# NC r6

## 1

#### India is building it’s relations with the West on the bedrock of new economic ties­­­­­---that’s key to counterbalancing China in the region

Mohan 21 C. Raja Mohan [director of the National University of Singapore’s Institute of South Asian Studies.],3-19-2021, "India Romances the West," Foreign Policy, https://foreignpolicy.com/2021/03/19/india-modi-west-quad-china-biden-non-aligned/ , accessed 8/8/2021 EH and Brett

In affirming that the “Quad has come of age” at the first-ever summit of the Quadrilateral Dialogue with the United States, Japan, and Australia last week, Indian Prime Minister Narendra Modi has sent an unmistakable signal that India is no longer reluctant to work with the West in the global arena, including in the security domain. The country’s new readiness to participate in Western forums marks a decisive turn in independent India’s world view. That view was long defined by the idea of nonalignment and its later avatar, strategic autonomy—both of which were about standing apart from, if not against, post-World-War-II Western alliances. But today—driven by shifting balance of power in Asia, India’s clear-eyed view of its national interest, and the successful efforts of consecutive U.S. presidents—India is taking increasingly significant steps toward the West. The Quad is not the only Western institution with which India might soon be associated. New Delhi is set to engage with a wider range of Western forums in the days ahead, including the G-7 and the Five Eyes. Britain has invited India to participate in the G-7 meeting in London this summer, along with other non-members Australia and South Korea. Although India has been invited to G-7 outreach meetings—a level or two below the summits—for a number of years, the London meeting is widely expected to be a testing ground for the creation of a “Democracy Group of Ten,” or D-10. In Washington today, there are multiple ideas for U.S.-led technology coalitions to reduce the current Western dependence on China. Two initiatives unveiled at the Quad summit—the working group on critical technologies, and the vaccine initiative to supply Southeast Asia—underline the prospects for an Indian role in the trusted technology supply chains of the United States and its partners. Along with Japan, India also joined a meeting of the Five Eyes—the intelligence-sharing alliance between the United States, Canada, Britain, Australia, and New Zealand— in October 2020 to discuss ways to give law enforcement agencies access to encrypted communications on platforms such as WhatsApp and Telegram. Five Eyes is a tightly knit alliance, and it is unlikely India will be a member any time soon. But it is very much possible to imagine greater consultations between the Five Eyes and the Indian intelligence establishment.To be sure, India’s engagement with Western institutions is not entirely new. India joined the British-led Commonwealth in 1947, but only after India’s first prime minister, Jawaharlal Nehru, made sure the forum was stripped of any security role in the postwar world. Refusing to join military alliances was a key plank of India’s policy of non-alignment. Nehru turned to the United States when his policy of befriending China and supporting its sensitivities collapsed by the end of the 1950s. Facing reverses in a military conflict with China on the long and contested border in 1962, Nehru sought massive defense assistance from U.S. President John Kennedy. With the deaths of both Kennedy and Nehru soon after, the prospects for strategic cooperation between New Delhi and Washington receded quickly. The 1970s saw India drift away from the West on three levels. On the East-West axis, it drew closer to the Soviet Union. On the North-South axis, it became the champion of the Third World. This was reinforced by the sharply leftward turn of India’s domestic politics and a deliberate severing of commercial cooperation with the West. Many concluded in the 1970s that anti-Americanism was part of India’s genetic code. After all, India voted more often against the United States at the United Nations during the Cold War than even the Soviet Union. The idea that India is irreconcilably opposed to the United States was the dominant assessment in both country’s capitals. Most scholars of Indian foreign policy assumed that come what may—at home or abroad—India would forever be alienated from the West. But the story of India’s international relations over the last three decades has been one of a slow but definite advances in cooperation with the United States and the West. The Quad summit is not only a culmination of that long trajectory, but also a major step up. It was the reform of the Indian economy at the end of the Cold War, along with the collapse of the Soviet Union as India’s superpower partner, that created the basis for the renewal of ties between New Delhi and Washington. But even as expanding commercial ties began to stabilize and deepen the bilateral relationship in the 1990s, Washington’s activism on Kashmir and its eagerness to denuclearize India made matters difficult for New Delhi. Beset with domestic turbulence and an era of weak coalition governments, New Delhi embarked on a hedging strategy by joining the Russian initiative for a so-called strategic triangle with Moscow and Beijing that eventually evolved into the BRICS Forum after Brazil and South Africa joined. U.S. President George W. Bush, however, revolutionized U.S. policy on India in the 2000s by discarding Washington’s mediating impulse on Kashmir, decoupling engagement with New Delhi from that with Islamabad, and resolving the dispute over non-proliferation. Bush recognized that India is critical for the construction of a stable balance of power in Asia as the continent was being transformed by the rapid rise of China. But just when Washington was ready to transform relations with New Delhi, India was paralyzed by self-doubt. If then-Prime Minister Atal Bihari Vajpayee boldly called India and the United States “natural allies” in 1998—at a time when no one seemed interested in Washington—his successor, Manmohan Singh, reverted to type. His government began to reinvent non-alignment, keep distance from the United States, and double down on the principle of strategic autonomy. Even as Indian-Chinese tensions multiplied after 2008—when the global financial crisis seemed to have convinced the Chinese leadership that the United States was in terminal decline, with the consequence that Beijing adopted a more assertive posture towards its neighbors—the Singh government continued to hedge against U.S. power. Modi, who became prime minister in 2014, began to reverse New Delhi’s resistance to a deeper partnership with Washington. His affirmation in his 2016 address to the U.S. Congress that India’s “historic hesitations” to engage the United States were over was not just a rhetorical flourish. Modi resolved the remaining issues that had prevented implementation of the historic 2008 Indian-U.S. nuclear deal, renewed the 2005 agreement for defense cooperation, and signed the so-called foundational defense agreements that have facilitated interoperability between the two country’s armed forces. He widened the annual bilateral Malabar exercises to include Japan in 2015 and Australia in 2020, helped revive the dormant Quad in 2017, came up with his own version of the Free and Open Indo-Pacific strategy in 2018, and joined the Quad summit in 2021. Beyond the relationship with the United States, Modi also revived India’s strategic interest in the Commonwealth, strengthened ties with the European Union, and joined the European Alliance for Multilateralism. He sought to make India part of the solution to mitigating climate change, supported “multi-stakeholderism” in global internet governance, initiated the International Solar Alliance and the Indo-Pacific maritime partnership with France, and is poised to lay the foundations for a substantive strategic partnership with British Prime Minister Boris Johnson when they meet in India next month. Every one of these moves was against the predominant instincts of India’s political class, bureaucratic establishment, and foreign-policy community. Two factors have facilitated this. First, Modi carried little of the anti-Western ideological baggage of the nationalists who thrive in his own party or the political left and center that prefer to keep a safe distance from Washington. Modi’s judgement that India needs a more productive relationship with the United States and the West is rooted in the simple calculus of national interest rather than any involved reasoning.

#### The TRIPS waiver sets the stage for India to use forced tech transfer to secure vaccines---that decks relations

Yogesh Pai & Prashant Reddy Thikkavarapu 21, Dr. Yogesh Pai has a PhD from the Inter-University Centre for IPR Studies, CUSAT, Kochi, in the area of Regulation of Standard-Essential Patents in India. Prashant Reddy Thikkavarapu Assistant Professor, National Academy of Legal Studies & Research (NALSAR) University of Law,. Hyderabad. Scrolli.in, Jun 01, 2021. “Even if WTO waives IP on vaccines, India will face challenge translating this into mass production” <https://scroll.in/article/996079/even-if-wto-waives-ip-on-vaccines-india-will-face-challenge-translating-this-into-mass-production> brett

With the United States agreeing to text-based negotiations on the revised Intellectual Property Rights waiver proposal jointly submitted by India and South Africa at the World Trade Organisation, the European Union remains the last major power opposing this proposal.

While we await the results of possibly lengthy text-based negotiations, it is necessary for the government of India to come out with a white paper explaining how exactly it intends to operationalise a possible IP waiver for vaccines, if and when such a waiver comes into effect.

The aim of such an exercise should be to explain to the world the manner in which this waiver will translate into the mass production of vaccines to meet the immediate medical needs of the developing world.

The initial wisdom among the proponents of the waiver is based on an assumption that a waiver will remove the legal barriers to production of vaccines. But as is widely acknowledged by most experts, developing countries will not be able to reverse-engineer these Covid-19 vaccines on their own. They will require active technology transfer from vaccines developers in the West before they can begin manufacture of any vaccines. These challenges are more practical than legal.

Tech-transfer challenge

For starters, even if the IP waiver does come into effect, unless the tech-owning vaccine producers residing abroad (i.e. beyond India’s legal limits) are forced under their respective domestic law to part with critical know-how and physical inputs (for example, cell lines), a waiver in itself will not translate into technology transfer in favour of firms willing to produce vaccines in India.

Thus the Pfizer/BioNtech and Moderna’s mRNA vaccine technologies, which are currently not produced in India, may still remain inaccessible under the waiver, unless countries such as the U.S. where these firms primarily reside engage in forced technology transfer under their domestic laws.

It is very unlikely that the Biden administration will force American companies to transfer their technology to Indian companies for no remuneration. The domestic political costs of such a policy would be too high for the Biden administration.

A domestic policy option for India is to threaten Western vaccine makers in India with punitive action against their existing patents for other products if they fail to voluntary transfer technology to Indian companies. Such a move towards forced technology transfer is the policy equivalent of throwing a grenade at India’s trade relations with the West without solving the problem of access to technology.

Presuming India does enact a legislative measure to force technology transfer, it is still not clear how a legal obligation to transfer technology to new firms willing to produce vaccines will lead to actual vaccine production.

#### US-India economic ties are key to strategic co-operation

Gupta 20, Anubhav Gupta is the associate director of the Asia Society Policy Institute in New York. WPR, March 5, 2020. “Despite the Trump-Modi ‘Love,’ Trade Is Still the Weak Link in U.S.-India Relations” <https://www.worldpoliticsreview.com/articles/28579/despite-the-trump-modi-love-trade-is-still-the-weak-link-in-us-india-relations> brett

Despite winning a substantial mandate in elections last year, Modi’s inclination has been to double down on a feckless approach to trade and to push a Hindu-nationalist social agenda that endangers internal stability. India’s fast-growing economy helped solidify the U.S.-India partnership after decades of bilateral aloofness during the Cold War. Without a more open, market-oriented economy, India’s growth trajectory will decline, undermining the economic foundation of the relationship as well as India’s future capabilities, and in turn, India’s utility as a partner in the region.

In the aftermath of Trump’s visit, some analysts have dismissed the trade tensions as a minor hurdle and pointed to the strength of defense ties as reassurance, arguing that the cause of paramount importance—a strategic partnership to deal with a rising China—is progressing unabated. But there is no guarantee that trade differences can continue to be compartmentalized when two economic nationalists are in charge. It also remains an open question whether growing defense sales are taking place within a truly strategic framework or simply on a transactional basis for both sides. Most importantly, it assumes that economic relations are not part of the strategic puzzle.

This is evident in the decision by Trump to leave the Trans-Pacific Partnership shortly after winning election, and by Modi to abandon the Regional Comprehensive Economic Partnership. If the U.S.-India strategic imperative is to manage China’s rise and boost their own engagement and presence in the region, these twin actions, driven by economic nationalism, were self-inflected blunders of the highest order.

Without a vibrant commercial relationship and a constructive approach to trade that is anchored in the Free and Open Indo-Pacific strategy, the United States and India will impede their own strategic endgame for the region. For this reason, the absence of a trade deal last week makes any celebrations of a U.S.-India partnership that is “stronger than ever before” ring a little hollow.

#### Indian ocean goes nuclear---India’s role is key to prevent it.

Gamage 17 (Rajni Gamage is a senior analyst with the Maritime Security Programme at the Institute of Defence and Strategic Studies, S. Rajaratnam School of International Studies, Nanyang Technological University, Singapore., 11/5/17, “Why the Indian Ocean Must Not Become Like the South China Sea”, https://nationalinterest.org/feature/why-the-indian-ocean-must-not-become-the-south-china-sea-23028?page=0%2C2)

Rising Strategic Uncertainty in the Indian Ocean The pursuit of contesting regional orders by major powers has engendered a strategic environment of uncertainty and mistrust in the Indo-Pacific. As geopolitical developments at land and sea feed off one another, the maritime domain has been marked as the latest theater of war. These dynamics have been most evident in the East and South China Seas, where the complexity of issues at hand is telling. A case in point is China’s construction of military facilities on artificial islands proximate to disputed maritime areas, against a backdrop of contesting interpretations of international law. As regional and extra-regional states face a rising China on all fronts, a climate of strategic anxiety prevails in anticipation of its potential impact on the existing rules-based international order. Such anxieties inevitably spill over into the Indian Ocean Region and manifest in ways unique to that part of the world. A rising India with aspirations to global-power status finds its regional dominance challenged by China’s two-ocean strategy and Belt and Road Initiative. In the maritime realm, India’s response comprises internal naval and port modernization, and increased naval engagements and exercises with neighboring littorals and external powers that have major stakes in the region. This has not, however, had any noticeable effects in tempering regional anxieties. Heavy maritime traffic in increasingly congested regional waters operate alongside this tense backdrop. The risk that various surface vessels could collide—whether naval or commercial—and the risk of submarine accidents is on the rise. A number of regional and extra-regional states have forward-deployed their navies in the Indian Ocean, independently or as part of various task forces. There have already been several maritime accidents involving warships and air crashes in the Persian Gulf and the northern Arabian Sea between regional and extra-regional navies—some of which escalated politically. The Iranian Navy, for instance, has confronted its smaller neighbors and the U.S. Navy by conducting high-speed naval maneuvers and missile firings, and it has used drones to shadow U.S. naval assets. Late last year, an Indian submarine attempted to enter into waters close to Gwadar Port and was reportedly repelled by the Pakistan Navy. Miscommunications and misperceptions are likely to result from such incidents and could escalate very fast to negative political and military expressions. It is against this setting that a code of conduct (COC) for the Indian Ocean was first proposed.

## 2

#### IP is key to sustaining the US dollar and maintaining dollar heg

Schwartz 19, Herman Mark Schwartz is Professor of Politics at the University of Virginia, “American hegemony: intellectual property rights, dollar centrality, and infrastructural power”, Tandfonline Journal, 6-28-19, <https://www.tandfonline.com/doi/full/10.1080/09692290.2019.1597754>, AR recut ramamurty

How does dollar centrality persist in the face of continuous US current account deficits and a steadily worsening net international investment position? Two mechanisms create a structural basis for dollar centrality, explaining how dollars enter global credit markets and why surplus countries continue to hold dollar-denominated assets. First, institutional structures deriving from late development suppress domestic demand in major current account surplus countries, making them reliant on external demand for growth. Local banks recycle those dollars into the global economy, creating huge dollar liabilities and assets on their balance sheets. This locks them into continued use of the dollar and reliance on the US Federal Reserve during crises. Second, US firms participating in the global unbundling of production have constructed commodity chains in which they capture disproportionate shares of global profits through their control over Intellectual property. These profits sustain valuations and thus the attractiveness of dollar-denominated assets. Routinization in use of the dollar and compliance with Trade-Related Aspects of Intellectual Property Rights (TRIPS) and US controlled commodity chains creates infrastructural power in Michael Mann’s sense. This routinization sustains US geo-economic power in the face of persistent current account deficits and growing net international debt relative to US gross domestic product.

#### Dollar Heg solves global conflict and laundry list of existential impacts

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

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 h**as 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 worldwidefinancial **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 20**05**, 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**.

## 3

#### Silicon supply can’t keep up with demand, but things will stabilize by 2023

Barrett 5-9 [Eamon Barrett, Senior reporter at Fortune. Focuses mainly on Asian countries. Holds Degrees from Buckinghamshire University and University of Leeds.] This is how the global chip shortage will end, 5-9-2021, Fortune, accessed 8-24-2021 https://fortune.com/2021/05/09/chip-semiconductor-shortage-global-end///ramamurty [modified for ableist language]

The world is in the grips of a global chip shortage because of demand for semiconductors surging far beyond capacity for supply. The shortage is [harmful] players in industries as diverse and far afield as automotives and smartphones—though carmakers have it the worst. Apple, for example, has staggered the release of new iPhones to adjust for reduced supply. Ford, meanwhile, is predicting that the shortage of chips—used for onboard computers that control features like speedometers and antilock brake systems—will result in a $2.5 billion reduction in operating profit as the automaker mothballs factories. It expects production to fall by half in the second quarter. Semiconductor manufacturers are already adding more capacity to meet future projections, and executives on the supply side of semiconductors have begun to speculate when the shortage, which emerged at the end of 2020, will ease. There's consensus that supply will remain tight throughout 2021. Intel CEO Pat Gelsinger predicts the shortage will persist for a “couple of years.” German chipmaker Infineon likewise suspects supply to finally meet demand in 2023. But the good news is that the shortage isn't the result of a genuine lack of resources, such as a dearth of the raw silicon that forms the wafer base for semiconductors; it’s just a disequilibrium between demand and supply. Rebalancing will require expanding capacity—and time. Why is there a global chip shortage? Demand for semiconductors experiences natural peaks and troughs since manufacturers tend to launch new deliverables, such as the latest smartphone model or the newest car marque, seasonally. But in 2020 a number of factors converged to create an unexpected peak. In May last year, the Trump administration’s imposed sanctions against Huawei Technologies, which blocked the Chinese smartphone maker from purchasing semiconductors made with U.S. technology. The blockade, which gave suppliers 120 days to comply, prompted Huawei to increase orders and stockpile chips ahead of the ban. “After the U.S. placed sanctions on Huawei, other Chinese smartphone makers started increasing semiconductor orders too because they wanted to take market share left by Huawei,” says Brady Wang, an analyst at Counterpoint Research. “That was one of the triggers for the shortage now.” Next, the pandemic forced millions to shelter and work at home, increasing orders for personal electronics, which run on chips. China’s exports of laptop computers surged 9.8% in the first half of 2020, meeting the sudden demand for home offices. The pandemic also forced some chipmakers to temporarily shut down production lines, introducing a dip on the supply-side. Perhaps more importantly, automakers expected the pandemic to reduce new car sales, and they cut production outlook and canceled their orders for semiconductors as a result. But the pandemic downturn was less pronounced than automakers expected, and consumer demand came roaring back as major economies rolled out vaccines. Automakers that had canceled semiconductor purchases rushed to put in new orders but found themselves at the back of a line front-loaded with personal electronics makers. Daniel Nenni, founder of chip information forum SemiWiki, says, “Calling it a shortage is really not the case. It was just bad supply-chain management.” Certainly not all automakers have been hit equally. Nissan chief operating officer Ashwani Gupta told Bloomberg that the chip shortage is something that every company “could have avoided” with better supply-chain management. Nissan, which has issued rolling stoppages on production lines because it can't source the chips it needs to complete orders, is among the companies that could have prepared better. Meanwhile Toyota, which keeps a close eye on its supply chains, began stockpiling chips early and has coasted through the shortage. Supply side On a call with journalists on Wednesday, German chipmaker Infineon, which specializes in automotive chipsets, said automakers had learned their lesson from the chip shortage and that “this idea of ordering parts when you need them and canceling them then when you don’t will not return.” But the semiconductor industry has other bottlenecks that are harder to resolve. Some 80% of the world’s chip supply—and, in fact, some 80% of Infineon's microcontroller supply—comes from Asia, where Taiwan’s TSMC dominates the market for contract chip manufacturing. TSMC has invested $2.88 billion to expand capacity at a factory in China that produces automotive chips, in order to “ease the global chip supply challenge.” The company also has committed to spending $100 billion over the next three years to “address the structural increase in the long-term demand.” The Taiwanese firm’s dominant position has made it something of a kingmaker amid the shortage. On Wednesday, U.S. Commerce Secretary Gina Raimondo said the commerce department was “working hard to see if we can get the Taiwanese and TSMC [to] prioritize the needs of [U.S.] auto companies.” German ministers requested Taiwanese officials help get German automakers to the front of the queue as early as January. The Taiwanese side responded by requesting Germany help the island source COVID-19 vaccines, but the quid pro quo seemingly never materialized. Both the U.S. and the EU have released plans to boost domestic semiconductor manufacturing capacity, limiting just slightly their reliance on Asia. The EU wants to double its chipmaking capacity by 2030, occupying 20% of the global market. Meanwhile U.S. President Joe Biden is pushing to secure $50 billion in government funding to revitalize the U.S.'s domestic industry. The extra capacity—some of which is being built by TSMC—won’t resolve the chip shortage soon but will help increase capacity in the long term. “Across the industry, there will be a huge ramp-up of production by the end of 2021,” says Sanyam Chaurasia, an analyst at Canalys. Some chipmakers, he says, started increasing capacity even last year, but it takes roughly a year for new factories to come online. “At the end of the day, supply will meet demand and there will be equilibrium,” says Chaurasia. “That's how business is run.”

#### Vaccine production already slowed the recovery – increasing production too fast will decimate silicon supply

Johnston 4-20 [Crystal Johnston, Director of marketing at webolution, Executive at various tech companies and holds a degree from the University of Denver] We know there is a chip shortage, but WHY?, 4-20-2021, Video Conference Gear, accessed 8-24-2021 https://www.videoconferencegear.com/blog/we-know-there-is-a-chip-shortage-but-why///ramamurty

A lot of different variables came into play to cause the shortage, creating a perfect storm that will now cost the economy billions in lost revenue. The world shut down, so did production. No one producing chips means there are no chips available. As businesses started to open back up, chip manufacturers jumped onto making chips, but by this time, they were already behind as a typical lead time for a semiconductor chip is 11-12.5 weeks. The need for electronics increased. With everyone being sent home to shelter in place, the need to work remotely became a necessity, no longer a luxury. Work from home solutions needed to be implemented and implemented fast. The future demand was underestimated. Manufacturers cannot tell the future (contrary to popular belief.) So, when it came to March 2020, manufacturers had not created any surplus of inventory, and so the inventory they did have ran out quickly causing the lead time now to increase to 15 weeks or more. Silicon shortage due to vaccines. The silicon that is used to create the semiconductor chips is the same kind of silicon used to create the vials used for the vaccines. The vaccines take precedence over the manufacturing of the semiconductor chips adding to the chip shortage. Ok, with now understanding why there is a shortage, let us dive into who will be affected. Pretty much anything that runs off computing will be affected by this shortage in one way or another. Think of a day in recent weeks that you went a whole day without using something that was not in relation with computing electronics. It is not just cell phones and cameras, or video game consoles, it is automotive, military, and general large-scale computing. Not just one industry will suffer from this shortage, all industries will, and the shortage will have a ripple effect. Increase in cost to manufacture chips will flow all the way down to consumers, with increases in costs for goods, and by goods, I mean ALL goods. For example, a fruit juice manufacturing plant, who specializes in manufacturing and distribution of local and exotic consumer fruit juices, now has most of their staff working from home. For example, a fruit juice manufacturing plant, who specializes in manufacturing and distribution of local and exotic consumer fruit juices, now has most of their staff working from home. To make sure staff are equipped appropriately, they purchase hundreds of laptop cameras and microphones. Also, the company needed to increase their server sizes and locations since staff will be remote. The hardware purchased has increased in cost due to the chip shortage, and now the fruit juice manufacturer must increase their product prices to assist in covering all these costs. The consumer now must pay extra per juice purchase all because the semiconductor chips are in short supply. What is being done about this? Production has started back up and chips are being pumped out as fast as possible, but it is not as simple as hiring more people to build more chips. Certain supplies (such as silicon) that are used to make the chips are in high demand, and the plants that make the chips can only produce so much at a time as the chips are highly labor intensive and attention to detail is of utmost importance. If a semiconductor chip is being placed into a car, and the chip is faulty, it could lead to the vehicle malfunctioning that could potentially cause harm to the driver. So, when you are grocery store shopping, and you notice that the price of your favorite food has gone up, think about how a shortage in semiconductor chips could be the direct cause.

#### TSMC supply chain is k2 preventing US-China trade war – SQuo makes this unlikely but any harm to the industry speeds up onshoring and competition

FP 2/16 A Special Report By FP Analytics, 2-16-2021 [A Special Report By FP Analytics] Semiconductors and the U.S.-China Innovation Race, 2-16-2021, Foreign Policy, accessed 9-16-2021 https://foreignpolicy.com/2021/02/16/semiconductors-us-china-taiwan-technology-innovation-competition///ramamurty

Semiconductors, otherwise known as “chips,” are an ­­essential component at the heart of economic growth, security, and technological innovation. Smaller than the size of a postage stamp, thinner than a human hair, and made of nearly 40 billion components, the impact that semiconductors are having on world development exceeds that of the Industrial Revolution. From smartphones, PCs, pacemakers to the internet, electronic vehicles, aircrafts, and hypersonic weaponry, semiconductors are ubiquitous in electrical devices and the digitization of goods and services such as global e-commerce. And demand is skyrocketing, with the industry facing numerous challenges and opportunities as emerging technologies such as artificial intelligence (AI), quantum computing, Internet of Things (IoT), and advanced wireless communications, notably 5G, all requiring cutting-edge semiconductor-enabled devices. But the COVID-19 pandemic and international trade disputes are straining the industry’s supply and value chains while the battle between the United States and China over tech supremacy risks splintering the supply chain further, contributing to technological fragmentation and significant disruption in international commerce. For decades, the U.S. has been a leader in the semiconductor industry, controlling 48 percent (or $193 billion) of the market share in terms of revenue as of 2020. According to IC Insights, eight of the 15 largest semiconductor firms in the world are in the U.S., with Intel ranking first in terms of sales. China is a net importer of semiconductors, heavily relying on foreign manufacturers—notably those in the U.S.—to enable most of its technology. China imported $350 billion worth of chips in 2020, an increase of 14.6 percent from 2019. Through its Made in China 2025 initiative and Guidelines to Promote National Integrated Circuit Industry Development, over the past six years, China has been ramping up its efforts using financial incentives, intellectual property (IP) and antitrust standards to accelerate the development of its domestic semiconductor industry, diminish its reliance on the U.S., and establish itself as a global tech leader. As U.S.-China competition has intensified, notably under the former Trump administration, the U.S. has been tightening semiconductor export controls with stricter licensing policies, particularly toward Chinese entities. Concerns continue regarding China’s acquisition of American technology through civilian supply chains and integration with Chinese military and surveillance capabilities. Caught between these global superpowers is the Taiwan Semiconductor Manufacturing Corporation (TSMC), a leading manufacturer in the industry, owning 51.5 percent of the foundry market and producing the most advanced chips in the world (10 nanometers or smaller). TSMC supports both American and Chinese firms such as Apple, Qualcomm, Broadcom, and Xilinx. Until recently, the firm also supplied Huawei but severed ties with the Chinese giant in May 2020 because of U.S. Department of Commerce restrictions on Huawei suppliers over security concerns. Taiwan has also become a geopolitical focal point because the Trump administration’s moves to strengthen American-Taiwanese relations heightened tensions in the Taiwan Strait and increased China’s military activity in the region, testing the Biden administration’s resolve. Together, these factors present significant risks to a critical manufacturing node for the global semiconductor industry. Taiwan represents one part of the industry’s complex ecosystem and shows more broadly the increasing difficulty for companies and countries to remain insulated from geopolitics—particularly amid pressures contributing to U.S. and China decoupling. As geopolitical, trade, and technology disputes mount and the COVID-19 pandemic continues to harm the supply and value chains, semiconductor firms are trying to secure their manufacturing processes by stockpiling supplies or relocating production facilities—disrupting the industry at large. With semiconductors at the heart of U.S.-China strategic and technological competition, the industry continues to experience a range of protective tariff and non-tariff measures that threaten production and competitiveness of the industry. This FP Insider Report analyzes the evolving strategic economic relationship among China, Taiwan, and the United States as it pertains to semiconductors, examines the growing economic and security challenges that key private and public sector actors within the industry face, and pinpoints opportunities for the Biden administration as it seeks to bolster U.S. competitiveness while containing China’s technological ambitions. In particular, this report finds: Semiconductors represent the linchpin for U.S. and China’s mutually dependent technological ambitions. Semiconductors are a critical technological vulnerability for both China and the United States, which rely on each other as well as Taiwan for cutting-edge semiconductor devices. Despite massive investment, China is highly unlikely to achieve independent semiconductor manufacturing capabilities in the next five to 10 years. Chinese companies are unable to compete against top-tier firms because of limited access to semiconductor manufacturing equipment (SME) and software, and their overall lack of industry knowledge hinders the development of a self-sufficient supply chain. Taiwan is set to become the center of U.S.-China tensions. Given the country’s central role in semiconductor manufacturing and technology supply chains, China will likely leverage its economic influence through trade restrictions, talent recruitment, and cyber to attack key companies in order to obtain core semiconductor intellectual property (IP) needed to bolster its domestic industry. Unilateral restrictions fostering distrust among companies and country governments risk economic decoupling. Unilateral economic measures imposed by the United States on segments of the supply chain, notably manufacturers such as TSMC, have fostered concern among private and public actors on the impact of action by U.S. leaders on global supply chains and corporate competitiveness. Recognizing critical bottlenecks and vulnerabilities, some companies are evaluating new production models, diversifying investments and suppliers to circumvent American economic policies, which could undermine U.S. primacy in the industry. Collaboration between the Biden administration and American corporations will be key to balancing national security and commercial interests. Given that multilateral frameworks on semiconductor regulation do not include Taiwan or China, the Biden administration could bolster existing forums for enhanced American-Taiwanese economic relations through the Economic Prosperity Partnership Dialogue (EPP) and Sino-American relations through the Strategic Economic Dialogue. Evaluation of current tax codes and permitting processes under the Federal Clean Air Act, which now disincentivizes companies from investing in U.S.-based fabrication plants, will also be important to attracting investment and strengthening U.S. competitiveness in the sector.

#### US China trade war goes nuclear

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A trade war would do enormous damage. It could foster a resentful and aggressive China and lead to the situation foreseen by Mearsheimer (2001), where a declining America decides to halt China’s rise. Decisions for war or peace Andrew J. Nathan and Andrew Scobell’s China’s Search for Security (2012) is noteworthy for its systematic inclusion of economic factors in a security oriented analysis. The driver of China’s foreign policy is its search for security, the book claims. Where the offensive realist Mearsheimer sees regional hegemony and global power as means to acquire national security, the defensive realists Nathan and Scobell distinguish between security and hegemony: Beijing wants security but not global power. When Beijing says it wants peace it means stability so it can ‘concentrate on economic development’ (Nathan and Scobell, 2012: 28). A country’s foreign policy is driven by its factual interests, although the causal path from interest to policy may be distorted by misinformation, miscalculation, value commitments, institutional weaknesses or leadership shortcomings. Nathan and Scobell think China will remain a ‘status quo power in a system designed by the West’ but hold it possible that future Chinese leaders may challenge US pre-eminence if Washington does not keep up the economic foundation for US power (Nathan and Scobell, 2012: 13, 346, 357). What could unravel the global system would not be China’s rise but US decline. This is the main risk, as they see it. If ‘the West weakens itself to the point of creating a power vacuum’, then China will acquire bases around the world and replace the dollar with the renminbi in its foreign trade. The US would thus have to decide whether and when to resist, and this could lead to war. The recipe for peace is that the US maintains its strength and conducts a cautious foreign policy. China is likely to act rationally on the basis of its search for security (Nathan and Scobell, 2012: xi, 359). It follows from their reasoning that the risk of war will increase if China can no longer depend on the US for its economic development, while the US retains sufficient military power to believe it can win a war. Again it is seen that a politically motivated reduction in the Sino–US economic interdependence is a likely precursor to any crisis leading to war. If Nathan and Scobell’s reasoning is combined with Roach’s analysis of financial politics and Copeland’s ‘trade expectation’ argument it seems that the key to minimizing the risk of war is to rebalance the global economic system in a way allowing the major powers to remain codependent. A combination of mutual nuclear deterrence and economic interdependence is likely to preserve global peace as long as no major power expects to see a rapid decline in its relative power. Deterrence and inter-dependence are both, however, precarious. One depends on credibility, the other on the expectation that flows are kept open within a mutually beneficial financial and trading system. The arguments cited so far are all structural, building on the assumption that deterrence and interdependence prevent or reduce the risk of war regardless of who holds power in Beijing, Washington (and Tokyo) or, to put it differently, assuming that no government will be knowingly prepared to set the world ablaze or accept the cost of a global economic recession. Some scholars are weary of structural arguments and prefer to look at leadership or agency. Who ensures caution in Chinese and US decision-making? Is it the two presidents themselves? Is it the standing committee of the Chinese Communist Party politburo and the US National Security Council? Is it the Pentagon and the PLA? Is it China’s Prime Minister and the US Secretary of the Treasury or the Chairman of the Federal Reserve? Is it transnational company executives with access to decisionmakers? Or is it media, think tanks and other opinion-makers? Ultimately the two presidents decide, so their capacities, priorities and motivations are essential, as well as the opinions of their formal and informal advisers. This should inform the research agenda. This paper shall now look at four approaches to the question of agency, some referring back to the outbreak of World War I in Europe. The 2014 centennial brought multiple comparisons between Europe 1914 and Asia 2014. Some of the best are assembled in Rosecrance and Miller’s The Next Great War?: The Roots of World War I and the Risk of US–China Conflict (2015). Their main message is that the so-called Thucydides trap is not just bilateral. What made the Peloponnesian War inevitable was not only ‘the growth of Athenian power and the fear it caused in Sparta’ but that Corcyra attacked Corinth, so Sparta felt it necessary to come to its ally Corinth’s defence, leaving Athens little choice but to support its ally Corcyra (Allison, 2015: 77–78; Coker, 2015: 109). North Korea could conceivably pull China into war with the US, as it did in 1950. Japan, Taiwan or the Philippines could drag the US into war with China: ‘The most likely route to war with China is via a dispute involving one or more of the United States’ Asian allies’ (Miller, 2015: xxi). In his contribution to the Rosecrance and Miller volume, Richard N. Cooper (2015) discusses economic interdependence and war. He begins by confirming the often-heard argument that the outbreak of World War I provides evidence that high economic interdependence is no guarantee against war (Cooper, 2015: 57). Then he rehabilitates the often ridiculed Norman Angell, whose The Great Illusion: A Study of the Relation of the Military Power in Nations to Their Economic and Social Advantage (1910) did not actually argue (at least not mainly) that war was impossible but warned against the naval race between Britain and Germany because it could lead to a mutually destructive confrontation. After comparing the level of economic interdependence between the European powers in 1914, Cooper goes briefly through the July–August decision-making in Vienna, Berlin, Moscow, Paris and London, holding Tsar Nicholas II’s decision to mobilize as the factor making war unavoidable. Cooper emphasizes that the fatal decisions were made by relatively few people and that none of them foresaw the destructiveness of the war that followed: ‘If leaders had forecast the actual costs, they (and even the generals) undoubtedly would have worked much harder to avoid war’ (Cooper, 2015: 69).3 Such miscalculation can hardly be repeated today or in the foreseeable future. Given the existence of nuclear weapons, the memory of World Wars I and II, and how close the world was to Armageddon during the Cuban missile crisis, and also the awareness of the colossal conventional capabilities of the USA, China, Japan, Russia and India, any responsible statesman or woman today must know that all-out war brings mutually assured destruction. It is not possible for any sane leader to deliberately provoke all-out war. What remains possible is to gamble that the adversary backs down in a crisis, so that an individual state can provoke with impunity or win a limited war. The latter happened in Korea and Vietnam at a time when the USA and USSR—and China from 1964—were Asia’s only nuclear powers. An additional complication today is that a limited war could take the form of a cyber-war. Christopher Coker’s The Improbable War: China, the United Statesand Logic of Great Power Conflict (2015) offers the opposite argument of Cooper’s on the basis of constructivist thinking. Coker feels that the world is in danger of making ‘exactly the same mistakes today, as we are telling ourselves the same stories we did in 1914’, namely that inter-state war has become a matter of the past. There is the same ‘complacency about great power conflict’. Material factors alone cannot explain conflicts. They are driven by ideas, passions and beliefs. A big problem between China and the US is ‘resentment’ (Coker, 2015: 18–19, 65). An abundance of dangerous stories are told that could lead to war. The Chinese tell themselves the story of past humiliation, and look at the future in terms of basic conflict: ‘It looks as if the Chinese are preparing for a protracted confrontation with Japan’. The Americans tell themselves the Thucydides trap story, and are more and more nervous about China’s rising power: ‘Confrontation … is the American default mode, its unique cultural style’. If this situation persists, war may follow regardless of material factors. What the world needs is a ‘new normative consensus’ and ‘a constructive cultural dialogue’ about Chinese and Western values (Coker, 2015: 80, 119, 181). Although this runs counter to Copeland’s key finding that causes of war are relational and are not on the ‘unit level’ (Copeland, 2015: 435), it follows from Cooper and Coker that the drivers of unit-level decision-making must be studied. In his chapter in The Oxford Handbook of the International Relations of Asia, Yuen Foong Khong (2014) puts forward a forceful argument in favour of Foreign Policy Analysis (FPA) as an alternative or necessary supplement to International Relations (IR) theory. If the relative peace and economic dynamism of East Asia—and the relationship between the two—are to be understood, Khong claims that threat perceptions, national identity, ideology, and leadership, must be taken into consideration. IR neorealism is unable to explain why the East Asian region has seen relative peace and stability: ‘It is the FPA variables, rather than international structure, that do the heavy lifting when it comes to … explaining Asia’s relative peace and stability’ (Khong, 2014: 91). He finds that regional peace has come as a result of leadership changes in the region, with new leaders coming to power at certain junctures to implement growth-promoting export-oriented economic policies. These have led to substantial economic growth, which in turn has incentivized policymakers to avoiding actions that threaten peace and stability. Ominously, however, the same economic growth has enabled governments to invest heavily in modern weaponry, and this has increased the need for a strong US economic and military presence (Khong, 2014: 97). Etel Solingen (2015) goes further than Khong in a comparison of pre-World War I Germany and today’s China. It is not interdependence per se, she claims, that inhibits war. Interdependence can work both ways. The main question is what kind of socio-economic coalition that dominates domestic politics. Is it a coalition with an active interest in internationalization or one that seeks to protect its nation against foreign influences? Internationalizing strategies emphasize access to global markets, capital, and technology, regional cooperation and domestic macroeconomic stability. This reduces uncertainty, encourages savings, and enhances both foreign and internal investments (Solingen, 2015: 130). Conversely, inward-looking models benefit from enhancing the viability of statist, nationalist, protectionist, and military–industrial complexes. She finds that Germany pre-World War I conforms to the inward-looking model, and that this may explain its preparedness to go to war. The socio-economic coalition dominating Chinese politics today to some extent resembles imperial Germany’s agrarian–industrial–military complex. The main similarities are a ‘combination of rapid socioeconomic change and stagnant political institutions’, and the active use of assertive nationalism as a legitimating device (Solingen, 2015: 138). More importantly, however, China’s Communist Party regime differs from imperial Germany in holding its military under firm civilian control and embracing economic internationalization. China has radically integrated its economy with the global market and become part of an international division of labour, with trans-national production chains. China’s internationalizers ‘share incentives with the West – and much of the rest – to bolster a stable global economy’. Thus the prospects of China going to war are ‘small in 2014, though nontrivial’ (Solingen, 2015: 146). It should be noted that Solingen has nothing to say about the socio-economic coalitions that hold sway in Washington, DC. She seems, unlike Roach (2014), to assume that the threat to peace comes mainly from China. In this she also differs from Copeland, who finds that it is normally the declining power who initiates war, and Mearsheimer, who claims that China’s attempt to become Asia’s regional hegemon will force the US to contain and weaken it (Mearsheimer, 2001: 402–403; Mearsheimer, 2006: 162). Conclusions Several recent works on China and Sino–US relations have made substantial contributions to the current understanding of how and under what circumstances a combination of nuclear deterrence and economic interdependence may reduce the risk of war between major powers. At least four conclusions can be drawn from the review above: first, those who say that interdependence may both inhibit and drive conflict are right. Interdependence raises the cost of conflict for all sides but asymmetrical or unbalanced dependencies and negative trade expectations may generate tensions leading to trade wars among inter-dependent states that in turn increase the risk of military conflict (Copeland, 2015: 1, 14, 437; Roach, 2014). The risk may increase if one of the interdependent countries is governed by an inward-looking socio-economic coalition (Solingen, 2015); second, the risk of war between China and the US should not just be analysed bilaterally but include their allies and partners. Third party countries could drag China or the US into confrontation; third, in this context it is of some comfort that the three main economic powers in Northeast Asia (China, Japan and South Korea) are all deeply integrated economically through production networks within a global system of trade and finance (Ravenhill, 2014; Yoshimatsu, 2014: 576); and fourth, decisions for war and peace are taken by very few people, who act on the basis of their future expectations. International relations theory must be supplemented by foreign policy analysis in order to assess the value attributed by national decision-makers to economic development and their assessments of risks and opportunities. If leaders on either side of the Atlantic begin to seriously fear or anticipate their own nation’s decline then they may blame this on external dependence, appeal to anti-foreign sentiments, contemplate the use of force to gain respect or credibility, adopt protectionist policies, and ultimately refuse to be deterred by either nuclear arms or prospects of socioeconomic calamities. Such a dangerous shift could happen abruptly, i.e. under the instigation of actions by a third party – or against a third party. Yet as long as there is both nuclear deterrence and interdependence, the tensions in East Asia are unlikely to escalate to war. As Chan (2013) says, all states in the region are aware that they cannot count on support from either China or the US if they make provocative moves. The greatest risk is not that a territorial dispute leads to war under present circumstances but that changes in the world economy alter those circumstances in ways that render inter-state peace more precarious. If China and the US fail to rebalance their financial and trading relations (Roach, 2014) then a trade war could result, interrupting transnational production networks, provoking social distress, and exacerbating nationalist emotions. This could have unforeseen consequences in the field of security, with nuclear deterrence remaining the only factor to protect the world from Armageddon, and unreliably so. Deterrence could lose its credibility: one of the two great powers might gamble that the other yield in a cyber-war or conventional limited war, or third party countries might engage in conflict with each other, with a view to obliging Washington or Beijing to intervene.

## Case

#### 1] Extinction outweighs – reversibility, its one and done, no coming back; scope – affects everyone; magnitude – infinitely bad; Probability weighing doesn’t matter, a 1% risk of extinction is infinitely worse than anything else

#### 2] The issue is lack of resources, not IPR.

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When the IP waiver concept was first proposed last October, Moderna agreed not to enforce its COVID-19 related patents during the pandemic. But despite Moderna’s voluntary waiver of its IP rights, no other company has stepped up to manufacture the Moderna vaccine. The most significant obstacle to COVID-19 vaccine supply is not just the IP rights that companies have obtained, or are pursuing, but rather the lack of raw materials and manufacturing facilities to produce the vaccines. Currently, there are shortages of raw materials and equipment used to make vaccines and biological products. Unlike drug manufacturing, vaccine production processes are extremely complex and difficult to develop without support from current manufacturers. Additional manufacturers would need to have or acquire skilled expertise in mRNA technology and create or reconfigure manufacturing sites. Manufacturing vaccines requires additional processing steps and testing to assure quality and consistency. Manufacturing vaccines will also likely use the patented technology of other companies, who have not waived their IP rights. Investment in manufacturing is also an important piece of the solution. Whether existing companies can retool facilities and jump start manufacturing or new facilities need to be created through investment will be outcome determinative. There is little doubt that the waiver proposals would at the very least up-end the existing incentives, including the prospect of future pharmaceutical innovation and development of products, that resulted in the rapid development and approval of COVID-19 vaccines. Moreover, the TRIPS waiver proposals may not have the desired effect of boosting COVID vaccine production and availability of mRNA vaccines. On the other hand, recent attempts at voluntary licensing and technology transfer agreements related to adenovirus vector technology have resulted in increased vaccine production and availability. A TRIPS waiver may not be as effective for more complex vaccine production. Scaling up COVID-19 vaccine production is not a one-size-fits -all proposition. Ensuring equitable availability and delivery complicates the matter further.

#### 3] Squo solves.

Crosby et al. 6-8, Daniel Crosby specializes in international trade, investment and matters related to public international law. A partner in our International Trade practice and the manager of our Geneva office, Daniel helps sovereign and business clients to achieve practical economic objectives around the world by applying and negotiating international agreements. JDSUPRA, June 8, 2021. “Update on the Proposed TRIPS Waiver at the WTO: Where is it Headed, and What to Expect?” <https://www.jdsupra.com/legalnews/update-on-the-proposed-trips-waiver-at-8411942/> brett

Proponents have advanced the proposed TRIPS waiver in the name of meeting global vaccine demand. But even in the absence of a waiver, pharmaceutical manufacturers have continued efforts to expand global production and distribution of COVID-19 vaccines and therapies, with a focus on expanding access to developing countries. For example, Pfizer announced its plan to deliver two billion doses to developing nations over the next 18 months, with one billion doses coming this year.8 One forecast estimates that, by the end of 2021, total global COVID-19 vaccine production may exceed 11 billion doses – an amount potentially sufficient to achieve global herd immunity.9 Several pharmaceutical industry groups have also proposed a five-step plan to “urgently advance COVID-19 equity,” including: (1) increasing dose sharing among countries through COVAX and other mechanisms; (2) optimizing production of vaccines and raw materials; (3) eliminating trade barriers for critical raw materials; (4) supporting country readiness to deploy vaccination programs; and (5) driving further innovation.10 Manufacturers have also continued to partner with other companies in efforts to scale up global production. For example, Moderna recently engaged Samsung Biologics to provide fill-and-finish manufacturing for Moderna’s vaccine.11 Merck and Gilead also each entered into or expanded voluntarily licensing programs with manufacturers in India to produce the companies’ respective COVID-19 antiviral agents molnupiravir and remdesivir.12 Some WTO members have also considered using the existing TRIPS flexibilities to expand their vaccine access. For example, Bolivia has continued to pursue its effort to import the Johnson & Johnson COVID-19 vaccine from Canadian company Biolyse Pharma, under a compulsory license pursuant to TRIPS Article 31bis (if one could be obtained).13

#### 4] COVID is repeating its mutations – these mutations aren’t new rather the virus is running out of ways to adapt – no threat

Willyard 5-13 [Cassandra Willyard, 5-13-2021, "Five reasons why you don’t need to panic about coronavirus variants," [accessed 9-7-21]//Lydia

4. The same mutations keep popping up Once the virus enters a cell, it begins to replicate. The more copies it makes, the greater the likelihood that random errors, or mutations, will crop up. Most of these copying errors are inconsequential. A handful, however, might give the virus a leg up. For example, a spike-protein mutation known as D614G appears to help transmission of SARS-CoV-2. Another, E484K, might help the virus evade the body’s antibody response. If the viruses carrying these advantageous mutations get transmitted from one person to the next, they can start to outcompete the viruses that lack them, a process known as natural selection. That’s how the B.1.1.7 variant, which is more transmissible, became the predominant strain in the US. In the case of SARS-CoV-2, the mutations that improve the virus keep popping up in different parts of the globe, a phenomenon known as convergent evolution. “We are seeing the same combinations evolving over and over and over again,” says Vaughn Cooper, an evolutionary biologist at the University of Pittsburgh. Imagine a game of Tetris, Cooper writes in [a recent story for Scientific American](https://www.scientificamerican.com/article/the-coronavirus-variants-dont-seem-to-be-highly-variable-so-far/). “A limited number of building blocks can be assembled in different ways, in different combinations, to achieve the same winning structures.” Cooper and some other researchers see this evidence of convergent evolution as a hopeful sign: the virus may be running out of new ways to adapt to the current environment. “It’s actually a small deck of cards right now,” he says. “If we can control infections, that deck of cards is going to remain small.”

#### 5] No Solvency – AC causes put people at risk

Kappos and Michel 21 [David, attorney, IPR specialist, Paul retired judge US Court of Appeals, NBC News, "Waiving Covid-19 vaccine patents won't get shots in arms faster. It slows down new vaccines." May 25, https://www.nbcnews.com/think/opinion/waiving-covid-19-vaccine-patents-won-t-get-shots-arms-ncna1268099

There are already very real challenges to inoculating the world, including a widespread lack of proper refrigeration (let alone the ultracold storage required for some vaccines), a shortage of trained professionals to administer them and conduct follow-up evaluations, and a lack of patient compliance with the two-dose regimen for the Pfizer-BioNTech and Moderna jabs. Plus, there have already been issues with fakes and a lack of trust in the government that have come into play. In Mexico and Poland, authorities have identified counterfeit versions of the Pfizer-BioNTech vaccine. In Malawi, the New York Times reported that "people are asking doctors how to flush the AstraZeneca vaccine from their bodies." Suspending intellectual property rights will not remove any of these roadblocks and would likely exacerbate them. Without certain quality controls implemented by original patent holders, especially in places with existing levels of government or industrial corruption, we could see ineffective vaccines manufactured using substandard processes, and then administered without adequate refrigeration, professional handling or required counseling and follow up.

#### 6] Overreliance on vaccines hurts overall pandemic response.

**Lovelace 21:** Lovelace, Berkeley [health-care reporter for CNBC, mainly covering pharmaceuticals and the Food and Drug Administration] "WHO says Covid vaccines aren’t ‘silver bullets’ and relying entirely on them has hurt nations," *CNBC,* January 13, 2021

The World Health Organization said Friday that [coronavirus](https://www.cnbc.com/2021/01/15/coronavirus-live-updates.html) vaccines aren’t “silver bullets” and **relyi**ng solely on them to fight the pandemic has hurt nations. Some countries in Europe, Africa and the Americas are seeing spikes in Covid-19 cases “because we are collectively not succeeding at breaking the chains of transmission at the community level or within households,” WHO Director-General Tedros Adhanom Ghebreyesus said during a news conference from the agency’s Geneva headquarters. With [global deaths reaching 2 million](https://www.cnbc.com/2021/01/15/coronavirus-live-updates.html) and new variants of the virus appearing in multiple countries, world leaders need to do all they can to curb infections “through tried and tested public health measures,” Tedros said. “There is only one way out of this storm and that is to share the tools we have and commit to using them together.” The [coronavirus](https://www.cnbc.com/coronavirus/) has infected more than 93.3 million people worldwide and killed at least 2 million since the pandemic began about a year ago, according to data compiled by Johns Hopkins University. The virus continues to accelerate in some regions, with nations reporting that their supply of oxygen for Covid-19 patients is running “dangerously low,” the WHO said. Some countries, including the U.S., have focused heavily on the use of vaccines to combat their outbreaks. While vaccines are a useful tool, they will not end the pandemic alone, Mike Ryan, executive director of the WHO’s health emergencies program, said at the news conference. “We warned in 2020 that if we were to rely entirely on vaccines as the only solution, we could lose the very controlled measures that we had at our disposal at the time. And I think to some extent that has come true,” Ryan said, adding the colder seasons and the recent holidays also may have also played a role in the spread of the virus. “A big portion of the transmission has occurred because we are reducing our physical distancing. ... We are not breaking the chains of transmission. The virus is exploiting our lack of tactical commitment,” he added. “We are not doing as well as we could.” Dr. Bruce Aylward, a senior advisor to the WHO’s director-general, echoed Ryan’s comments, saying, vaccines are not “silver bullets” “Things can get worse, numbers can go up,” he said. We have vaccines, yes. But we have limited supplies of vaccines that will be rolled out slowly across the world. And vaccines are not perfect. They don’t protect everyone against every situation.” In the U.S., the pace of vaccinations is going slower than officials had hoped. As of Friday at 6 a.m. ET, more than 31.1 million doses of vaccine had been distributed across the U.S., but just over 12.2 million shots have been administered, according to data compiled by the Centers for Disease Control and Prevention. Meanwhile, cases are rapidly growing, with the U.S. recording at least 238,800 new Covid-19 cases and at least 3,310 virus-related deaths each day, based on a seven-day average calculated by CNBC using Johns Hopkins data. On Thursday, President-elect Joe Biden [unveiled a sweeping plan](https://www.cnbc.com/2021/01/14/biden-unveils-sweeping-plan-to-combat-the-covid-pandemic-in-the-us.html) to combat the coronavirus pandemic in the United States. While his administration will invest billions in a vaccine campaign, it will also scale up testing, invest in new treatments and work to identify new strains, among other measures.

#### 7] TRIPs not obstructing vaccines

Spad & Koopman 5-24 [Jonathan H. Spadt is the Chief Executive Officer and President of RatnerPrestia. Andrew J. Koopman, J.D., Temple University Beasley School of Law (2008) Vice President, Intellectual Property Law Society Member, Intellectual Property Moot Court team Staff Writer, International and Comparative Law Journal B.S., Engineering Physics, Cornell University (2005) Minor in Electrical Engineering]. 5-24-21, RatnerPrestia. “The “Moral” Waiver of IP Protection For COVID Vaccines: Why The US Proposal Creates More Problems Than It Solves” <https://www.ratnerprestia.com/2021/05/24/the-moral-waiver-of-ip-protection-for-covid-vaccines-why-the-us-proposal-creates-more-problems-than-it-solves/> brett

The reservations expressed by European and US leaders reflect a combination of short term practical concerns and long term policy interests. Most relevant to the goal of the waiver is the notion that IP restrictions, rather than export controls or logistical factors, represent the primary barrier to vaccine distribution. At this point, there is little evidence in support of this notion. In the great majority of nations, no patents have yet issued that would interfere with the manufacture of vaccines. Even were there such patents, the TRIPS Agreement already provides for the grant of compulsory licenses in the event of a national emergency. That such a provision has not yet been invoked is itself a blow to the argument that vaccine patents are interfering with vaccine production. The consensus opinion is that the primary obstacle to vaccine supply across the globe is distribution. The short term problem of vaccine supply would be more directly remedied not by a waiver of IP rights, but by a willingness of nations with a vaccine surplus and manufacturing wherewithal to share their supply.