## 1

#### A Temporary debt ceiling bill has passed but its not enough, comprehensive White House-Congress cooperation must be achieved through political capital for a December vote

**Cornwell 10-13** Susan Cornwell, 10-13-2021, "U.S. House votes for short-term debt ceiling fix, averting default," Reuters, <https://www.reuters.com/world/us/us-house-expected-pass-bill-hike-debt-ceiling-avert-default-2021-10-12/> SJ//DA

WASHINGTON, Oct 12 (Reuters) - **The Democratic-controlled U.S. House of Representatives gave final approval on Tuesday to legislation temporarily raising the government's borrowing limit to $28.9 trillion, pushing off the deadline for debt default only until December.** Democrats, who narrowly control the House, maintained party discipline to pass the hard-fought, $480 billion debt limit increase by 219-206. The vote was along party lines, with every yes from Democrats and every no from Republicans. President Joe Biden is expected to sign the measure into law before Oct. 18, when the Treasury Department has estimated it would no longer be able to pay the nation's debts without congressional action. House passage warded off concerns that the United States - the world's largest economy - would go into default for the first time, **but the temporary extension set the stage for continued fighting between the parties. "We have temporarily averted crisis ahead of next week’s deadline, but come December, members of Congress will need to choose to put country before party and prevent default,"** said Democratic Representative Richard Neal, chairman of the House Ways and Means committee. Republicans insist Democrats should take sole responsibility for raising the debt limit because their party wants to spend trillions of dollars to expand social programs and tackle climate change. Democrats say the increased borrowing authority is needed largely to cover the cost of tax cuts and spending programs during former Republican President Donald Trump's administration, which congressional Republicans supported. Senate Republican Leader Mitch McConnell wrote to Biden on Friday that he would not work with Democrats on another debt limit increase. McConnell was harshly criticized by Trump, the Republican party's leader, after the Senate vote. "I will not be a party to any future effort to mitigate the consequences of Democratic mismanagement," McConnell wrote to Biden, saying another vast spending bill would hurt Americans and help China. **Lawmakers also have only until Dec. 3 to pass legislation to fund the government and prevent a shutdown. MORE PARTISAN FIGHTING AHEAD House Speaker Nancy Pelosi told reporters earlier on Tuesday she hoped there could be a bipartisan solution to the debt ceiling issue.** Pelosi said a Democratic proposal to allow the Treasury Department to lift the debt ceiling, with Congress having the ability to overrule it "has merit." She also repeated that Democrats do not want to use a procedural maneuver called reconciliation to raise the ceiling. Reconciliation would let Democrats raise the ceiling with 51 votes rather than the 60 required under the Senate's filibuster rule if Republicans will not cooperate. **The Senate's vote last week to raise the limit - which had been more routine before the current era of fierce partisanship - turned into a brawl.** Republicans tried to link the measure to Biden's goal of passing multitrillion-dollar legislation to bolster infrastructure and social services while fighting climate change. Pelosi said she is optimistic that **Democrats can work out changes to reduce the cost of their social policy plans** by Oct. 31. **In another sign compromise was possible, progressive Democrats told reporters that most of them wanted to keep all the proposed programs in the multitrillion-dollar bill, while shortening the time period to cut its overall cost.** Biden has suggested a cost range around $2 trillion rather than the initial $3.5 trillion target. Pelosi said she would not bring legislation to the House floor if it cannot pass the Senate, where moderate Democrats Joe Manchin and Krysten Sinema both say they cannot support a $3.5 trillion cost. The months-long fight over the debt limit is closely tied to the November 2022 congressional elections, when Republicans are trying to gain majorities in both the House and Senate. Democratic lawmakers fear that a Republican boycott of future efforts to raise the debt ceiling will leave them exposed to political attack ads over the next year that accuse Democrats of fiscal malfeasance and disregard for the ballooning debt. But Democrats in turn accuse Republicans of being willing to let the country default on its debts to score political points. During the Trump administration, **the debt limit was raised three times with the support of Democrats, despite their opposition to Republican initiatives that added to government debt like 2017 tax-cut legislation and Trump priorities like construction of a southwest border wall to keep out immigrants.**

#### Aff doesn’t solve but requires negotiations that saps PC.

Pooley 21 [James; Former deputy director general of the United Nations’ World Intellectual Property Organization and a member of the Center for Intellectual Property Understanding; “Drawn-Out Negotiations Over Covid IP Will Blow Back on Biden,” Barron’s; 5/26/21; <https://www.barrons.com/articles/drawn-out-negotiations-over-covid-ip-will-blow-back-on-biden-51621973675>] Justin

The Biden administration recently announced its support for a proposal before the World Trade Organization that would suspend the intellectual property protections on Covid-19 vaccines as guaranteed by the landmark TRIPS Agreement, a global trade pact that took effect in 1995. The decision has sparked furious debate, with supporters arguing that the decision will speed the vaccine rollout in developing countries. The reality, however, is that even if enacted, the IP waiver will have zero short-term impact—but could inflict serious, long-term harm on global economic growth. The myopic nature of the Biden administration’s announcement cannot be overstated. Even if WTO officials decide to waive IP protections at their June meeting, it’ll simply kickstart months of legal negotiations over precisely which drug formulas and technical know-how are undeserving of IP protections. And it’s unthinkable that the Biden administration, or Congress for that matter, would actually force American companies to hand over their most cutting-edge—and closely guarded—secrets. As a result, the inevitable foot-dragging will cause enormous resentment in developing countries. And that’s the real threat of the waiver—precisely because it won’t accomplish either of its short-term goals of improving vaccine access and facilitating tech transfers from rich countries to developing ones. It’ll strengthen calls for more extreme, anti-IP measures down the road. Experts overwhelmingly agree that waiving IP protections alone won’t increase vaccine production. That’s because making a shot is far more complicated than just following a

recipe, and two of the most effective vaccines are based on cutting-edge discoveries using messenger RNA. As Moderna Chief Executive Stephane Bancel said on a recent earnings call, “This is a new technology. You cannot go hire people who know how to make the mRNA. Those people don’t exist. And then even if all those things were available, whoever wants to do mRNA vaccines will have to, you know, buy the machine, invent the manufacturing process, invent creation processes and ethical processes, and then they will have to go run a clinical trial, get the data, get the product approved and scale manufacturing. This doesn’t happen in six or 12 or 18 months.” Anthony Fauci, the president’s chief medical adviser, has echoed that sentiment and emphasized the need for immediate solutions. “Going back and forth, consuming time and lawyers in a legal argument about waivers—that is not the endgame,” he said. “People are dying around the world and we have to get vaccines into their arms in the fastest and most efficient way possible.” Those claiming the waiver poses an immediate, rather than long-term, threat to IP rights also misunderstand what the waiver will—and won’t—do. The waiver petition itself is more akin to a statement of principle than an actual legal document. In fact, it’s only a few pages long. As the Office of the United States Trade Representative has said, “Text-based negotiations at the WTO will take time given the consensus-based nature of the institution and the complexity of the issues involved.” The WTO director-general predicts negotiations will last until early December. That’s a lot of wasted time and effort. The U.S. Trade Representative would be far better off spending the next six months breaking down real trade barriers and helping export our surplus vaccine doses and vaccine ingredients to countries in need.

#### Debt default tips gradual dollar decline into a spiral of destabilizing hot money outflows.

Brian Chappatta 20, CFA Charterholder, Bloomberg Opinion Columnist Covering Debt Markets, BS in Journalism and Economics from Northwestern University, “A Weakening U.S. Dollar Is Still the Preeminent Currency”, Bloomberg Quint, 10/22/2020, https://www.bloombergquint.com/gadfly/a-weakening-u-s-dollar-is-still-the-preeminent-currency

Simply put, it’s in no country’s or region’s best interest (at least not imminently) for the U.S. dollar lose its place as the reserve currency of choice. That means the dollar will retain its place on the global stage no matter how weak it might get in the months to come. But make no mistake: There are any number of reasons to bet that the greenback will slide further.

Most obviously, the dollar tends to appreciate when U.S. interest rates climb and weaken when they fall. Short-term Treasury yields are pinned near zero and are expected to stay there for years, while longer-term yields have increased somewhat but remain near all-time lows. There’s also the well-known fact that the federal budget deficit has ballooned this year in response to the Covid-19 pandemic. Traders widely expect that large shortfalls will continue in the year ahead, particularly if the Democratic Party sweeps the White House and both chambers of Congress, as polls indicate.

Either way, America’s so-called twin deficits — in both its current account and budget — are so extreme that a regression analysis from Bloomberg News’s Cameron Crise projects a 31% decline over the next two years in the ICE U.S. Dollar Index, known as DXY. There’d certainly be no hyperbole in calling that a “crash.”

It’s hard to imagine that sort of precipitous decline happening, however, without an exogenous shock that’s separate and distinct from interest rates and deficits. My Bloomberg Opinion colleague Noah Smith posited last month that a complete breakdown in America’s institutions could be that force:

Urban chaos, violent conflict and uncertainty over who will control the country in the coming years make for a very bad business environment. In a worst-case scenario, businesses and investors could decide the U.S. is a failing state and that their money is best kept elsewhere, at least until things quiet down. The result could be an unprecedented capital flight — money stampeding out of one of the world’s largest economies and abandoning the reserve currency at the same time. That would probably mean a dollar crash, a surge of U.S. inflation and destabilizing flows of hot money into Europe, Japan, Canada, Australia, South Korea and other, more stable developed nations.

Suffice it to say, that sort of dystopian outlook probably shouldn’t be anyone’s base-case scenario for how the next few months will unfold in the foreign-exchange market. Indeed, speculative U.S. dollar traders recently turned positive on the greenback for the first time in four months, with net noncommercial positions in DXY futures rising above zero for the first time since June, according to Commodity Futures Trading Commission data. While that’s hardly a decidedly bullish position, it at least suggests a sizable pool of money will take the other side of the dollar doomsday narrative.

#### Extinction.

Joshua Zoffer 20, Investor at Cove Hill Partners, Fellow at New America, JD Candidate at Yale University Law School, AB from Harvard University, “To End Forever War, Keep the Dollar Globally Dominant”, The New Republic, 2/3/2020, https://newrepublic.com/article/156417/end-forever-war-keep-dollar-globally-dominant

In early 2016, Obama Treasury Secretary Jack Lew cautioned that the dollar’s dominance as a global currency rested, in part, on the U.S. government’s reluctance to fully weaponize it. If foreign markets and governments “feel that we will deploy sanctions without sufficient justification or for inappropriate reasons,” he warned, “we should not be surprised if they look for ways to avoid doing business in the United States or in U.S. dollars.” Lew’s case stemmed from the more fundamental view that the dollar’s international role is “a source of tremendous strength for our economy, a benefit for U.S. companies and a driver of U.S. global leadership”—in other words, a role worth keeping. This view is emblematic of American financial governance since the Second World War. U.S. economic analysts, especially at the Treasury, have jealously guarded the dollar’s role and the many benefits it offers: the ability to run large deficits at low cost and disproportionate influence over the structure of the global economy, among others.

Yet in their recent article in The New Republic, David Adler and Daniel Bessner argue the U.S. should abandon these advantages. In their view, the dollar’s role has encouraged American militarism and should be relinquished to curb such behavior. Dollar hegemony is not without cost, but to renounce it would be a profound mistake. Adler and Bessner’s view neglects the sizable economic benefits the dollar’s role confers on the U.S., as well as its possible use as an antidote to military adventurism. It ignores the enormous good that can be done with deficit spending, much of which has gone to the American military but could instead fund progressive programs. And it elides the inability of the U.S. and its global trading partners to shift away from dollar dominance without creating worldwide financial distress. Adler and Bessner are right that the U.S. has misused its privilege, but Washington should not abandon it; rather, American leaders should seek to transform it.

Generations of American policymakers have been right to protect the dollar’s key currency role for economic reasons. Most notably, dollar hegemony affords the U.S. the ability to run large and prolonged budget and balance-of-payments deficits. The dollar represents 62 percent of allocated foreign exchange reserves, is used to invoice and settle roughly half of world trade, and accounts for 42 percent of global payments. Because governments, banks, and businesses worldwide need lots of dollars, the world market always stands ready to absorb new U.S.-dollar-denominated debt without charging higher interest rates.

Adler and Bessner correctly point out that the rest of the world considers the dollar’s role as the world’s reserve currency to be an “exorbitant privilege,” a term coined in the 1960s by then French Finance Minister Valéry Giscard D’Estaing. The ability to spend beyond its means has enabled the U.S. to fund its impressive military might, whether one views that power as the fountainhead of Pax Americana or the source of illegitimate military adventurism.

But these economic benefits go beyond just deficits. The demand for dollars also pushes up the dollar’s value against other currencies, enhancing American purchasing power and offering consumers access to imports on the cheap. The dollar’s role also means American firms rarely need to do business in foreign currencies, reducing transaction costs and exchange-rate risks.

More broadly, America’s central economic role gives it outsize influence at crucial moments. At the height of the financial crisis that began in 2008, the Federal Reserve was able to inject vital liquidity into the global financial system by selectively offering dollar swap lines to trusted foreign central banks. Dollar hegemony enabled the U.S. to act swiftly, effectively, and on its own terms.

In addition, the dollar’s role offers a potent alternative to kinetic military action as a means of pursuing foreign policy objectives. The dollar’s broad use means access to dollar liquidity—which in turn requires access to the U.S. financial system—is essential for foreign governments and businesses. For foreign banks, especially, being cut off from dollar access is essentially a death sentence. That makes sanctions that do so a powerful tool in the international arena.

In 2005, for example, the U.S. used the dollar to strike a devastating blow against North Korea without firing a single shot or even formally enacting sanctions. Using authority provided by Section 311 of the Patriot Act, the Department of the Treasury crippled Banco Delta Asia, a bank accused of facilitating illegal activity by the North Korean government, by merely threatening to cut off its access to the American financial system. Deposit outflows began within days; within weeks the bank was placed under government administration to avoid a full collapse. Pyongyang was hit hard, as other banks ceased their business with it to avoid meeting the same fate.

Similarly, though the Trump administration has worked hard to undo it, the Joint Comprehensive Plan of Action with Iran to limit the development of nuclear weapons was made possible, in part, by painful dollar sanctions that brought Iran to the table. Far from being a proximate cause of military conflict, the dollar’s central global role has often been used to contain adversaries without military intervention.

Still, skeptics are right to point out that the dollar’s role has indirectly funded American interventionism and that dollar sanctions have been overused, provoking the ire of American allies. But these facts suggest we should use our dollar power to forge a more progressive U.S. order, not abandon the advantage altogether. America’s exorbitant privilege need not fund warships and missiles: The same low-interest borrowing could be used to fund a new universal health care system, expand access to higher education, or pursue any number of large-scale social policy objectives, including financing global public goods that no other country or consortium of countries is prepared to fund, such as climate change mitigation.

## 2

#### The US is leading the biopharma race but China is close up.

Gupta 21 [Gaurav; Physician, founder of the biotechnology investment firm Ascendant BioCapital; “As Washington Ties Pharma’s Hands, China Is Leaping Ahead,” Barrons; 6/11/21; <https://www.barrons.com/articles/as-washington-ties-pharmas-hands-china-is-leaping-ahead-51623438808>] Justin

There should be no doubt that we are living at the dawn of a golden age of biomedical innovation. The American scientific engine that produced Covid-19 vaccines in record time was fueled by a convergence of advances in genomics, biomarkers, data science, and manufacturing years in the making. The first Food and Drug Administration approvals of a host of new product formats—oligonucleotide, bispecific, oncolytic virus, CAR-T, and lentivirus/AAV—all took place within the last decade. These represent an unprecedented expansion of the armamentarium that physicians have at their disposal to treat and cure disease. In the last few years, 47% of all new medicines were invented by U.S. biopharma companies, with homegrown startups driving the majority of innovation. The bulk of the remainder were developed by foreign companies specifically for the U.S. market. An indirect benefit of these trends is that most novel therapeutics undergo clinical development and early commercial launch here in the U.S. The rest of the world understands that the American patient has earlier and broader access to groundbreaking therapies via these mechanisms. Indeed, the past decade is filled with examples of medical “firsts” for American patients: the first cure for Hepatitis C, the first gene therapy for blindness, the first immunotherapy for cancer. Future rewards will be greater still if we preserve our current system of incentivizing and protecting innovation. The remarkable innovation capacity of our biopharmaceutical industry ought to be a source of national pride. Yet while “Made in America” is the global standard for medicines in development today, misguided policy risks ceding our scientific prowess to other countries in the future. This is particularly true in the case of China, where biotechnology has become a strategic pillar for the health of its people and economy. From 2016 to 2020, the market capitalization of all Chinese biopharma companies increased exponentially from $1 billion to over $200 billion. China saw over $28 billion invested in its life sciences sector in 2020, double the previous year’s amount. Returns on China’s investment are already arriving. The FDA approved a drug developed in China for the first time ever in 2019. While China’s innovation capacity currently remains behind America’s, my experiences as a biopharma professional make it clear they are doing everything they can to catch up and catch up fast. In fact, when I speak to Chinese biotechnology executives, they boast that they can run clinical trials faster than their U.S. counterparts. The danger of misguided policies that disincentivize pharmaceutical innovation in the U.S. is effectively driving that same innovation to China. If we close off the market in the U.S. at the same time that China is opening its market to innovative new products, then we will see companies choose to first launch impactful novel medicines in China, based on clinical trials conducted in China. Because the FDA rarely accepts data generated entirely outside the U.S., this relocation of research capacity will negatively affect Americans’ access to cutting-edge therapies.

#### The plan gives away sensitive biotechnology information that facilitates a China lead.

Rogin 21 [Josh; Columnist for the Global Opinions section of the Washington Post and a political analyst with CNN. Previously, he has covered foreign policy and national security for Bloomberg View, Newsweek, the Daily Beast, Foreign Policy magazine, Congressional Quarterly, Federal Computer Week magazine and Japan’s Asahi Shimbun newspaper. He was a 2011 finalist for the Livingston Award for Young Journalists and the 2011 recipient of the Interaction Award for Excellence in International Reporting. Rogin holds a BA in international affairs from George Washington University and studied at Sophia University in Tokyo. He lives in Washington, DC; “Opinion: The wrong way to fight vaccine nationalism,” The Washington Post; 4/8/21; <https://www.washingtonpost.com/opinions/global-opinions/the-wrong-way-to-fight-vaccine-nationalism/2021/04/08/9a65e15e-98a8-11eb-962b-78c1d8228819_story.html>] Justin

Americans will not be safe from covid-19 until the entire world is safe. That basic truth shows why vaccine nationalism is not only immoral but also counterproductive. But the simplest solutions are rarely the correct ones, and some countries are using the issue to advance their own strategic interests. The Biden administration must reject the effort by some nations to turn our shared crisis into their opportunity.

As the inequities of vaccine distribution worldwide grow, a group of more than 50 developing countries led by India and South Africa is pushing the World Trade Organization to dissolve all international intellectual property protections for pandemic-related products, which would include vaccine research patents, manufacturing designs and technological know-how. The Trump administration rejected the proposal to waive the agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) for the pandemic when it was introduced in October.

Now, hundreds of nongovernmental organizations and dozens of Democratic lawmakers are pushing the Biden administration to support the proposal. But many warn the move would result in the United States handing over a generation of advanced research — much of it funded by the U.S. taxpayer — to our country’s greatest competitors, above all China.

In Congress, there’s justified frustration with the United States’ failure to respond to China’s robust vaccine diplomacy, in which Beijing has conditioned vaccine offers to pandemic-stricken countries on their ignoring security concerns over Chinese telecom companies or abandoning diplomatic recognition of Taiwan. There’s also a lot of anger at Big Pharma among progressives for profiting from the pandemic.

“We are in a race against time, and unfortunately Big Pharma is standing in the way of speedily addressing this problem,” Rep. Jan Schakowsky (D-Ill.), who supports the effort to waive intellectual property protections, told me in an interview. “I think the real security issue is that while the United States balks in making sure that we help ourselves, that these adversaries will just jump right in.”

Schakowsky argued that alternative measures for helping poor countries manufacture vaccines are simply not moving fast enough to save lives and that the United States has a duty to respond. House Speaker Nancy Pelosi (D-Calif.) personally conveyed her support for the waiver to President Biden, Schakowsky said.

But Big Pharma is just one piece of the puzzle. Countries such as India and South Africa have been trying to weaken WTO intellectual property protections for decades. The mRNA technology that underpins the Pfizer and Moderna vaccines was funded initially by the Defense Advanced Research Projects Agency and has national security implications.

Inside the Biden administration, the National Security Council has already convened several meetings on the issue. The waiver is supported by many global health officials in the White House and at the U.S. Agency for International Development, who believe the United States’ international reputation is suffering from its perceived “America First” vaccine strategy.

On Wednesday, U.S. Trade Representative Katherine Tai spoke with WTO Director General Ngozi Okonjo-Iweala about the waiver issue. USTR is convening its own interagency meetings on the issue, which many see as a move to reassert its jurisdiction over WTO matters.

If and when this does get to Biden’s desk, he will also hear from national security officials who believe that waiving TRIPS would result in the forced transfer of national security-sensitive technology to China, a country that strives to dominate the biotechnology field as part of its Made in China 2025 strategy. Once countries such as China have this technology, they will apply their mercantilist industrial models to ensure their companies dominate these strategically important industries, potentially erasing thousands of U.S. jobs.

“We would be delivering a competitive advantage to countries that are increasingly viewed as our adversaries, at taxpayer expense, when there are other ways of doing this,” said Mark Cohen, senior fellow at the University of California at Berkeley Law School.

#### That’s weaponized – destroys primacy.

Kuo 17 [Mercy A; Executive Vice President at Pamir Consulting; “The Great US-China Biotechnology and Artificial Intelligence Race,” The Diplomat; 8/23/17; <https://thediplomat.com/2017/08/the-great-us-china-biotechnology-and-artificial-intelligence-race/>] TDI // Re-Cut Justin

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

#### That causes extinction.

Yulis 17 [Max; Major in PoliSci, Penn Political Review; “In Defense of Liberal Internationalism,” Penn Political Review; 4/8/17; <http://pennpoliticalreview.org/2017/04/in-defense-of-liberal-internationalism/>] // Re-Cut Justin

Over the past decade, international headlines have been bombarded with stories about the unraveling of the post-Cold War world order, the creation of revolutionary smart devices and military technologies, the rise of militant jihadist organizations, and nuclear proliferation. Indeed, times are paradoxically promising and alarming. In relation to treating the world’s ills, fortunately, there is a capable hegemon– one that has the ability to revive the world order and traditionally hallmarked human rights, peace, and democracy. The United States, with all of its shortcomings, had crafted an international agenda that significantly impacted the post-WWII landscape. Countries invested their ambitions into security communities, international institutions, and international law in an effort to mitigate the chances of a nuclear catastrophe or another World War. The horrors and atrocities of the two Great Wars had traumatized the global community, which spurred calls for peace and the creation of a universalist agenda. Today, the world’s fickle and declining hegemon still has the ability, but not the will, to uphold the world order that it had so carefully and eagerly helped construct. Now, the stakes are too high, and there must be a mighty and willing global leader to lead the effort of diffusing democratic ideals and reinforcing stability through both military and diplomatic means. To do this, the United States must abandon its insurgent wave of isolationism and protectionism, and come to grips with the newly transnational nature of problems ranging from climate change to international terrorism.

First, the increase in intra-state conflict should warrant concern as many countries, namely in Africa and the Middle East, are seeing the total collapse of civil society and government. These power vacuums are being filled with increasingly ideological and dangerous tribal and non-state actors, such as Boko Haram, ISIS, and Al-Shabaab. Other bloody civil wars in Rwanda, Sudan, and the Congo have contributed to the deaths of millions in the past two decades. As the West has seen, however, military intervention has not been all that successful in building and empowering democratic institutions in the Far East. A civil crusade, along with the strengthening of international institutions, may in fact be the answer to undoing tribal, religious, and sectarian divisions, thereby mitigating the prospects of civil conflict. During the Wilsonian era, missionaries did their part to internationalize the concept of higher education, which has contributed to the growth of universities in formerly underdeveloped countries such as China and South Korea.[1] In addition, the teachings of missionaries emphasized the universality of humanity and the oneness of man, which was antithetical to the justifications for imperialism and the rampant sectarianism that plagued much of the Middle East and Africa.[2] Seeing that an increase in the magnitude of human casualty is becoming more of a reality due to advancements in military technology and the increasing outbreaks of civil war, international cooperation and the diffusion of norms that highlight the importance of stable governance, democracy, and human rights is the only recourse to address the rise in sectarian divides and civil conflicts. So long as the trend of the West’s desire to look inward continues, it is likely that nation states mired in conflict will devolve into ethnic or tribal enclaves bent on relying on war to maintain their legitimacy and power. Aside from growing sectarianism and the increasing prevalence of failed states, an even more daunting threat come from weapons that transcend the costs of conventional warfare.

The problem of nuclear proliferation has been around for decades, and on the eve of President Trump’s inauguration, it appeared that Obama’s lofty goal of advocating for nonproliferation would no longer be a priority of American foreign policy.[3] In addition, now that the American president is threatening to undo much of the United States’ extensive network of alliances, formerly non-nuclear states may be forced to rearm themselves. Disarmament is central to liberal internationalism, as was apparent by the Washington Naval Treaty advocated by Wilson, and by the modern CTBT treaty. The reverse is, however, being seen in the modern era, with cries coming from Japan and South Korea to remobilize and begin their own nuclear weapon programs.[4] A world with more nuclear actors is a formula for chaos, especially if nuclear weapons become mass-produced. Non-state actors will increasingly eye these nuclear sites as was the case near a Belgian nuclear power plant just over a year ago.[5] If any government commits a serious misstep, access to nuclear weapons on the behalf of terrorist and insurgent groups will become a reality, especially if a civil war occurs. States with nuclear weapons require domestic stability and strong security, which is why states such as Israel, North Korea, and Pakistan could be in serious trouble in the event of a domestic uprising or military coup. The disarmament of all states is essential for human survival, and if it is not achieved, then a world full of nuclear weapons and an international system guided by realpolitik could give rise to nuclear warfare. In today’s world, nuclear weapons leave all states virtually defenseless. But, for nuclear deproliferation to become a cornerstone of the global agenda, a pacifying and democratic power must rise to the limelight to advocate the virtues of peace, stability, and human rights.

## 3

#### 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.

## 4

#### Text: The member nations of the World Trade Organization ought to form and adhere to an international panel of science diplomats’ ruling to reduce intellectual property protections for medicines for COVID-19 which would be justified based on deliberation over why reducing intellectual property protections for medicines for COVID-19 is a good idea, why the status quo is worse, and how to enforce the plan.

#### They have the jurisdiction to rule over intellectual property and secure science diplomacy.

Hajjar and Greenbaum 18 [David; Dean Emeritus and University Distinguished Professor, and Professor of Biochemistry and Pathology at Weill Cornell Medicine, Cornell University. He is a Fellow of the American Academy of Arts and Sciences, Fellow of the American Association for the Advancement of Sciences, a Jefferson Science Fellow of the National Academies at the U.S. Department of State, and a recent Senior Fellow in Science Policy at the Brookings Institute; Steven; Professor and Chair of the Department of Physics and Astronomy at Hunter College of the City University of New York and a Fellow of the American Physical Society. He was a Jefferson Science Fellow of the National Academies at the U.S. Department of State; “Leveraging Diplomacy for Managing Scientific Challenges,” American Diplomacy; September 18; <https://americandiplomacy.web.unc.edu/2018/09/leveraging-diplomacy-for-managing-scientific-challenges-an-opportunity-to-navigate-the-future-of-science/>] Justin

At the global level, science diplomacy is defined as cooperation among countries in order to solve complex problems through scientific research and education (1). For example, science diplomacy plays an important role in resolving global issues related to the ecosystem (such as clean water, food safety, energy conservation, and preservation of the environment). It also addresses problems related to the healthcare industry. For example, scientists have served at the international level to forge the Middle Eastern Cancer Consortium a decade ago to facilitate better healthcare and improve cancer research in the region. Whether one considers science for diplomacy or diplomacy for science, international science collaborations benefit from allowing science diplomats (broadly defined as science envoys, science attaches, embassy fellows) to help establish positive international relationships between the U.S., Europe, Latin America, Africa or Asia, particularly when proprietary disputes arise (2, 3). These various types of science diplomats already exist; some, like embassy fellows and science envoys, have one-year appointments so their role may be limited, while attaches usually have two or three year appointments that may allow them to be more successful in long, protracted negotiations. In any event, we believe that scientists can play more of a role in advancing international scientific cooperation. A key point addressed here is how to balance security concerns against the need for free exchange of information needed for innovation and growth. Both the National Science Foundation and the National Institutes of Health are already engaged in supporting American science and strengthening collaborations abroad. Such efforts take advantage of international expertise, facilities, and equipment. Here, we provide a rationale for the use of diplomacy to address scientific challenges. This approach allows some scientists working as diplomats to help manage complex and potentially conflicting situations that arise between scientific communities and their governments. Such issues include managing disputes such as licensing agreements for intellectual property (IP) and providing protection of IP. International collaborations can not only support but also accelerate the advancement of science. However, collaborations may carry risk if IP is misappropriated for other purposes. International collaborations should have a basis in strategy and specific goals (for example, drug discovery) in order to justify the use of government and/or corporate funds. About a decade ago, a group of academics from the University of Manchester in the United Kingdom assembled the “Manchester Manifesto,” subtitled “Who Owns Science” (6). This document addressed the lack of alignment between commercial interests, intellectual rights, and credit to the researcher. In our (and commonly held) view, the groups representing these disparate values could benefit from diplomatic mediation. More recently, it has become increasing apparent that managing China as a science and technology superpower represents another challenge for the U.S. Resolution of issues such as ownership of IP, rights to reagents, or use of skilled laboratory personnel from international collaborations may require the efforts of science diplomats. There are few international offices or “guardians” to protect junior and senior scientists in corporate or academic sectors from misuse of reagents or piracy. China’s failure to respect IP rights, and the resulting piracy, has drawn much attention. The media have also focused on the failure of watchdog government agencies to detect and manage these unwanted activities. Industrial espionage compromises U.S. interests. Moreover, Chinese and Russian hackers have cyberattacked U.S. technology companies, financial institutions, media groups, and defense contractors. In 2018, industrial spying was even reported in a major medical school in New York City where scientists were alleged to have illegally shared research findings with Chinese companies. The U.S. has a long history of hiring research personnel from other countries to staff its laboratories and industrial R&D centers. These scientists and engineers have made critical contributions to our nation’s well-being and security. These young Chinese and South Asian graduates of U.S. programs a generation ago now staff our research enterprise. However, recent trends in U.S. graduate school applications in science, technology, engineering and mathematics (STEM) reflect a downturn in foreign applicants, particularly from China. It is becoming increasingly apparent that the number of American-born students seeking STEM degrees is not sufficient to satisfy future demands of our high-tech workforce. While our own educational reforms must be augmented, we cannot ignore the need to continue to recruit overseas talent. We believe that foreign scientists can continue to make critical discoveries in the U. S. provided that their talent is nurtured, developed, and harnessed for the common good. At the same time, American companies cannot hire foreign scientists if they take the ideas they generate in U.S. laboratories back to their home countries without proper credit or permission. If the advancement of science is to succeed, greater diplomatic cooperation is needed to solve and manage proprietary issues for the benefit of all (5, 6). So, how does one strike the proper balance between security and growth? Science is a universal social enterprise; international conferences lead to friendships and productive collaborations between nations. Given that the U.S. and Chinese governments recognize the need for international communication and collaboration then surely there should be a mechanism for adjudicating anticipated conflicts. One approach would be for government, industrial, and academic stakeholders to form an international panel of scientists and engineers to manage any conflicts of interest between the need to protect proprietary information crucial to a company’s competitive edge, and the need for students and young faculty members to publish their findings. Smaller scale efforts along these lines have recently given rise to unique global partnerships, such as fellowship support by major pharmaceutical companies, which aim to address these conflicts to the benefit of both parties. An added feature of such arrangements is that they often provide corporate financing for research (9). Can this corporate-academic partnership model be adapted to multinational joint R&D efforts while protecting IP? This question falls squarely within the purview of international science diplomacy, whereby science diplomats can establish rules of conduct governing joint global technology development with proper IP protection. Despite the highly publicized and legitimate piracy allegations against China, at least some data indicates that the Chinese legal system is responding positively to worldwide pressure to honor foreign IP. A 2016 study by Love, Helmers, and Eberhardt, for example, found that between 2006 and 2011, foreign companies brought over 10 percent of patent infringement cases in China, and won over 70 percent of those cases (10). Today, “win rates” average around 80 percent, and “injunction rates,” around 98 percent (10). As Chinese scientists and engineers increasingly enter the top tier of the innovation space, their growing awareness of their own need for IP protection could be a powerful motivating force for the protection of all IP. As stated earlier, science diplomats could catalyze this progress even further by direct negotiations with those parties involved in the conflicts. An obvious flaw in this optimistic outlook is that scientists in the U.S. wield more influence with their government than scientists in China wield with theirs. And to the extent that the Chinese government could be encouraging IP theft, this must be addressed first by those international companies/firms who want to do business with the Chinese. Chinese investments, as well as tech incubators and targeted acquisitions, can enable access to U.S. technologies for commercial development. Although this conveys a level of risk to the developers, it may provide valuable opportunities for U.S. companies as well. In many respects, the extensive engagement and collaboration in innovation between the U.S. and China, often characterized by open exchanges of ideas, talent, and technologies, can be mutually beneficial in enriching and accelerating innovation in both countries. In summary, we believe that science diplomats could help address the increasingly complex issues that arise between accelerating scientific and engineering advances, and the need to protect national security and corporate IP. We also propose that this might be accomplished by asking the **National Academies to recommend academic, corporate, and government scientific leaders to serve on an international scientific advisory board**, and for the corresponding organizations in other countries to do the same. Access to the free flow of information promotes new knowledge and innovation. A return to a more restrictive intellectual environment is not only harmful to progress, but also nearly impossible to manage in the current internet age. A good place to start would be to engage the newly appointed head of the White House Office of Science and Technology Policy (the Science Advisor to the President of the United States), and working groups within established organizations. These organizations include the American Association for the Advancement of Science (AAAS) or the National Academies of Science, Engineering and Medicine, and corresponding international organizations. What incentive is there for a busy and successful scientist to serve in such capacity? It is the same altruism that motivates us to accept assignments as journal editors, manuscript reviewers, or funding agency panelists for the advancement of science toward the greater good.

#### COVID exposed weaknesses in science diplomacy—revitalizing it is key to solving every existential threat.

Gluckman and Turekian 20 [Peter and Vaughan; 6/17/20; Sir Peter Gluckman is the chair of the International Network for Government Science Advice, director of Koi Tū: The Centre for Informed Futures at the University of Auckland, and former science adviser to the New Zealand prime minister. Vaughan Turekian is the executive director of policy and global affairs at the National Academies of Sciences, Engineering, and Medicine and a former science and technology adviser to the US secretary of state; “Rebooting Science Diplomacy in the Context of COVID-19,” Issues, <https://issues.org/rebooting-science-diplomacy-in-the-context-of-covid-19-lessons-from-the-cold-war/>] Justin

The COVID-19 pandemic is amplifying preexisting tensions between the United States and China across all domains, including science and technology. This is happening even as global science and technology cooperation has become a central feature of public health and the development of vaccines and treatments. Does this new dynamic between the two powers accurately reflect a changed world, and could it presage greater tension to come? The United States’ and China’s different political and economic models and distinct domestic and global interests create rising tensions as their soft power footprints (and increasingly hard power influences) span the globe. This places many other nations in a position not unlike that during the Cold War, when countries found themselves uneasily sitting between two elephants, the United States and the Soviet Union, pulling in different directions. We do not know whether today’s US-China tension will settle into an uncomfortable status quo or lead to a progressive decoupling or a more rapid severance between the two economic giants. It might even develop into a more stable and constructive relationship. This creates an opportunity for science diplomacy to again help bridge the gap between two major powers with conflicting worldviews, as happened in the Cold War. Important lessons from the science diplomacy of that era may help inform how best to respond in the current geopolitical context. Science diplomacy between 1945 and 1991 played an important role in preventing US-Soviet relations from degrading into mutual destructiveness. It led to the establishment of critical institutions and initiatives that advanced scientific understandings that underpinned critical agreements. Through the 1950s, 1960s, and 1970s, scientists working with or without the explicit support of their governments played crucial roles in ensuring some level of civility and progress in the otherwise tense superpower relationship. Some examples are illustrative. Prompted by a recommendation from the International Council of Scientific Unions (ICSU), the major powers agreed on the 1957–58 International Geophysical Year that led to the signing of the Antarctic Treaty in 1959, ensuring that Antarctica was a place for peaceful scientific purposes rather than for exploitative or military gain. In the 1960s Soviet Premier Alexei Kosygin and US President Lyndon Johnson worked to establish the International Institute for Applied Systems Analysis, which focused on collaborative research between the major powers and their partners in areas that are now of increasing importance, such as the nexus of energy, water, and food. In 1985 the United States and the Soviet Union became two of the founding signatories for the Vienna convention for the protection of the ozone layer. Remarkably, collaboration between the superpowers grew even in areas that might be sensitive, such as space; the American Apollo and Soviet Soyuz spacecraft docked in orbit in 1975, and the two nations signed a joint agreement on space cooperation in 1987. Scientists working with or without the explicit support of their governments played crucial roles in ensuring some level of civility and progress in the otherwise tense superpower relationship. A critical lesson learned during this era was that science focused on fundamental questions and global processes could help in maintaining connections and building understanding, even in the face of growing political and security tensions. In this context, institutions including academies of science, international organizations such as ICSU, and United Nations technical organizations provided important conduits for collaboration. The role of science in diplomacy became more widespread following the collapse of the Soviet Union in 1991. Science diplomacy played a constructive role in approaching global issues such as climate change, biodiversity loss, sustainable development, and global health. These are areas where international science flourishes, and the value of this cooperation is plain to see. But they are also areas where science diplomacy translated into policy in the forms of conventions, treaties, and agreements—most notably with the Intergovernmental Panel on Climate Change, which provided space for developing international cooperation around climate science even as the politics of climate policy were more difficult to address. Other agreements—such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, the Convention on Biological Diversity, and numerous lower-profile partnerships—provided ways to engage science well before broader international policy regimes around thorny global issues could be adequately addressed. Such is the backdrop to the growing and serious US-China rivalry. The rising health, economic, and societal impacts of COVID-19, and accusations about responsibility for them, have greatly fuelled mutual suspicion and antagonism. Yet the world is looking for a sense of equilibrium between the great powers. Countries such as Australia and New Zealand find themselves increasingly stretched between their trading dependency with China and their historical, security, and political ties with the United States. Smaller nations that rely heavily on the multilateral rules-based order through the World Trade Organization and for technical help though bodies such as the World Health Organization fear that the US-China tension is undermining core elements of this system. RISING SUPERPOWERS, RISING TENSIONS China has moved rapidly to the leading edge in many domains of science. It has invested heavily in building advanced research infrastructures and a skilled technical workforce. Hundreds of thousands of Chinese students, research fellows, and scholars have studied in the West. China is now the second largest source of scientific papers after the United States, and an increasing number involve international coauthorship—with more than 40% having US-based coauthors. Thus there is the latent base for extended East-West cooperation. But China’s ascendance as a superpower is not without concerns about integrity. There is ongoing wariness about scientific espionage in potentially commercially important areas, including intellectual property management and technology transfer. At the same time, law enforcement agencies in the United States and other Western economies are suspicious of Chinese theft of cutting-edge research and technology. All contribute to a sense within many Western policy circles that some forms of scientific misconduct are endemic in China. The rising health, economic, and societal impacts of COVID-19, and accusations about responsibility for them, have greatly fuelled mutual suspicion and antagonism. COVID-19 has amplified concerns, as accusations flow about the availability and accuracy of Chinese data on the origin and impact of the SARS-CoV-2 virus that causes the disease. But there are also concerns about the veracity of some of the US data. Leading Western scientific journals have retracted suspicious results regarding the treatment of COVID-19; the choice of drugs has been politicized. There are disagreements about the accuracy of COVID-19 death counts promulgated by the White House versus those from the US Centers for Disease Control and Prevention. At the same time, the Trump administration’s withdrawal of funding from WHO has increased international concerns about the politicization of the pandemic and the breakdown of the international technical agencies that were designed to address global challenges. As the United States moves its focus away from the international stage and toward an “America First” policy, China has filled that space with a greater presence in the various bodies of the United Nations and an increasing range of multinational partnerships. Science has become a critical component of Chinese efforts to expand influence over international policies and relationships. One example is the Belt and Road Initiative, which while designed to build greater economic ties across Eurasia and Africa has also established a significant scientific and technological component, including its own international scientific organization. The initiative refers often to the UN Sustainable Development Goals, which reinforces a perception that China’s foreign policy goals are well-aligned with globally agreed upon measures. Within the COVID-19 crisis, science has shown a remarkable willingness to work across national and organizational boundaries. Similar to how diverse stakeholders came together in the West Africa Ebola outbreak of 2014–16, academic organizations, philanthropy, and the private sector have worked across country borders to develop broader science understandings of the COVID-19 challenge and approaches to solving it. WHO has launched the Solidarity trial, which involves investigators in over 35 countries, as well as a technology access pool to share information and data. The US National Academies of Sciences, Engineering, and Medicine is working with a US-based nongovernmental organization to help advise the Africa Centres for Disease Control and Prevention on the use and effectiveness of nonpharmaceutical interventions. But unlike earlier health challenges, COVID-19 is also being used within official government engagements to exacerbate tensions. Competition is underway to not only frame blame for the pandemic but to develop countermeasures domestically. Science can use its tools of informal diplomacy to try to reduce tensions. This will require global scientific organizations and individual scientists to recognize that their contribution to society is more than just building knowledge; it also involves building relationships and reducing tensions. This is truer today than at any time since the end of the Cold War 30 years ago. We need both formal and informal science diplomacy to play their role in navigating the rocky path ahead. Increasing and using science diplomacy will not be easy given the broad suspicions on both sides and the growing awareness of the coupling between scientific and economic competition between the two major powers. The tensions between the United States and China are distinct from those between the United States and the Soviet Union through most of the second half of the twentieth century. Societies, including the scientific community, are much more intertwined today at all levels. At the same time, the breakdown of many post-World War II institutions, and the growing trend toward nationalism and isolationism in the West, leaves a major gap in the infrastructure that would be needed to support technical discussions on global issues. Unlike earlier health challenges, COVID-19 is also being used within official government engagements to exacerbate tensions. But there are some opportunities. Both China and the United States are active in a number of multilateral scientific organizations, such as the International Science Council (ISC), which succeeded ICSU in 2018 and has been looking at ways to adapt to the new realities. Working through ISC to develop principles for science cooperation and conduct could provide an important framework for developing a set of norms and standards that could be applied to science writ large. It would also build an early foundation for broader technical discussions among scientists. After the Chernobyl nuclear accident in 1986, countries with very different political views rapidly agreed on a Convention on Early Notification of a Nuclear Accident—signed even while the Cold War raged. Could the scientific community define the basis of a similar convention to alert the global community to an emerging disease from a novel organism that jumped from an animal into humans? Such an agreement could provide for the time-critical sharing of biosamples and data. The ISC and its members have the expertise and nonpartisan basis to develop the scientific criteria for such a convention. And given that both US and Chinese commentators have made allegations regarding the origins of the COVID-19 virus in the other’s military research, it may be time to address the lack of a scientific support system for the Biological Weapons Convention. This lack of support, 45 years after the convention came into force, is in marked distinction to that related to chemical weapons. Recall the lessons from the Cold War. One is the need to focus on areas and topics of mutual interest and concern, such as space, cutting-edge energy projects, and global health. Another is to focus on building institutional links, either by taking advantage of existing institutions of science or, when opportunities arise, creating new ones. In this endeavor, nongovernmental or quasigovernmental organizations are particularly important. But shared interest between the Americans and Soviets around technically based global challenges such as Antarctica and the loss of the ozone layer also provided an important means to overcome political mistrust to work toward common, science-based solutions. Perhaps the United States and China, joined by allies on both sides, could develop new projects and facilities to explore and understand the physics and biology of the oceans—which, while often involving critical strategic and economic interests, is an arena where scientists can work together outside traditional political venues to develop better understandings. Whatever the area of focus, both sides of the Pacific need to recognize that the status quo is not sustainable. New systems and new approaches will be critical for advancing the science while leaving open important communication avenues for diplomacy.

## Case

### Solvency

#### Aff fails – circumvention, it’s the squo, and claims of a “time-limit” are false.

Sauer 21 [Hans; Deputy General Counsel and Vice President for Intellectual Property for the Biotechnology Innovation Organization (BIO), a major trade association representing more than 1,000 biotechnology companies from the medical, agricultural, environmental, and industrial sectors. At BIO, he advises the organization’s board of directors, amicus committee, and various staff committees on patent and other intellectual-property-related matters. Before taking his current position at BIO in 2006, he was chief patent counsel for MGI Pharma Inc. in Bloomington, MN, and senior patent counsel for Guilford Pharmaceuticals Inc. in Baltimore, MD. Mr. Sauer holds a M.S. degree in biology from the University of Ulm in his native Germany, a Ph.D. in neuroscience from the University of Lund, Sweden, and a J.D. degree from Georgetown University Law Center, where he serves as adjunct professor; “Waiving IP Rights During Times of COVID: A ‘False Good Idea’,” IP Watch Dog; 4/19/21; <https://www.ipwatchdog.com/2021/04/19/waiving-ip-rights-during-times-of-covid-a-false-good-idea/id=132399/>] Justin

It should be clear from the foregoing that there are many practical problems with this proposal:

Even if it were to pass out of the WTO, the waiver would still have to be implemented under the national laws of the WTO member countries. No explanation has been provided as to how up to 164 countries would be expected to quickly amend multiple statutes in their legal codes, or which form these amendments would take. Curiously, close to half of the waiver-supporting countries are already exempt from TRIPS anyway, and are effectively demanding to be free of rules that don’t apply to them. The most likely result of the proposed waiver would be a chaotic global patchwork of national laws that would linger at various stages of national implementation for years after the end of the pandemic.

Due to the breadth and vagueness of the proposal, it would be impossible for IP right holders to understand which products or services would lose IP protection in which country, or for how long – and little faith can be had in assurances that a waiver would be targeted and time-limited. Especially with regard to the critical category of trade secret or proprietary information, manufacturing know-how, clinical regulatory data packages and proprietary cell lines and other biological materials that are proposed to be shared, the waiver would in **no way be time-limited**. Proprietary information and materials cannot be un-disclosed or un-shared once they have been made public; they would simply lose their protection forever.

One wonders whether Congressional proponents of the TRIPS Waiver have given any thought as to how it could be implemented in U.S. law. There is no mechanism in U.S. law for simply waiving vested IP rights. Amendments to the federal patent, copyright, food and drug, and other federal statutes would need to be attempted; trade secret protections under 50 state laws overridden; and the waiver’s interference with the IP and confidentiality provisions of myriad existing private contracts would need to be sorted out. As a result, the Federal Government would have to assume unforeseeable and potentially colossal financial liability. And because the waiver is intended for the benefit of foreign developing nations, the legality of any attempt at U.S. domestic implementation would be doubtful, as Congress has no authority to expropriate U.S. property to benefit foreign countries. It is of course possible that Congressional proponents of the waiver are merely engaging in virtue-signaling, without any intention of ever implementing anything. But nonetheless, the waiver is certain to invite similar legislative train wrecks in other countries that aspire to the rule of law, and it is perplexing how little forethought seems to have gone into the proposal.

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

### WTO

#### 1] Counterplans solve the advantage – all their evidence is extremely generic and just says that if people’s perception on the WTO is good then it increases legitimacy – no reason the counterplans are any different – also proves disads turn case because WTO legitimacy is based on its perception

#### 2] US China trade war killed the WTO and proves no solvency for protectionism- card is fire

- 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

#### 3] No link- the plan is domestically enforced- the mention of the WTO is just to outline what countries enact the aff

#### 4] Their evidence proves uniqueness overwhelms the link -WTO is dead-credibility doesn’t matter when it physically can’t resolve

1AC Solís 20 [(Mireya Solís is director of the Center for East Asia Policy Studies, Philip Knight Chair in Japan Studies, and a senior fellow in the Foreign Policy program at Brookings. “The post COVID-19 world: Economic nationalism triumphant?” July 10, 2020. <https://www.brookings.edu/blog/order-from-chaos/2020/07/10/the-post-covid-19-world-economic-nationalism-triumphant/>] TDI

The chances that the World Trade Organization (WTO) can deliver a multilateral round of trade negotiations to slash tariffs across the board and update the trade and investment rulebook are nil. But the WTO has also lost its central role as arbiter of trade disputes among its members. In December 2019, the Appellate Body ceased to function

#### Also proves they can’t solve – it says countries need a dispute mechanism but none of the 1ac gives them that mechanism

#### 5] Group their impact scenarios – both of them are just interdependence in fancier terms – Interdependence doesn’t solve war – prefer studies at the multilateral not just dyadic level – 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.

### Covid

#### Kitfielf says nothing – its just china silencing propaganda which is what they’ve done for decades

#### Aff fails---trade secrets remain secrets and existing logistical hubs fail – answers HRW cuz they assume transfers will happen for solvency

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

#### The aff ignores insufficient infrastructure, materials, and “know how” needed to expand vaccine supply- even if IPR were waived there’s no scale up

Santos Rutschman 21 Santos Rutschman, Ana (Professor of Law, St. Louis University) and Julia Barnes-Weise (Executive Director of the Global Healthcare Innovation Alliances Accelerator a non-profit organization spun out of a program in Public Policy at Duke University, and a Senior Consultant to the Coalition for Epidemic Preparedness Innovations. She is a lawyer, global health policy consultant, entrepreneur and Certified Licensing Professional). "The COVID-19 Vaccine Patent Waiver: The Wrong Tool for the Right Goal." Bill of Health (2021) (2021)./SJKS

Second, even if all types of legal restrictions on the use of vaccine technology were lifted — or had never existed in the first place — there is simply not enough infrastructure (manufacturing facilities and equipment) nor raw materials (the components needed to manufacture and deliver vaccines) to produce and distribute COVID-19 vaccines as predicted under current waiver proposals. We have long faced a global vaccine manufacturing problem that will not be fully resolved during the current pandemic. In the case of vaccines that need to be kept at ultra-cold temperatures, these problems intensify. One of us (Barnes-Weise) has been involved in the contractual negotiations for the development, manufacturing and transfer of technology related to COVID-19 vaccines. In addition to the informational gaps described above, COVID-19 vaccine manufacturers are most concerned about how well the recipients of the technology transfer will understand and be able to implement such knowledge in making vaccines of the necessary quality. Shortages do not merely affect materials necessary to manufacture vaccines and facilities adequate to manufacture the vaccines; they also affect the availability of personnel qualified to instruct the licensee and recipient of this information. Sending an employee of this caliber out of the original manufacturing site to a partner site risks reducing the capacity of the first site. And remote instruction, necessitated by the pandemic, has its own shortcomings. In relation to the patents on the vaccines themselves, most of the concerns that the vaccine manufacturers express are around the protection of their vaccine platforms for the purposes of making future or non-COVID-19 vaccines. Moderna shared information about its [patents](https://www.modernatx.com/patents) in summer 2020. The manufacturers, as evidenced by the number of licenses to manufacture granted to date, are eager to [find](https://www.reuters.com/article/us-health-coronavirus-lonza-moderna/lonza-gets-licence-to-make-ingredients-for-moderna-vaccine-idUSKBN2B72BB) [partners](https://www.bloomberg.com/news/articles/2021-01-27/sanofi-to-make-millions-of-biontech-pfizer-s-covid-vaccine-doses) with the [capabilities](https://www.fosunpharma.com/en/news/news-details-3801.html) to expand production. It is not to their benefit to produce an inadequate supply of a highly sought-after vaccine. However, even willingness to transfer patented vaccine technology has faced numerous practical hurdles to date: 1) infrastructural limitations; 2) scarcity of raw materials; 3) concerns about licensees having the ability to actually manufacture effective vaccines in light of the infrastructural and product scarcity, even in situations in which there might be no informational gaps. A patent waiver would not address any of the practical concerns currently at the root of tech transfer negotiations involving COVID-19 vaccine technology. Compounding these problems is the fact that, should a waiver be issued, there is no legal mechanism that can compel the transfer of certain types of know-how or trade secrets should a company be unwilling to license its intellectual property — which, again, at this point in the pandemic, is not a problem we have observed. Finally, it is important to keep in mind that a waiver would be temporary: supporters of current waiver proposals should consider what will happen once demand for vaccines begins diminishing and fewer manufacturers remain on the market. Moreover, they should consider the legal and practical uncertainty that a waiver would introduce, as it is unclear how technology transfer between companies would cease (or continue) once the waiver expires.

#### 1AC HRW is not reverse casual – it says IP leads to shortages, but not how the waiver resolves them – their ev also literally says no way to scale up production overnight which means disads come decisively first

#### Raw materials take years to scaleup.

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

But perhaps the strongest argument against waivers is this: in October Moderna, one of the producers of new mRNA vaccines, actually offered an IP waiver. No-one has yet taken it up. Instead, “the biggest obstacle is raw materials,” says Dr Richard Torbett, chief executive of the Association of the British Pharmaceutical Industry. “All of the companies are saying we could produce more if we only had more glass vials, or filters, or bio bags.” Again, this is a daunting challenge – the Pfizer vaccine, for example, has 260 ingredients that come from 60 companies in 19 different countries. Many of these products are highly specialised and it will take many months, perhaps years, to ramp production of them up. “We’re very likely to see continued shortages that set back some of the vaccine producers for several months,” says Rasmus Bech Hansen, chief executive of Airfinity, adding that it is becoming harder for manufacturers with new jabs to secure the needed supplies – CureVac is already facing this problem, for example. The third challenge is perhaps harder to tackle. Vaccines are biological products and the manufacturing process does not always go smoothly. According to Airfinity, 1.73bn doses have been distributed worldwide, far short of the 4.5bn initially projected by big pharma. An overambitious manufacturing target is largely to blame for the gap. [AstraZeneca’s row with Europe](https://www.telegraph.co.uk/news/2021/05/09/eu-says-wont-renew-astrazeneca-contract-pivots-towards-pfizers/), for instance, was triggered by a lower yield at factories than hoped. Meanwhile Russia has produced only around 42m doses – compared to 400m from AstraZeneca and Pfizer – amid difficulties producing the second dose of Sputnik V, which uses different adenoviruses in the first and second shot.