt fish populations,” she added. The scale of the problem Subsidies paid to the global fishing industry amount to around $35 billion per year (228 billion yuan). Of this, $20 billion is given in forms that enhance the capacity of large fishing fleets, such as fuel subsidies and tax exemption programmes, according to the European Parliament’s Committee on Fisheries. In 2018, the world’s top 10 providers of harmful fisheries subsidies gave out $15.4 billion in total, according to a report by Oceana. The EU, as a bloc, provided $2 billion, ranking third behind China and Japan. Research by Pew has found that eliminating all harmful subsidies could help fish populations recover. Specifically, it would result in an increase of 12.5 percent in global fish biomass by 2050, which translates into nearly 35 million metric tonnes of fish – almost three times Africa’s entire fish consumption in a single year. The need for progress on an agreement has gained new urgency during the last few years, as the world’s fish populations have continued to fall below sustainable levels. Around 60 percent of assessed stocks are fully exploited and 30 percent are overexploited, according to the latest figures from the UN Food and Agriculture Organization. The termination of harmful subsidies, which is embedded in the UN Sustainable Development Goals (SDGs), would be seen as key progress on ocean sustainability ahead of this year’s UN biodiversity conference in Kunming, scheduled for October, and the COP26 climate summit in Glasgow in November. “This is the year that the agreement has to be delivered. The WTO chief has made positive pronouncements of an agreement this year. There’s light at the end of this 20-year tunnel. The alternative of being in the tunnel shadows is a depressing prospect at the time ocean life is declining,” Peter Thomson,?UN special envoy for the ocean, said in a recent webinar.

#### Negotiations on IPR require tradeoffs- empirics prove.

DC = DEVELOPING COUNTRY

NET = NET EXPORTER OF TECH (advanced countries)

TNC = Trade Negotiations Committee

Anell = Lars Anell the Chair of the TRIPS negotiations

Marcellin 16 Marcellin, Sherry (Professor, London School of Economics). The political economy of pharmaceutical patents: US sectional interests and the African Group at the WTO. Routledge, 2016. SJMS

Regarding the provisions in the section on patents, including that on exclusions from patentability, another DC negotiator maintained that the stipulations should reflect ‘a well-balanced system’ (ibid: 3). Ironically however, he proceeded to categorise the texts as ‘reasonably satisfactory’, contending that a positive attitude of his delegation towards them would depend to a large extent on progress in other areas of the negotiation (ibid). This was the second time in the negotiations that a DC delegate made such an obvious attempt to concede in TRIPS while seeking bargains in other negotiating areas, suggesting that the real access-to-medicines implications of patents were not fully appreciated by all such participants (Abbott 2002: 43–4); and that such participants may have understood that the negotiations would not have culminated in their favour. Immediately after the April TNC of 1989 a similarly affiliated participant had also affirmed that if some participants were to be required to make sacrifices in the area of IPRs, there should be a readiness to make such sacrifices for their benefit in agriculture, natural resources or other negotiating groups (MTN.GNG/NG11/13: 5).10 This first declaration could be construed as a signal of a prejudged outcome that disfavoured DCs. Towards the end of this session another DC participant, supported by several others, pointed out that some other delegations had very high ambitions in the area of TRIPS and that the time had come to review the subject matter in the context of the Uruguay Round negotiations as a whole, particularly in relation to what was being offered in the more traditional areas of the GATT (ibid: 12). At these final stages in the negotiations, DCs were actively seeking trade-offs in other areas in return for agreeing to IPRs in the manner in which the NETs had anticipated (Adede 2003: 30 and Matthews 2002: 109). Anell’s informal consultations and his proposed bilateral bargaining strategies worked in tandem to consolidate the weakening position of DCs propagated during the April TNC meeting in 1989. Anell ended this final session by sharing concerns expressed about the need for results in all areas of the UR, explicitly urging delegations to manufacture consensus through concessionary bargaining. The effects would later be seen in Dunkel’s ‘Draft Final Acts Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations’.11

#### That collapses biodiversity.

Osmanski 20 [Stephanie; Freelance Journaler, Writer at GreenMatters; “How Does Overfishing Affect Biodiversity? Let's Do a Deep Dive,” GreenMatters; 12/29/20; <https://www.greenmatters.com/p/how-overfishing-affects-biodiversity>] Justin

Three out of seven people — about 260 million worldwide — rely on seafood as their primary source of protein, which means the environmental and health impacts of fishing are more relevant than ever. In fact, overfishing is becoming a huge problem; Conservation.org reports that one-third of the world’s wild-caught fisheries are depleted as a direct result of overfishing, pollution, and climate change. As fish populations decline, farmed fisheries have started supplying most of our seafood, which is often plagued with additives, growth hormones, genetically modified organisms, and even food dye. However, overfishing results in other issues, too — mainly, environmental issues. Overfishing significantly affects biodiversity, which in turn, changes the ecosystem. Keep reading to find out more on how overfishing contributes to biodiversity. What is overfishing? Overfishing refers to non-sustainable practices of fishing that result in the depletion of fish species. In layman’s terms, overfishing happens when fishermen catch fish faster than the fish can reproduce. Long ago, when fishing relied on more natural methods (instinct, word-of-mouth, and guesswork), fishing practices were more natural and therefore, sustainable. But due to modern technology, fishermen now get significant help from high-tech machinery that can detect and track schools of fish, enable fishermen to explore new areas of water they had not been able to access before, and also embark in deeper waters. According to the United Nations Food and Agricultural Organization (FAO), over 70 percent of the world’s fisheries are “fully exploited,” “over exploited,” or “significantly depleted” as a direct result of overfishing. What is biodiversity? Biodiversity refers to the variety of life on Earth, referring to our planet’s vast number of biological species and organisms. It's heavily impacted when certain species cease to exist, or become threatened at a rate that is faster than that species can reproduce. Ultimately, the number of plants, animals, and microorganism species on Earth determines biodiversity. According to Global Issues, varying genes in each of these species also contributes to more biodiversity. If ecosystems or species become threatened or cease to exist, biodiversity decreases — and ultimately, all walks of life are impacted — because of the degrading food chain and other necessary biological processes. How does overfishing affect biodiversity? Overfishing impacts biodiversity in more ways than one — per Marine Science Today, overfishing alters the food chain. If a certain species is wiped out due to overfishing, the animals that rely on that species as a food source could starve, or might resort to eating other species of fish, thus altering the ecosystem and food chain as a whole. On the other end of the spectrum, the population generally consumed by the extinct species would grow disproportionately, often making way for an influx of pests. Overfishing creates a domino effect that impacts all living organisms, therefore significantly affecting biodiversity. Why is biodiversity important? Biodiversity is necessary, because every organism plays a role in the eco-system. If one species is compromised, biodiversity becomes compromised as a whole: the food chain, ecosystems, and more. The more biodiversity there is on this planet, the more productive ecosystems are, contributing to a greater availability of biological resources. Apart from food, biodiversity impacts medicinal resources, wood products, and ornamental plants. Biodiversity also helps ecosystems recover in cases of disaster. If a weather event threatens natural disasters, healthy, biodiverse ecosystems have a better chance of bouncing back. It also ensures protection of water resources, soil formation, nutrient storage and recycling, and the necessary breakdown of pollution. Why is marine biodiversity is important to humans? Aside from assuring food security, marine biodiversity also provides social and socioeconomic benefits. Socioeconomically, many areas of the world rely on fisheries to survive. If fishermen cannot sell seafood, fisheries cannot purchase fish, and these ways of life are forced out of business. A side effect of that would be that so many populations that rely on fisheries would be out of their main source of protein. Biodiversity also brings many social benefits to human populations: the opportunities to research and educate about fisheries, natural habitats, ecosystems, and various species. It also increases tourism and recreational activities, while having a lasting cultural impact, too — if specific populations rely on a species for food, loss of that population would affect that population’s culture and food supply. Marine biodiversity is incredibly important — let's take a stand against overfishing to ensure it doesn't plague eco-systems and human populations alike. TBH, might be best to go fish-free. instead.

#### Biodiversity loss causes extinction.

Torres 19[Phil; Affiliate Scholar at the Institute for Ethics and Emerging Technologies, Founder of the X-Risks Institute, Writer Appearing in Skeptic, Free Inquiry, Bulletin of the Atomic Scientists, Salon, Truthout, Erkenntnis, Metaphilosophy; “Biodiversity Loss: An Existential Risk Comparable To Climate Change,” Bulletin of the Atomic Scientists; 4/11/16; <https://thebulletin.org/2016/04/biodiversity-loss-an-existential-risk-comparable-to-climate-change/>] Justin

Catastrophic consequences for civilization. The consequences of this rapid pruning of the evolutionary tree of life extend beyond the obvious. There could be surprising effects of biodiversity loss that scientists are unable to fully anticipate in advance. For example, prior research has shown that localized ecosystems can undergo abrupt and irreversible shifts when they reach a tipping point. According to a 2012 paper published in Nature, there are reasons for thinking that we may be approaching a tipping point of this sort in the global ecosystem, beyond which the consequences could be catastrophic for civilization.

As the authors write, a planetary-scale transition could precipitate “substantial losses of ecosystem services required to sustain the human population.” An ecosystem service is any ecological process that benefits humanity, such as food production and crop pollination. If the global ecosystem were to cross a tipping point and substantial ecosystem services were lost, the results could be “widespread social unrest, economic instability, and loss of human life.” According to Missouri Botanical Garden ecologist Adam Smith, one of the paper’s co-authors, this could occur in a matter of decades—far more quickly than most of the expected consequences of climate change, yet equally destructive.

Biodiversity loss is a “threat multiplier” that, by pushing societies to the brink of collapse, will exacerbate existing conflicts and introduce entirely new struggles between state and non-state actors. Indeed, it could even fuel the rise of terrorism. (After all, climate change has been linked to the emergence of ISIS in Syria, and multiple high-ranking US officials, such as former US Defense Secretary Chuck Hagel and CIA director John Brennan, have affirmed that climate change and terrorism are connected.)

The reality is that we are entering the sixth mass extinction in the 3.8-billion-year history of life on Earth, and the impact of this event could be felt by civilization “in as little as three human lifetimes,” as the aforementioned 2012 Nature paper notes. Furthermore, the widespread decline of biological populations could plausibly initiate a dramatic transformation of the global ecosystem on an even faster timescale: perhaps a single human lifetime.

The unavoidable conclusion is that biodiversity loss constitutes an existential threat in its own right. As such, it ought to be considered alongside climate change and nuclear weapons as one of the most significant contemporary risks to human prosperity and survival.

# Case

## 1NC – Circumvention

### 1NC – WTO

#### Circumvention – WTO doesn’t have the jurisdiction.

* Process takes 5 years and the 18 months to get a report

Patnaik 21 [Priti; 3/12/21; Founding Editor, Geneva Health Files; “Could Vaccine Nationalism Spur Disputes At The WTO; TRIPS Waiver Talks Update,” Geneva Health Files, <https://genevahealthfiles.substack.com/p/could-vaccine-nationalism-spur-disputes>] Justin

Hi, From the view on the street in Geneva, pandemic policy-making is unmistakably being shaped at the World Trade Organization, riding on the momentum generated when Director-General Ngozi took office earlier this month. After speaking on her first day at work at the General Council meeting earlier this month, her interventions on addressing the trade aspects of fighting the pandemic have been swift. She also spoke at the COVID-19 Vaccines Manufacturing Summit earlier this week. Alongside the political discussions on the TRIPS waiver, a few countries have come together asking her direct intervention to alleviate production shortages of vaccines by engaging with the industry. We bring all this for you, and more in this edition. In our story this week, we explore the possibility of whether vaccine nationalism can result in disputes at the WTO. The opinion on this divided. However, we would not be surprised if commercial and political interests eventually far outweigh the public health implications of such potential disputes. We also bring you a brief update on the TRIPS waiver discussions at the TRIPS Council meeting at WTO from earlier this week. Seasoned watchers believe that the waiver might just be able to get a critical mass of support. Stay tuned, it is going to get interesting and not pretty. Vacuous statements on solidarity that we have witnessed from political leaders might finally translate into some real meaning in the coming weeks and months. Read these stories collectively. One leads to the other. It has been interesting to report on the pandemic with issues simultaneously straddling these different worlds of health and trade. In other news from us, happy to share that Geneva Health Files participated in this report on how the institutions of International Geneva responded to policy-making for the pandemic. (“Covid-19: Que Fait La Genève Internationale? by Annick Chevillot) Finally, we continue to be encouraged by the steadily growing numbers of our supporters. We are making it work because of you. Thank you. Do spread the word around and let your tribe grow! Please note that we are making an exception and will make this exclusive edition public after a few days, to accommodate regular readers who are in the process of making a transition into paid subscriptions. Thank you for understanding. Until next week! Best, Priti Write to us: patnaik.reporting@gmail.com or genevahealthfiles@protonmail.com; Follow us on Twitter: @filesgeneva 1. Story of the week WILL VACCINE NATIONALISM LEAD TO WTO DISPUTES? Experts believe that the solution to vaccine nationalism is not filing disputes, but negotiations. But lawyers anticipate disputes even if filed simply for political leverage. Vaccine nationalism, a condition that has flourished during COVID-19, is loosely understood as the tendency of countries to hoard vaccines. But protectionist trade practices of hoarding medical supplies began as soon as the pandemic hit. This is now taking a serious turn with export restriction measures adopted by some countries. This could lead to a real possibility of countries taking the legal route to file disputes at the WTO, even if only for political leverage, experts say. Geneva Health Files spoke to legal experts, lawyers and delegations of some countries for this story. Will rising protectionism to address the pandemic relate to a rash of WTO disputes? Yes and no, depending on who you speak to. Earlier this week, Ngozi Okonjo-Iweala, WTO DG, said that 59 members and 7 observers, had some pandemic-related export restrictions or licensing requirements in place at the end of February, primarily for personal protective equipment. She pointed out that these figures were lower than the 91 countries that had brought in such measures over the past year. Image Credit: Photo by Anete Lusina from Pexels EU-AUSTRALIA When EU announced measures for export authorization earlier this year, amidst prevailing conditions of scarcity of vaccines production, it was met with near-ubiquitous criticism. Our interest was piqued when Italy decided to block export of AstraZeneca vaccine doses to Australia. It is understood that Australia had discussed these concerns with DG Ngozi. It was reported that Australia intended to work with other countries including Canada, Japan, Norway and New Zealand, “to pressure European officials in Brussels as a group.” We reached out to the Australian Permanent Mission to the WTO in Geneva, to find out if the country had plans to file a dispute. In response to our question on whether there has been any formal consideration at this stage to file a WTO dispute against the EU, a spokesperson of the mission answered in the negative. “Australia intends to work cooperatively with like-minded states, including the EU, to deliver vaccines as a global good. Our view is that vaccines should not be subject to restrictive trade measures,” the spokesperson told Geneva Health Files. We were also told that Australia’s Minister for Trade, Dan Tehan had spoken to the EU Trade Commissioner Valdis Dombrovkis on Australia’s approach. The spokesperson also confirmed that the minister had spoken to the WTO DG on the matter. Does this mean we will witness no disputes as a result of protectionist measures during the pandemic, will countries opt for negotiation over a litigious route to address vaccine shortages? WILL DISPUTES ARISE? One Geneva-based trade source on the condition of anonymity said, “The way the EU was excoriated at the [WTO] General Council meeting (earlier this month), in response to its trade restriction measures, shows that this issue will not go away anytime soon. There is a real possibility of members filing disputes.” (One diplomatic source called discussions at the General Council meeting last week as “a slaughterhouse”) The view on whether members will rush in to file disputes is divided – not the least because of what it means to go through the dispute settlement process at the WTO in the midst of a pandemic. For one, there is the issue of time constraints. Disputes at the WTO can take long. This is apart from the current crisis facing the international trade court – WTO’s Appellate Body which is not currently functional. Disputes around the pandemic will need to be resolved quickly to have any impact. It could take up to 18 months to get a panel report in the WTO disputes settlement system. So experts feel that WTO disputes system may not be suitable for these kinds of urgent challenges. While it is too soon to dismiss the possibility of trade disputes, experts believe that the way to address competition for medical products during the pandemic will be through negotiation. Experts point to the 2001 dispute brought by the U.S. against Brazil, during the AIDS crisis, which ended up as mutually agreed solution. (See DS199: Brazil — Measures Affecting Patent Protection). The dispute involved Brazil’s local working requirements in its industrial property law. Joost Pauwelyn, Professor of International Law, who also heads the department at The Graduate Institute in Geneva, believes that the focus is and should be on finding solutions, practical ways to address concerns, not litigation. Last year, Pauwelyn analysed the legal framework of export restrictions at the EU and WTO level. (See Export Restrictions in Times of Pandemic: Options and Limits under International Trade Agreements) "There is no GATT/WTO ruling that addresses the issue (of the use of export restrictions in the health area) directly. The IP-related disputes that arose during the AIDS crisis were negotiated. It was dealt with at the political level (TRIPS council, General Council etc.) and ultimately via a waiver and TRIPS treaty amendment, not in the dispute settlement system," Pauwelyn says. Asked whether the crisis in the Appellate Body will dissuade countries from filing disputes, Pauwelyn says, “WTO dispute settlement is currently broken given the option to block panel outcomes to a non-existent Appellate Body. In addition, the process takes about 4-5 years, but under this status quo, it means that by the time the case is settled, the world may already be facing the next pandemic so to speak. So in practical terms, filing a dispute could be a non-starter.”

#### Durable fiat can’t solve – passing the bill has nothing to do with enforcing it.

Lamp 19 [Nicholas; Assistant Professor of Law at Queen’s University; “What Just Happened at the WTO? Everything You Need to Know, Brink News,” 12/16/19; <https://www.brinknews.com/what-just-happened-at-the-wto-everything-you-need-to-know/>] Justin

Nicolas Lamp: For the first time since the establishment of the WTO in 1995, the Appellate Body cannot accept any new appeals, and that has knock-on effects on the whole global trade dispute settlement system. When a member appeals a WTO panel report, it goes to the Appellate Body, but if there is no Appellate Body, it means that that panel report will not become binding and will not attain legal force.

The absence of the Appellate Body means that members can now effectively block the dispute settlement proceedings by what has been called appealing panel reports “into the void.”

The WTO panels will continue to function as normal. When a panel issues a report, it will normally be automatically adopted — unless it is appealed. And so, even though the panel is working, the respondent in a dispute now has the option of blocking the adoption of the panel’s report. It can, thereby, shield itself from the legal consequences of a report that finds that the member has acted inconsistently with its WTO obligations.

### 1NC – HIC

#### Aff gets circumvented by powerful countries.

DC = developing country

NIT = Net Importers of Technology (this references developing countries)

NET = Net Exporters of Technology (countries with advanced economies)

Marcellin 16 Marcellin, Sherry (Professor, London School of Economics). The political economy of pharmaceutical patents: US sectional interests and the African Group at the WTO. Routledge, 2016./SJKS

In July 1988, prior to the Montreal Mid-Term Review, DCs had sensed that the approach being proposed by industrialised countries was desirable on the grounds that the alternative would be a proliferation of unilateral or bilateral actions (MTN.GNG/NG11/8: 31). These NITs maintained that acceptance of such an approach would be tantamount to creating a licence to force, in the name of trade, modifications in standards for the protection of IP in a way that had not been found acceptable or possible so far in WIPO (ibid). Brazil subsequently informed the Group that on October 20, 1988, unilateral restrictions had been applied by the US to Brazilian exports as a retaliatory measure in connection with an IP issue; that this type of action seriously inhibited Brazil’s participation in the work of the Group, since ‘no country could be expected to participate in negotiations while experiencing pressures on the substance of its position’ (MTN.GNG/NG11/10: 27). The Brazilian delegate maintained that such action by the US constituted a blatant infringement of GATT rules and was contrary to the Standstill commitment of the Punta del Este Declaration. ‘The United States action was an attempt to coerce Brazil to change its intellectual property legislation, and furthermore represented an attempt by the United States to improve its negotiating position in the Uruguay Round’ (ibid). A US delegate countered that the measures had been taken with regret and as a last resort after all alternative ways of defending legitimate US interests had been exhausted, and that the US further believed that the adoption of effective patent protection was in Brazil’s own interest (ibid: 28). The US had therefore applied its strategy of coercive unilateralism against one of the two most important players championing the cause of the South in the TRIPS negotiations, the other being India. Apprehensive about the resistance of this dominant Southern duo, the United States sought to utilise its market size as a bargaining tool to secure changes to national IP regimes. It therefore decided to impact the more powerful of the two at the time, thereby indirectly admonishing India and the entire coalition against strengthened IP rules, as well as their domestic export constituencies who would be affected by US decisions to restrict imports. Moreover, because Brazil and India appeared to be collaborating extensively in maintaining a united front, a resulting strain on Brazil’s economy would likely affect their co-operation. However, since market opening and closure have been treated as the currency of trade negotiations in the post-war period (Steinberg 2002: 347), the move to place restrictions on Brazilian exports by the largest consumer market in the GPE should not have been entirely unanticipated. Brazil was also the regional leader in South America and disciplining it would send an unequivocal warning to other South American countries (Drahos and Braithwaite 2002: 136), including Argentina, Chile and Peru who were also active participants in the negotiations. This would mark the start of a series of coercive strategies aimed at compliance with the US private-sector envisioned GATT IPP.

## Advantage

### 1NC – COVID

#### Trade secrets are intangible and hubs fail

Banri Ito 21 [(Professor of Economics, Aoyama Gakuin University; Fellow, RIETI), 8/8/21, Impacts of the vaccine intellectual property rights waiver on global supply, <https://voxeu.org/article/impacts-vaccine-intellectual-property-rights-waiver-global-supply>] Justin

Regarding waivers of vaccine patents, there have been some voluntary initiatives. On 8 October, soon after South Africa and India proposed a waiver of the TRIPS agreement on 2 October 2020, Moderna, a US pharmaceutical company, expressed its intention not to exercise its patent rights on its COVID-19 vaccine.1 Although Moderna reached an agreement with South Korean pharmaceutical company Samsung Biologics on consignment production of the vaccine on 22 May 2021, so far there have been very few confirmed cases of efforts to reproduce Moderna's vaccine or of licenses being granted to other companies.

With respect to the COVID-19 vaccines developed by Pfizer (jointly with BioNTech of Germany) and Moderna, it appears that the whole body of relevant technical knowledge has not necessarily been patented but that some of the technical knowledge remains undisclosed as trade secrets. Patenting is only one means of ensuring ‘appropriability’, which refers to a company's capacity to secure profits from its own technological innovation. While patent information may make it possible for outsiders to achieve development results similar to those achieved by the patented technology through a similar method without infringing the patent right, keeping the technology undisclosed as a trade secret or incorporating complex processes into it may be an effective means of ensuring appropriability. Pharmaceuticals can easily be counterfeited through ‘reverse engineering’, which refers to a process in which the active ingredients of a drug are identified as a result of deformulation. Therefore, as a general rule, it is considered important to exclude the risk of counterfeiting through patenting.

While it is not clear how much of the relevant technological knowledge remains unpatented, there are apparently some technical reasons for not obtaining full patent protection. The Pfizer and Moderna vaccines use advanced technology based on messenger RNA (mRNA), representing the first case of practical application of such technology. Although I, a non-expert in this field, will refrain from going into further detail, it is highly likely that those vaccines cannot easily be counterfeited as their production requires complex production processes and unique technology.

Patenting involves public disclosure of technical knowledge, providing information on how to reproduce patented inventions. It has the function of lowering technology trade costs by clarifying property rights on technical knowledge. If the technical knowledge necessary for manufacturing a certain product remains undisclosed as a trade secret, it may not be recorded in a written or other tangible form, and it may become necessary to pass down the technical information as cumulative implicit knowledge. As a result, technology transfer may become difficult.

Perhaps in view of that risk, in April 2021, the World Health Organization (WHO) established a COVID-19 vaccine technology transfer hub as a scheme to promote the sharing of mRNA-based technology. However, there are no media reports to date indicating that technical knowledge has been provided through this scheme.2

#### Plan harms innovation---public funding not enough.

Saydlowski 21 [Rowan; 7/19//21; “*Biden’s Global Innovation Rights Giveaway Poisons New Medical Breakthroughs*,” Property Rights Alliance, <https://www.propertyrightsalliance.org/news/biden-global-innovation-rights-giveaway-poisons-medical-breakthroughs/>] Justin

The private enterprises that have spearheaded the research and development of the COVID-19 vaccines rely on patents to ensure not only that they are produced safely and reliably by manufacturers, but also to mitigate risk and eventually to collect revenue to fund future innovations, such as booster shots. Dr. Amesh Adalja, senior scholar at the Johns Hopkins Center for Health Security, says that negotiating the TRIPS waiver has already “poisoned the whole atmosphere,” as “what was one of the cornerstones of enticing companies to be involved is now not something they can rely on.” The “waiver” model was applied to the Zika pandemic by none other than senior socialist Senator Bernie Sanders. He lambasted the Trump administration for funding research by Sanofi for a Zika virus vaccine, complaining that a future patent would give the company “exclusive license to patents and thus a monopoly to sell a vaccine against the Zika virus.” Shortly afterward, the administration cut funding to the program and Sanofi quickly followed by suspending its research as well. Today, unlike for COVID-19 where in less than one year the world saw several highly effective vaccines be developed, there is still no vaccine for the Zika virus. Intellectual property rights incentivize investment and mitigate risk. The Pfizer and Moderna coronavirus vaccines are the result of nearly twenty years of mRNA research preceding last year’s rapid development, rigorous testing, and thorough approval process. Pfizer alone spent $9 billion on research and development to create the vaccine that today has already inoculated tens of millions of people. The immense upfront investment costs are not unique to COVID-19 vaccines; the average new medicine takes at least ten years from the time it is created to the time it enters the market, and the average research & development cost is nearly $3 billion. Ultimately, only 1 out of 5,000 new medicines will win final market approval. Strong IP rights reduce the risk that pharmaceutical companies bear, allowing for more new innovations to be developed. So far, after India and South Africa revised their original proposal to include trade secrets and manufacturing processes in addition to patents and added a virtually unlimited time frame for the waiver to be active, the proposal has failed to achieve key support from the U.S. or Europe. These updates indicate that the proposal was always about whittling away intellectual property rights rather than getting vaccines into the arms of the world’s most vulnerable people.

#### MRNA expert shortages.

Garde et al 21 [Damian Garde (National Biotech Reporter), Helen Branswell (Senior Writer, Infectious Disease)Matthew Herper (Senior Writer, Medicine, Editorial Director of Events), 5/6/21, Waiver of patent rights on Covid-19 vaccines, in near term, may be more symbolic than substantive, <https://www.statnews.com/2021/05/06/waiver-of-patent-rights-on-covid-19-vaccines-in-near-term-may-be-more-symbolic-than-substantive/>] Justin

In October, Moderna vowed not to enforce its Covid-19-related patents for the duration of the pandemic, opening the door for manufacturers that might want to copy its vaccine. But to date, it’s unclear whether anyone has, despite the vaccine’s demonstrated efficacy and the worldwide demand for doses.

That underscores the drug industry’s case that patents are just one facet of the complex process of producing vaccines.

“There are currently no generic vaccines primarily because there are hundreds of process steps involved in the manufacturing of vaccines, and thousands of check points for testing to assure the quality and consistency of manufacturing. One may transfer the IP, but the transfer of skills is not that simple,” said Norman Baylor, who formerly headed the Food and Drug Administration’s Office of Vaccines Research and Review, and who is now president of Biologics Consulting.

While there are factories around the world that can reliably produce generic Lipitor, vaccines like the ones from Pfizer and Moderna — using messenger RNA technology — require skilled expertise that even existing manufacturers are having trouble sourcing.

“In such a setting, imagining that someone will have staff who can create a new site or refurbish or reconfigure an existing site to make mRNA [vaccine] is highly, highly unlikely,” Yadav said.

#### Existing companies solve scale-up, but other companies don’t have the capabilities.

Lowe 21 [Derek; BA from Hendrix College and PhD in organic chemistry from Duke before spending time in Germany on a Humboldt Fellowship on his post-doc. He’s worked for several major pharmaceutical companies since 1989 on drug discovery projects against schizophrenia, Alzheimer’s, diabetes, osteoporosis and other diseases; 2/2/21; Myths of Vaccine Manufacturing; <https://www.science.org/content/blog-post/myths-vaccine-manufacturing>] Justin

Ah, but now we get back to Step Four. As Neubert says, "Welcome to the bottleneck!" Turning a mixture of mRNA and a set of lipids into a well-defined mix of solid nanoparticles with consistent mRNA encapsulation, well, that's the hard part. Moderna appears to be doing this step in-house, although details are scarce, and Pfizer/BioNTech seems to be doing this in Kalamazoo, MI and probably in Europe as well. Everyone is almost certainly having to use some sort of specially-built microfluidics device to get this to happen - I would be extremely surprised to find that it would be feasible without such technology. Microfluidics (a hot area of research for some years now) involves liquid flow through very small channels, allowing for precise mixing and timing on a very small scale. Liquids behave quite differently on that scale than they do when you pour them out of drums or pump them into reactors (which is what we're used to in more traditional drug manufacturing). That's the whole idea. My own guess as to what such a Vaccine Machine involves is a large number of very small reaction chambers, running in parallel, that have equally small and very precisely controlled flows of the mRNA and the various lipid components heading into them. You will have to control the flow rates, the concentrations, the temperature, and who knows what else, and you can be sure that the channel sizes and the size and shape of the mixing chambers are critical as well.

These will be special-purpose bespoke machines, and if you ask other drug companies if they have one sitting around, the answer will be "Of course not". This is not anything close to a traditional drug manufacturing process. And this is the single biggest reason why you cannot simply call up those "dozens" of other companies and ask them to shift their existing production over to making the mRNA vaccines. There are not dozens of companies who make DNA templates on the needed scale. There are definitely not dozens of companies who can make enough RNA. But most importantly, I believe that you can count on one hand the number of facilities who can make the critical lipid nanoparticles. That doesn't mean that you can't build more of the machines, but I would assume that Pfizer, BioNTech, Moderna (and CureVac as well) have largely taken up the production capacity for that sort of expansion as well.

And let's not forget: the rest of the drug industry is already mobilizing. Sanofi, one of the big vaccine players already (and one with their own interest in mRNA) has already announced that they're going to help out Pfizer and BioNTech. But look at the timelines: here's one of the largest, most well-prepared companies that could join in on a vaccine production effort, and they won't have an impact until August. It's not clear what stages Sanofi will be involved in, but bottling and packaging are definitely involved (and there are no details about whether LNP production is). And Novartis has announced a contract to use one of its Swiss location for fill-and-finish as well, with production by mid-year. Bayer is pitching in with CureVac's candidate.

#### List of supply shortages – there is no way the aff solves, but they decrease available vaccines.

[Laurie Garrett 21, (Columnist at Foreign Policy and former senior fellow for global health at the Council on Foreign Relations). 5/7/21, Stopping Drug Patents Has Stopped Pandemics Before, Foreign Policy, <https://foreignpolicy.com/2021/05/07/stopping-drug-patents-pandemics-coronavirus-hiv-aids/>] Justin

The vaccines aren’t easy to make. Manufacturing errors in a Maryland Emergent BioSolutions factory caused an 86 percent plummet in Johnson & Johnson vaccine supplies in early April. Complex steps in the process of isolating, purifying, preserving, storing, and delivering COVID-19 immunizations are each error-prone and require long lists of specialized chemicals and machinery.

The world is in the grips now of pipette tips shortages—used to suck out chemicals and viral samples from test tubes in key steps of vaccine making. Syringes are in short supply, prompting vaccinators to toss vaccine supplies for lack of means to administer them. The sterile containers used to hold vaccines are running out. From the earliest days of the 2020 pandemic, the sorts of protective gear and machinery vaccine researchers and makers require have been in short supply, exacerbated by trade tensions between the United States and China. Swabs used for COVID-19 testing and all aspects of equipment cleaning in sterile conditions are held up in a grotesque family dispute in Maine. There aren’t enough centrifuge tubes made worldwide to spin down cell samples. Moderna and Pfizer are constantly scrambling to find the ingredients used to make the microscopic fatty balls, called liposomes, that house the mRNA molecules and carry them safely into the bloodstream. Even the nucleic acids used to construct mRNA and a long list of special enzymes used to purify those samples are in horribly short supply, largely because their use overlaps with the manufacture of COVID-19 tests. Because such delicate chemicals and proteins must be handled at deep-freeze temperatures and transported swiftly for immediate use, the entire supply chain is vulnerable to the simplest of catastrophes: weather at an airport, a car crash that blocks truck traffic, power outages, or competition for cargo space.

Although waiving TRIPS requirements on COVID-19 vaccines is a spectacular, historic gesture, would-be generic makers worldwide will soon discover their efforts are stymied not by patents but for want of Avanti Polar Lipids’ liposome ingredients, Flexsafe RM special bags to hold liquid vaccines in bulk, phosphate-buffered saline solution, Distearoylphosphatidylcholine for liposome-making, 5’ cap for mRNA made by TriLink BioTechnologies, RNA polymerases—the list goes on, and on, and on. As the number of would-be vaccine makers grows, so will demand for thousands of such items, putting pressure on companies that are, in many cases, mom-and-pop operations. Worse, pressure on supplies critical for COVID-19 vaccine making is already resulting in a production loss of vital medicines for other diseases.

#### The aff causes a scramble for limited resources by manufacturers with no experience – turns case.

Breuninger 21 [Kevin; Specialist at CNBC; “Pfizer CEO opposes U.S. call to waive Covid vaccine patents, cites manufacturing and safety issues,” CNBC; 5/7/21; <https://www.cnbc.com/2021/05/07/pfizer-ceo-biden-backed-covid-vaccine-patent-waiver-will-cause-problems.html>] Justin

“Currently, infrastructure is not the bottleneck for us manufacturing faster,” Bourla wrote in a dear colleague letter posted on LinkedIn. “The restriction is the scarcity of highly specialized raw materials needed to produce our vaccine.”

Pfizer’s vaccine requires 280 different materials and components that are sourced from 19 countries around the world, Bourla said. He contended that without patent protections, entities with much less experienced than Pfizer at manufacturing vaccines will start competing for the same ingredients.

“Right now, virtually every single gram of raw material produced is shipped immediately into our manufacturing facilities and is converted immediately and reliably to vaccines that are shipped immediately around the world,” Bourla wrote.

He predicted that the proposed waiver “threatens to disrupt the flow of raw materials.”

“It will unleash a scramble for the critical inputs we require in order to make a safe and effective vaccine,” Bourla wrote.

“Entities with little or no experience in manufacturing vaccines are likely to chase the very raw materials we require to scale our production, putting the safety and security of all at risk,” the CEO wrote.

#### Prevents distribution---causes vaccine hesitancy.

Newey et al 21 [Sarah Newey*;* Anne Gulland*;* Jennifer Rigby, (GLOBAL HEALTH SECURITY CORRESPONDENTS at the telegraph) *and* Samaan Lateef (Reporting IN INDIA) 6/1/21, Vaccinating the world: the obstacles hindering global rollout – and how to overcome them, Telegraph, <https://www.telegraph.co.uk/global-health/science-and-disease/vaccinating-the-world/>] Justin

[Vaccine hesitancy has also reared its head](https://www.telegraph.co.uk/global-health/science-and-disease/hesitancy-hard-wired-us-indulge-now-peril/), with concerns around rare blood clots linked to the AstraZeneca and J&J vaccines hitting public confidence in Africa. The Democratic Republic of Congo sent 1.3m unwanted doses to countries including Togo and Senegal before they expired in late June, while Malawi destroyed 20,000 unused shots last month as hesitancy hit rollout. “There were some assumptions in the public health community that this is such a bad pandemic... that this will change people’s minds if they were ever hesitant about vaccines,” Prof Heidi Larson, director of the Vaccine Confidence Project, told a Devex event. “Well, it hasn’t really – in fact, the groups and the questioning around vaccines and some of the anti sentiments have actually escalated.” There are also growing concerns that the AstraZeneca and J&J vaccines may be viewed as the “cheap relation” compared to the new mRNA vaccines produced by Pfizer and Moderna. Given the former make up the bulk of Covax’s supply and are far easier to distribute in the developing world, this is a substantial hurdle. “The AstraZeneca row has significantly impacted confidence – not just across Africa, but around the world,” says Dr Ayoade Alakija, co-chair of the Africa Union Vaccine Delivery Alliance. “But there is no choice here [to pick a different vaccine].” However, back in Kumasi, Mr Nyarko says it is supply rather than confidence that is currently undermining his district’s roll out. And with no clear picture on when more shots will arrive, he’s left with few options. “All we can do for now is pray that Ghana can secure another batch,” he says. “We are praying that the UK and Europe will help us.

#### Reduced IP protections creates a rapid increase in faulty and fraudulent vaccines

Norquist 21 Grover Norquist (president of Americans for Tax Reform), 5/21/21, Biden is wrong to let other nations seize US intellectual property, The Hill, https://thehill.com/opinion/white-house/554629-biden-is-wrong-to-let-other-nations-seize-american-intellectual-property/SJKS

Upon taking office, Biden promised to hold China accountable. In a speech weeks after the inauguration, Biden [vowed](https://www.whitehouse.gov/briefing-room/speeches-remarks/2021/02/04/remarks-by-president-biden-on-americas-place-in-the-world/) to “push back on China’s attack on human rights, intellectual property and global governance.” To onlookers that day, Biden was promising to build on former [President Trump](https://thehill.com/people/donald-trump)’s [progress in holding China accountable](https://www.cnbc.com/2020/01/16/us-china-trade-deal-intellectual-property-protection-benefits-beijing.html). By backing the IP waiver, Biden will [ignore warnings](https://www.fbi.gov/news/pressrel/press-releases/peoples-republic-of-china-prc-targeting-of-covid-19-research-organizations) from the FBI that China was targeting COVID-19 research. China has long [pushed](https://www.tandfonline.com/doi/abs/10.1080/10192577.2016.1201261?journalCode=rplr20) to weaken global IP protections, known as TRIPS (Trade-Related Aspects of Intellectual Property Rights). Rather than surrendering on IP rights, the Biden administration should reduce protectionist trade restrictions imposed by other nations on COVID-19 products and encourage investments into vaccine manufacturing capacity that mirror Trump’s [Operation Warp Speed](https://public3.pagefreezer.com/browse/HHS%20%E2%80%93%C2%A0About%20News/20-01-2021T12:29/https:/www.hhs.gov/about/news/2020/05/15/trump-administration-announces-framework-and-leadership-for-operation-warp-speed.html). Seizing the trade secrets and IP of American COVID-19 manufacturers will do nothing to help fight the pandemic. Criminal syndicates all over the world have already [taken advantage](https://www.interpol.int/News-and-Events/News/2020/Global-operation-sees-a-rise-in-fake-medical-products-related-to-COVID-19) of the crisis to market fake COVID-19 tests, fake personal protective equipment and [fake vaccines](https://slate.com/technology/2021/05/counterfeit-covid-vaccines-mexico.html). Biden will make the problem worse. Foreign countries could see a flood of fraudulent vaccines from criminal organizations and from generic manufacturers that struggle to get the formula right. The case of [Emergent BioSolutions](https://www.nytimes.com/2021/03/31/us/politics/johnson-johnson-coronavirus-vaccine.html) — a Maryland-based manufacturer that contaminated 15 million doses of the Johnson and Johnson vaccine — shows that the manufacturing process is complex and requires extensive quality checks.

### 1NC – WTO

#### COVID and Appellate Body thump cred – biggest internal link. Independently, no Appellate Body means no dispute resolution so the aff gets circumvented.

Meyer 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/>] TDI

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."

#### US China trade war killed the WTO and proves no solvency.

- new tariffs through loopholes

- not going through dispute resolution

- not enough AB members to rule

- US concern WTO can’t solve and is risky

Bown 19 Chad Bown, 6-13-2019, "The 2018 trade war and the end of dispute settlement as we knew it," VOX Eu, https://voxeu.org/article/2018-trade-war-and-end-dispute-settlement-we-knew-it/SJKS

The US deliberately pushed the WTO to the brink Before turning to a critique of the WTO, I begin with the conventional wisdom. The US provoked a crisis in 2018 with three precisely targeted policy decisions that expertly poked holes in some of the WTO’s weakest spots. First, it imposed new tariffs – which it claimed would not be subject to international review – on nearly $50 billion of steel and aluminium imports. Formally, the US excused its new tariffs by triggering the WTO’s national security exception. The US administration has argued this exception is “self-judging” or “non-justiciable”, meaning that it cannot be questioned or benchmarked against externally verifiable economic evidence, unlike other opt-outs like antidumping or safeguards.2 But denying any outside check could lead to copycat behaviour and a protectionist spiral in which countries ignore even the most basic rules that limit tariffs. The result could be systemic failure. Second, the US retaliated against another WTO member without first going through the formal dispute resolution process. Its tariffs on $250 billion of imports from China came after completing only an internal investigation. WTO rules require a country first win a dispute that requests the partner change its policies. The US could only be authorised to retaliate if China then refused to comply, and even then, the retaliation would be subject to WTO limits. Third, the US initiated a procedure that could end the WTO’s system of resolving disputes. Countries currently have the right to appeal to the WTO’s standing Appellate Body (AB) if they disagree with a preliminary ruling. But the United States has refused to allow the appointment of new AB members as old members’ terms expire. By December 2019, the AB may not have enough members to issue rulings to appeals.3 But if no rulings are issuable, a forward-looking defendant country could simply trigger an appeal, put the legal case into permanent limbo, and eliminate the WTO’s ability to authorise tariff retaliation against countries that fail to comply. Scholars have articulated the extraordinary economic and long-run institutional costs of these and other US policy actions taken in 2017-2018.4 Those costs are of first-order importance but will not be repeated here. Instead, the next sections explore the political-economic concerns with the WTO that may have contributed to these US actions. China’s subsidies demanded US intervention of some form The US imposed national security tariffs in part because of China’s state-driven economic model. In sectors like steel and aluminium, for example, China’s expansion increased from under 20% to over 50% of global production between 2002 and 2017. Yet, even as China’s domestic demand began to slow, production and its already formidable exports continued to increase. China’s subsidies and exports exacerbated three external concerns. Its potential global domination was worrisome on anti-competitiveness grounds because of its history of abusing international market power once acquired.5 Furthermore, US policymakers have become more sensitive to the fact that technology- and trade-induced shocks impose larger-than-expected adjustment costs on domestic communities and labour markets, and that the Chinese system may push ‘its share’ of those costs onto others (Autor et al. 2016).6 Finally, China got caught in US domestic politics. Steel and aluminium firms are geographically concentrated in American swing states, and US policymakers are historically responsive to their economic interests. And the industries’ older, mostly male workers may be part of the other recent US narrative over identity politics (Grossman and Helpman 2018). US national security tariffs arose because others wouldn’t work or had been ruled illegal by the WTO Other US policy options had been taken off the table for a combination of reasons. The US had already emptied some of the WTO toolbox, but to little economic effect. Its use of antidumping tariffs had mostly stopped steel and aluminium imports directly entering from China. But China’s exports to third countries continued to rise – as did US imports from third countries – likely due to trade diversion and potentially trade deflection. But second, the US was unwilling to deploy a nondiscriminatory safeguard tariff – instead of a national security tariff – because earlier attempts had been thwarted by the WTO itself. The AB issued a series of legal rulings condemning US safeguards imposed over 1995-2003, including a 2002 US safeguard on steel.7 The US was also concerned a WTO dispute was too risky and potentially unwinnable The US ruled out a formal dispute to stop Chinese subsidies, the first-best result, out of concern that the WTO was not well-equipped to constrain Chinese-style subsidisation.8 WTO subsidy disciplines can easily capture transparent, direct payments from a government agency to firms. But Chinese subsidies are different and often stem from a nuanced and complex combination of policies. A recent OECD (2019) study of the downstream (finished) aluminium industry is illustrative. Its first key point is that primary aluminium is estimated to make up 75-86% of the cost of downstream products, and primary aluminium has benefited from highly subsidised Chinese coal. But second, China also imposed export restrictions on primary aluminium, implicitly subsidising Chinese downstream firms relative to their foreign competitors. China also rebated value-added taxes to exporters of downstream products without doing the same to primary producers. The combined result was a heavily subsidised downstream, refined aluminium industry. But it is also one that the WTO legal system would have found challenging to address.9

#### Shaffer not rev causal

#### Interdependence doesn’t solve war – prefer studies at the multilateral level which is the WTO – competitive dynamics outweigh conflict dampening incentives.

Chatagnier and Kavakli 17 – (2017, J. Tyson, PhD in Political Science, Assistant Professor in the Department of Political Science at the University of Houston, and Kerim Can, PhD in Political Science, assistant professor at the Faculty of Arts and Social Sciences at Sabanci University in Turkey, “From Economic Competition to Military Combat: Export Similarity and International Conflict,” Journal of Conflict Resolution, Vol 61, Issue 7, 2017)

International trade has long been thought to facilitate peace among nations (Kant [1795] 1970). A voluntary exchange of goods that leaves both parties better off inherently raises the value of each side to the other, increasing the cost of conflict. The belief that economic interaction can ignite a positive dynamic of cooperation and reduce conflictual behavior is so intuitive and widespread that some political pundits have even heralded free trade as the path to world peace (see, e.g., Griswold 1998; Boudreaux 2006).The conventional wisdom within the international relations literature (e.g., Oneal and Russett 1997; Gartzke, Li, and Boehmer 2003; Polachek and Xiang 2010) reinforces these claims, having found consistent empirical (and theoretical) links between trade and peace. At the same time, however, there is certainly evidence that trade can exacerbate rivalry and conflict between states. Throughout history, states have fought their competitors for advantage (i.e., access to inputs and markets) in the global marketplace. For instance, in his authoritative account of the Anglo-German rivalry before World War I, Kennedy (1980, 464) concludes that “the most profound cause [of the conflict], surely, was economic”. More specifically, the cause was “the detectable increase in Anglo-German trade rivalry since Bismarck’s time as the latter country steadily became more competitive.” Moreover, while modern empirical international relations research has largely come down on the side of the neoliberals, it has not been monolithic. Indeed, numerous studies by Barbieri (1996, 2002) have demonstrated that increased trade actually has the potential to aggravate tensions between states. These inconsistencies in both the historical and analytical records raise questions about the simplicity of the link between trade and conflict. Additionally, the vast majority of previous work considers only the bilateral effects of trade, neglecting the way in which trade between two actors can affect a third. We remedy this oversight by analyzing the effects of trade competition, arguing that the tension produced by export competition can be an important source of international conflict. More specifically, we highlight that economic actors who face foreign competition have an incentive to use military power to gain an advantage in international markets. These domestic actors can use their economic power to influence their nation’s political elites and increase the likelihood that economic conflict erupts into war. We support this theoretical argument with several well-established historical cases including the seventeenth-century Dutch-English commercial rivalry, the pre-World War I Anglo-German rivalry, and the 1990 invasion of Kuwait by Iraq. Our argument suggests that, although trade can have a pacifying direct effect at the dyadic level, it also has strong indirect effects, which can be conflict aggravating. We test this argument using commodity-level trade data from 1962 to 2000. We measure each country pair’s portfolio similarity along nearly 1,300 commodity categories and test the effect of this variable on several indicators of international conflict. Our results strongly support our claim that countries that produce and export similar goods are significantly more likely to fight, even taking into account their bilateral trade. These findings are robust to several checks on model specification as well as alternative explanations. We also show that our findings are not driven by oil or other strategic resources and that they hold for both raw and manufactured goods. In light of these results, we are confident that we have identified a significant and practically important cause of war.

#### WTO is bad:

#### 1] Conflict – stats, cheapened war, and asymmetry.

Lucas Hahn 16. Bryant University. April, 2016. Global Economic Expansion and the Prevalence of Militarized Interstate Disputes. <https://digitalcommons.bryant.edu/honors_economics/24/> brett \*MIDs = Militarized Interstate Disputes

3. Neo-Marxist Views on Asymmetrical Trade One of the most supported arguments against the notion that economic expansion promotes peace is that trade, brought about by economic expansion, actually increases MIDs. Many authors have in fact argued that increased economic interdependence and increased trade may have, in some ways, “cheapened war”, and thus made it easier to wage war more frequently (Harrison and Nikolaus 2012). Neo-Marxists and Dependency Theorists argue that the notion that trade promotes peace often depends on the balance of trade between two nations with a trading relationship. If the two nations have a symmetrical trading relationship, then both nations benefit from trade equally and may thus, engage in less conflict just as proposed by many liberal theorists. However, more often than not, the trading relationship between two nations may be asymmetrical. In this case, one nation benefits more than the other. Furthermore, one nation is often more dependent on trade with its partner than the partner is with it. These circumstances can breed violent conflicts (Barbieri and Schneider 1999). Barbieri’s (1996, 40) regression analyses have supported these claims. She found that when dyads (pairs of nation-states) are highly interdependent, they are nearly 25 times more likely to engage in armed conflict than when the dyads are not interdependent. Ultimately, she came to the conclusion that there seems to be a “hurdle effect”. Up to a point trade does seem to promote peace. However, after that point, the balance of trade often becomes disproportionate between two nations and as a result trade promotes conflict.

#### 2] Warming.

Campesina 13 Via Campesina (international farmers organization founded in 1993 in Mons, Belgium, formed by 182 organisations in 81 countries,[1] and describing itself as "an international movement which coordinates peasant organizations of small and middle-scale producers, agricultural workers, rural women, and indigenous communities from Asia, Africa, America, and Europe), 9/9/13, To confront the climate emergency we need to dismantle the WTO and the free trade regime, VIA CAMPESINA, https://viacampesina.org/en/to-confront-the-climate-emergency-we-need-to-dismantle-the-wto-and-the-free-trade-regime/SJEP

These existing WTO trade rules are currently undermining initiatives to tackle climate change and they can be further aggravated by the attempt of new negotiations in the upcoming 9th Ministerial meeting in Bali, Indonesia. How the corporate rules of the WTO work Under the WTO logic, each country should specialize in what they can produce best -what is called their “comparative advantages”- and then trade these products in exchange for products that other countries produce best. This logic however promotes the construction of market-oriented and imbalanced economies that focus on the demands of the market rather than the needs of their people on the ground. These export-oriented economies also bleed Mother Nature in order to exploit the most out of it provoking disruptions in the environment as we are seeing now with climate change, biodiversity loss and the destruction of ecosystems. This is the capitalist logic – nature is just a thing to be exploited for profit. The real beneficiaries of this imbalanced trade rules of the WTO are the transnational corporations since in reality, they are the ones that have more “comparative advantages” than fledgling national and domestic infant industries. In a world of free trade flows – as the WTO aspires – transnational corporations are free to enter and move between countries, choosing those with cheap labor and relaxed regulations and at the same time able to exit and move out just as easily after it has exhausted and grabbed the natural resources, leaving in several cases, their toxic waste. At the same time, the losers are many – the farmers who lose their farms as they cannot compete with cheap food imports that flood the local markets, the workers whose jobs are made even more unstable and precarious with the pressure to lower labor standards, the persons who are forced to migrate because of loss of livelihood, the women who are most times those who bear the brunt of economic distress on the family and community, the indigenous people who are displaced from their lands, and Mother Earth. Global Trade Rules and the Environment The WTO, of course, claims to be committed to “environmental protection” and “sustainable development.” Citing Article XX from the old GATT[[1]](https://mail.google.com/mail/ca/u/0/?shva=1" \l "140f3245da855c0a__ftn1" \o ")regime that was grandfathered into the WTO, any country can be exempted from the WTO rules to bring in policy measures “necessary to protect human, animal or plant life or health” [Article XX–b] or measures “relating to the conservation of exhaustible natural resources…” [Article XX–g]. At first glance this may sound ‘environmentally friendly,’ but it is conditioned by a big caveat in the Article’s preamble [or ‘chapeau’] which, in effect, puts the onus on countries initiating environmental protection measures to prove that their actions will not cause “arbitrary or unjustifiable discrimination” or pose a “disguised restriction on international trade.” In other words, global trade rules guaranteeing the free flow of capital, goods and services trump environmental protection priorities. As a result, environmental protection measures are often challenged and struck down for being a “disguised restriction on international trade.” Indeed, under the overarching ‘most favored nation’ and ‘national treatment’ clauses of the WTO regime, those transnational corporations based in member countries effectively have ‘sovereign rights.’ Moreover, even the scope of environmental protection covered by Article XX is too narrowly defined to adequately safeguard measures urgently needed today to combat climate change, let alone the further commodification of nature. Recent WTO ruling against climate initiatives In the province of Ontario, Canada, the WTO recently struck down a law and program designed to promote the development of renewable energy as a measure for mitigating climate change while also creating jobs. The program allots the majority of producer power rights to Ontario companies thereby making it possible for the province to make the transition from coal, oil and gas without completely damaging its local economy. Its ‘domestic content requirements’ ensure that new manufacturing jobs will be created in Ontario by requiring that 25 percent of the content of all wind projects and 50 percent of the content of all solar projects are produced by workers and industries in the province. This program also guaranteed preferential 20-year purchase price per kilowatt-hour for electricity from wind and solar generators from companies that had a certain percentage of their costs originating from Ontario. In its first two years, this program created more than 20,000 climate jobs in Ontario and was on track to create a total of 50,000. It was accelerating the production of renewable energy while simultaneously reducing both greenhouse gas emissions and unemployment. While there are particular concerns about the program’s implementation, it is recognized as an innovative step toward tackling climate change. In 2010/2011, however, Japan and the European Union representing the interest of their transnational corporations filed cases in the WTO against Ontario’s renewable energy incentives program claiming that it was violating the “national treatment” rule of the WTO. This rule establishes: “The products of the territory of any contracting party [country member of the WTO] imported into the territory of any other contracting party [country member of the WTO] shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use.” [Art. III. 4 General Agreement on Tariffs and Trade (GATT) of the WTO] This means that you can give more benefits to foreign transnational corporations but never less than what you have given to a domestic enterprise. When it comes to climate change, this implies that a State cannot promote the development of a national industry of solar panels, wind energy or renewable energy by using national regulations primarily designed to benefit domestic companies or products. If a State wants to give subsidies or preferences to those national companies or products it must also give the same incentives to foreign transnational corporations. In other words an infant domestic effort at generating renewable energy, will have to compete from the first day with a big foreign transnational corporation of “clean energy”, most of them main actors of the so-called “Green Economy”, that care much more about their markets than the climate of the world and that in reality still promote a market-based and exploitative model of “renewable energy”. On May 2013, the Dispute Settlement Body of the WTO in its final ruling said that Canada/Ontario was in violation of WTO rules. One month later, the Ontario Minister of Energy announced that they will “comply with the World Trade Organization’s ruling on the domestic content provision”. The WTO ruling against Ontario is just the tip of the iceberg. There are other cases, for example, in India, who is still suffering the deaths of almost 1,000 persons, the disappearances of 3,000 and the evacuation of 100,000 due to the extreme floods caused by deforestation and climate change in Uttarakhand, there was a case filed by the United States in February 2013 in the WTO challenging India’s use of subsidies and “buy local” rules in its domestic solar program. The WTO rules that the United States has based its complaints on that India has supposedly violated are the very same ones that forced Ontario to change its renewable energy program. Furthermore, there are disputes in the WTO between China, the United States and the European Union in relation to wind power equipment and solar panels. These disputes don’t aim to lower the prices of renewable energy but rather the contrary. Their main aim is to preserve the markets and profits of their respective corporations. Bali: New attempt to expand the WTO and FTAs At the next ministerial meeting of the WTO, they will not try to conclude the “Doha Development Round.” This has proven to be too difficult as it is a massive agreement encompassing numerous areas and with the “single undertaking” clause of the WTO, where everything or nothing is agreed, this has led to the impasse in the negotiations. However, with a new Director General supported by the influential developing country coalition BRICS (Brazil, Russia, India, China and South Africa), the transnational corporations and big players in the WTO have a new strategy to unlock the stalemate and promote an “early harvest” of some agreements, what they call the “Bali Package”, and push forward agreements that will include environmental goods and services like the White House has recently announced: “The U.S. will work with trading partners to launch negotiations at the World Trade Organization towards global free trade in environmental goods, including clean energy technologies such as solar, wind, hydro and geothermal… Over the next year, we will work towards securing participation of countries, which account for 90 percent of global trade in environmental goods, representing roughly $481 billion in annual environmental goods trade. We will also work in the Trade in Services Agreement negotiations towards achieving free trade in environmental services.” [[2]](https://mail.google.com/mail/ca/u/0/?shva=1" \l "140f3245da855c0a__ftn2" \o ") In effect, these measures are part of the follow-up to the false ‘green economy’ agenda promoted and adopted at the Rio+20 Earth Summit last June 2012. A prime objective of this Rio+20 plan of action is to promote and accelerate the commodification of both material and non-material parts of nature. Here, for example, the functions of forests are to be extended beyond just the provision of wood products to be used for environmental services ranging from green tourism to carbon capture and storage. In turn, this calls for the establishment of markets for ecosystem services and biodiversity offsets. However, in order to create and advance markets for environmental services and goods, they must be aided and abetted by global trade rules. In other words, the false ‘green economy’ agenda simply cannot operate without the WTO regime and the FTAs. And we need to remember that the rules of the WTO are the basis for all other free trade agreements, whether bilateral or regional, (TPP, TTIP, EPAs, CAFTA, NAFTA, EU-Association Agreements and others[[3]](https://mail.google.com/mail/ca/u/0/?shva=1" \l "140f3245da855c0a__ftn3" \o ")). These WTO-plus agreements are also in their own right, undermining and working counter to initiatives to care for the environment and address climate change. There are dozens of cases all over the world of foreign corporations demanding huge compensations from States, using the FTAs clause allowing lawsuits from investor to State, because of national environmental regulations. Occidental v. Ecuador, Pacific Rim Mining Corp v. El Salvador, Vattenfall v. Germany, Renco vs. Peru are just some examples of how free trade and investment rules are designed and used to undermine initiatives to heal nature. In many situations a simple threat of a lawsuit from an investor, eases national environmental regulations. International trade law has legal mechanisms to sanction and implement their rulings while environmental provisions are mainly declarations that have no compliance mechanisms and are easily trumped by trade agreements. People and Nature first! To address the climate emergency we need to not only stop the expansion of the WTO and FTAs but we need to go beyond that and call for an end to the WTO itself and the free trade regime. There is no more time for half-measures. If we are to save nature and humanity, we need to change the system and changing the system means dismantling the free trade regime. WTO rulings like in the Ontario case cannot be allowed to proliferate. Governments should not have to follow rulings that undermine initiatives to address climate change. Human rights, labor rights, indigenous rights and the rights of Mother Earth have to be above trade rules if we want to preserve life as we know it. In the WTO and the FTAs, there are clauses that guarantee the patents of transnational corporations over inventions that can save millions of lives and that can help reduce greenhouse gas emissions. We are living a global emergency situation, greater than any that we have lived, and intellectual property rights for profit should not have precedence over nature and humanity. Trade is needed but a different kind of trade, one that is not based on the exploitation of people and nature and whose rules benefit the communities and not the corporations. The kind of trade we need is complementary and equitable trade not corporate free trade. We need to guarantee that all countries and especially those that are least responsible and most affected by climate change have the right and the capacity to: Support their national and domestic renewable energy sector trough “buy local” regulations, subsidies and all kinds of measures that allow them to get rid of fossil fuels as soon as possible. Have free access to all patents concerning renewable energy and inventions that can help limit the impacts of climate change. Promote food sovereignty and agroecology to not only cool the planet but to feed the people without agrotoxics and GMOs. Stimulate local production and consumption of durable goods to meet the fundamental needs of the people and avoid the transport of goods that can be produced locally. Guarantee the human right to water, reverse the privatization of public water services and preserve the watersheds. Push for clean and accessible public transport infrastructure to take cars off the roads to reduce greenhouse gas emissions. Establish regulations and sanctions against industries that destroy and pollute the environment without the threat of international disputes. Encourage the nationalization and control of the society over the energy sector to dismantle the dirty component and accelerate the expansion and promote community based renewable forms of clean energy. Promote economies that are diverse and resilient to climate change. To really address the climate crisis, a world without the WTO and the FTAs, one that is not dominated by transnational corporations and the global free trade regimes, is necessary! We have to change the system, and we have to do this now.