# 1st off

I negate and value morality as ought is defined as “used to express moral obligation”

The reason morality exists in the first place is to regulate our actions towards others. If any moral code is not motivational then there is no reason to do what is right and that code merely fails to escape the skeptical conclusion. Motivational externalism collapses into internalism. **Joyce**:

Back to the [Suppose] external reason[s]. Suppose it were claimed, instead, that I have a reason to refrain from drinking the coffee because it is tapu and must not be touched. This reason claim will be urged regardless of what I may say about my indifference to tapu, or my citing of nihilistic desires to tempt the hand of fate. [r]egardless of my desires (it is claimed) I ought not drink - l have a reason not to drink. But **how could** that reason ever explain any action of mine? Could the **external reason** even **explain** my **[action]** from drinking**?** Clearly, in order to explain it **the** external **reason must have some causal**ly efficacious **role [in]** among the antecedents of **the action** (in this case, an omission) — l must have. in some manner. "internalized" it. The only possibility, it would seem, consistent with its being an external reason, is that I believe the external reason claim [but] : I believe that the coffee is tapu. There's no doubting that such a belief can play a role in explaining actions - including my refraining from drinking the coffee. The question is whether the **belief alone can[not] produce action**, to which the correct answer is “No.” A very familiar and eminently sensible view says that **in order to explain** an **action** the **belief must couple with desire**s (such that those same desires had in the absence of the belief would not have resulted in the action). And this seems correct: if I believe that the coffee is [bad] tapu but really just don’t care about that, then I will not refrain from drinking it. So in order for the belief to explain action it must couple with [desire] elements - but in that case the putative **external reason collapses into** an **internal** one.3

Additionally, agents can only be motivated by their own desires; not the external desires of another because A) They are epistemically inaccessible B) Individuals have unlimited wants that are not communicated and C) We only care about our own desires as individuals are self-interested and don’t care about helping others. This means that you can’t independently motivate people to affirm.

Only a contractarian system that derives principles of mutual restraint from individuals’ self-interest account for this fact because contractarian principles are necessarily in the interest of all parties involved because they wouldn’t constrain their action against their will, **Gauthier:**

**Moral principles are** introduced as the **objects of** full voluntary ex ante **agreement among** rational **persons.  Such agreement is hypothetical,** in supposing a pre-moral context for the adoption of moral rules and practices.**But the parties to agreement are real,** determinate individuals, **distinguished by their** capacities, **situations, and concerns.**  In so far as **[Since] they** would **agree** **to constrain**ts **on their choices**,restraining their pursuit of their own interests, **they acknowledge a distinction between what they may and may not do.  As rational persons** understanding the structure of their interaction, **they recognize for mutual constraint**, and so for a moral dimension in their affairs.

Thus, the standard is **consistency with** **contractarian principles of mutual restraint,** defined as those principles by which individuals would constrain their actions with the belief that doing so would serve their self-interest.

Additionally, prefer the standard

**1. Consent-** Contractarianism is based on consent—implicit in acceptance of a contract—which ultimately determines what qualifies as a net good or harm. Moral theories must be based in consent otherwise actions could never be determinate.

**2. Infinite Regress-** Only contractarianism can avoid an infinite regress. When we look to an external authority to derive normative conceptions of the good, we are left wondering why a certain good is actually good. Any conception of morality and what people are due begs the question of why our assessment of individual dues ought be preferred over other assessments of individual dues. Contractarianism avoids this by allowing individuals to construct conceptions of the good based on a rational restriction of their future actions. No other theory is derived from a morally neutral base.

Now negate:

[1] Either A) The resolution wills that member nations reduce intellectual property protections for already existing medicines, which means they would be in direct violation/infringement upon existing contracts or B) The resolution wills that member nations reduce intellectual property protections generally, which is inconsistent with the contractarian principle of equal parties. Gauthier:

But the strengths of a contractarian theory may seem to be accompanied by grave weaknesses. We have already noted that for a contractarian, morality requires **a context of mutual benefit**. John Locke held that 'an Hobbist . . . will not easily admit a great many plain duties of morality'. And this may seem equally to apply to the Hobbist's modern-day successor. Our theory does not **assume[s]** any fundamental concern with impartiality, but only **a concern derivative from the benefits of agreement**, and those benefits are **determined by the effect** that **each person can have on** the interests of **her fellows. Only beings whose** physical and mental **capacities are** either roughly **equal** or mutually complementary **can expect to find cooperation beneficial to all.** Humans benefit from their interaction with horses, but they do not co-operate with horses and may not benefit them. **Among unequals, one party may benefit most by coercing the other,** and on our theory would have no reason to refrain. We may condemn all coercive relationships, but only within the context of mutual benefit can our condemnation appeal to a rationally grounded morality.

Gauthier, David P. *Morals by Agreement*. Oxford: Clarendon, 1986. Print.

Thus, there can be no contractarian principle that wills that government actors are obligated to reduce intellectual property protections, because they are on a different power level than any agent to whom those reductions would apply. To clarify, even if it is the case that these governments *could* reduce intellectual property protections, they simply cannot be *obligated* to, because there is no agent with which they could have a contract that is consistent with contractarian principles.

#### [2] IP rights are included in multiple international contracts – the aff violates that.

**WIPO** (WIPO, 11-9-1998, accessed on 8-25-2021, World Intellectual Property Organization, "Intellectual Property and Human Rights", https://www.wipo.int/edocs/pubdocs/en/wipo\_pub\_762.pdf)

The World Intellectual Property Organization (WIPO) and the Office of the United Nations High Commissioner for Human Rights (OHCHR) take pleasure in issuing the proceedings of the Panel Discussion on "Intellectual Property and Human Rights" which took place in Geneva on November 9, 1998, to mark the Fiftieth Anniversary of the Universal Declaration of Human Rights (UDHR). Intellectual property rights are enshrined as human rights in the UDHR. Article 27 of the Universal Declaration provides that: "(]) Everyone has the right.freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits; (2) Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author." These rights are further emphasized by Article 15 of the International Covenant on Economic, Social and Cultural Rights, 1966 (ICESCR), Article 19 of the International Covenant on Civii'and Political Rights, 1966 (ICCPR), the Vienna Declaration and Program of Action, 1993 (VDPA), and other international and regional instruments.

#### [3] Consent – the aff disregards the consent of medicine producers and allows it to be violated by removing patents - negates because violating a party’s consent is an act of violating a hypothetical contract since their side of the contract isn’t accounted for

[4] WTO member nations cannot make contracts among themselves because they are not equal, **Wade:**

Moreover the US and the EU want to modify the current TRIMS agreement so as to ban all performance requirements, including for joint venturing, technology transfer, and research and development. At the Doha Ministerial meeting of the WTO in 2001 the US and the EU pressed this agenda, but India and Brazil prevented the ban being approved. However, the language in the relevant part of the current TRIMS is not legally clear, and many developing countries fear that if they do use such non-banned performance requirements the US or the EU will still threaten to take them to the **DSM** – whose **rulings**, they have seen, **are almost always in favour of the most restrictive interpretation of allowable performance requirements**; and the **threat** to take them to the DSM **may** well **be reinforced by other threats**, such as to cut foreign aid, as noted earlier. What is more, **states currently negotiating to join the WTO** (the ‘accession countries’) **are finding that the rules they are being asked to sign on to are even more restrictive than those for existing members. There is no**t a **standard set of rules.**

Wade, Robert Hunter. "What strategies are viable for developing countries today? The World Trade Organization and the shrinking of ‘development space’." Review of international political economy 10.4 (2003): 621-644.

That negates: any contract signed between member nations is illegitimate as it was not agreed to by EQUAL parties.

[5] WTO member nations cannot make contracts among themselves because they are noton equal footing, developing member nations are always put at a disadvantage

**Walker:**

But **the WTO membership has failed to deliver** the promised **pro-development changes**. Finding "development" in the Doha Development Round today is like looking for a needle in a haystack. **Developing countries** [**have been completely sidelined**](https://www.theguardian.com/global-development/poverty-matters/2011/jul/29/wto-doha-fails-poorest-countries) **by the economic and political interests of global powers.**

Here are 10 examples of how the WTO has failed the poor:

1. Cotton: the [Fairtrade Foundation revealed last year](http://www.fairtrade.org.uk/includes/documents/cm_docs/2010/f/2_ft_cotton_policy_report_2010_loresv2.pdf) how the $47bn in subsidies paid to rich-country producers in the past 10 years has created barriers for the 15 million cotton farmers across west Africa trying to trade their way out of poverty, and how 5 million of the world's poorest farming families have been forced out of business and into deeper poverty because of those subsidies.

2. Agricultural subsidies: beyond cotton, WTO members have [failed even to agree how](http://www.ifpri.org/sites/default/files/publications/rb16.pdf) to reduce the huge subsidies paid to rich world farmers, whose overproduction continues to threaten the livelihoods of developing world farmers.

3. Trade agreements: **the WTO has** also **failed to clarify the** deliberately **ambiguous rules on** concluding **trade agreements that allow the poorest countries to be manipulated by the rich states**. In Africa, in negotiations with the EU, countries have been forced to eliminate tariffs on up to 90% of their trade because no clear rules exist to protect them.

4. Special treatment: the rules for developing countries, called ["special and differential treatment"](http://www.wto.org/english/tratop_e/devel_e/dev_special_differential_provisions_e.htm) rules, were meant to be reviewed to make them more precise, effective and operational. But the WTO has failed to work through the [88 proposals](http://www.wto.org/english/thewto_e/minist_e/min03_e/brief_e/brief21_e.htm) that would fill the legal vacuum.

5. Medicine: the poorest in developing countries are unable to access affordable medicine because members have failed to clarify ambiguitiesbetween the need for governments to protect public health on one hand and on the other to protect the [intellectual property rights](http://www.who.int/medicines/areas/policy/doha_declaration/en/index.html) of pharmaceutical companies.

6. Legal costs: the WTO pledged to improve access to its expensive and complex legal system, but has failed. In 15 years of dispute settlement under the WTO, [400 cases have been initiated](http://ictsd.org/i/events/dialogues/103446/). No African country has acted as a complainant and only one least developed country has ever filed a claim.

7. Protectionist economic policies: one of the WTO's five core functions agreed at its inception in 1995 was to achieve more coherence in [global economic policy-making](http://www.wto.org/english/res_e/booksp_e/discussion_papers13_e.pdf). Yet the WTO failed to curb the speedy increase in the number of [protectionist measures](http://www.wto.org/english/news_e/news11_e/g20_wto_report_may11_e.doc) applied by G20 countries in response to the global economic crisis over the past two years – despite G20 leaders' repeated affirmations of their "unwavering" commitment to resist all forms of protectionist measures.

8. Natural disaster: **the WTO fails to alleviate suffering when it has the opportunity to do so**. In the case of natural disaster, the membership will have taken almost [two years to agree and implement temporary trade concessions](http://www.moneycontrol.com/news/current-affairs/eu-welcomes-india-allowing-wto-waiver-forpakistan_592122.html) for Pakistan, where severe flooding displaced 20 million people in 2010 and caused $10bn of damage. Those measures, according to the International Centre for Trade and Sustainable Development, would have boosted Pakistan's exports to the EU by at least €100m this year.

9. Decision-making: the WTO makes most of its decisions by consensus – and achieving consensus between 153 countries is nearly impossible. But this shows another failure of the WTO: to break the link between market size and political weight that would give small and poor countries [a voice in the trade negotiations](http://www.globaleconomicgovernance.org/wp-content/uploads/Deere-and-Harbourd.Developing-Country-Coalitions-in-the-WTO.pdf).

10. Fair trade: 10 years after the start of the Doha Development Round, **governments have failed to make trade fair**. As long as **small and poor countries remain without a voice**, the role of campaigning organisations, such as [Traidcraft](http://www.traidcraft.co.uk/get_involved/campaign/time_to_nip_US_cotton_subsidies_in_the_bud) and [Fairtrade Foundation](http://www.fairtrade.org.uk/), which are working together to eliminate cotton subsidies, will remain critical.

Walker, Aurelie. “The WTO Has Failed Developing Nations.” The Guardian, Guardian News and Media, 14 Nov. 2011, www.theguardian.com/global-development/poverty-matters/2011/nov/14/wto-fails-developing-countries

# 2nd off

1. Reduce means to decrease the volume and concentrate the flavor of by boiling [Merriam-Webster]. Intellectual property protections are a concept and can’t be boiled off, so the resolution is incoherent.
2. Member is defined as a body part or organ [Merriam-Webster]. Body parts aren’t recognized as nations, so they can’t enact the resolution and the rez is incoherent.
3. For is used as a function word to indicate equivalence in exchange [Merriam-Webster]. Means the resolution is incoherent, intellectual property protections can’t be exchanged to get medicines because they don’t have a monetary value.
4. To is used as a function word to indicate movement or an action or condition suggestive of movement toward a place, person, or thing reached [Merriam-Webster]. Reduce is a verb and cannot be moved towards, so the resolution is an impossibility so you auto-negate because it’s false.
5. Zeno’s paradox. If I want to travel some distance, I must first travel half of that distance, but then I have to travel half of that distance and so on into infinity. This proves motion impossible, but passing policy requires motion, ie raising your hand to take a vote, so you negate.
6. Good Samaritan paradox. If I want to solve x problem, x problem has to exist first which would mean I want that problem to exist so we can never solve problems
7. Paradox of tolerance. If we accept the aff, we have to reject all views that aren’t the aff which means they aren’t tolerant, so vote neg.
8. Decision making paradox. If I make a decision, I have to make a decision to make that decision, which would be a metadecision. But then I have to make a decision to make that decision, and so on into infinity. This means that decisions are impossible, so the member nations of the world trade organization can’t reduce intellectual property protections for medicines, so you negate.
9. Place paradox. If x is in some place, then that place has to be in another place, but that place has to be in another place, and into infinity. This means that places can’t exist, and nations take place in a place, so you negate.
10. Neg definition choice – the aff should have defined in the 1ac because it was in the rez so it’s predictable contestation, by not doing so they have forfeited their right to read a new definition – kills 1NC strategy since I premised my engagement on a lack of your definition.
11. The punishment for violating disclosure interps should be a win: 1) increase probability of elim participation which means more people will see these materials I’ve tried to hide, the only truly appropriate consequence, 2) online debate is terrible so more rounds are a punishment
12. Presumption and permissibility negate. a) if i said my name was rick astley you won’t believe me, b) there are more reasons why a statement might not be true than ones that directly prove the statement true. Permissibility flows neg because the aff has the burden to prove that the member nations of the wto ought to reduce intellectual property protections. In addition, permissibility negates because if we don’t know the permissibility of an action, it’s better to err on the side of caution and not do it. Thus, proving permissibility, which is distinct from obligation negates.
13. The ROTB is TT - A) Isomorphism: alternative RTBs aren’t binary win/loss, and thus cannot function in debate B) Constitutivism: the ballot and tab software presents decisions as aff/neg, not who best achieves some good value. Also, “affirm” is “To state that is true” [1] and negate is “to deny the existence or truth of”, which independently proves truth testing. C) Key to 1) Ground Parity: The wording committee and topic selection process exist to identify topics with a range of defensible arguments on both sides, “role of the ballot” claims can frame the round in ways that make my ground either absurd or morally abhorrent 2) Predictability: The only face value of a resolution is its truth or falsity as a statement – not some inherent other framework

On the AC

Use a reasonability brightline of disclosing source, citations, and contact info. That solves all of their abuse, people still have access to evidence and can maybe actually read the article to see how they’re utilized and can always message me for more. Reject competing interps on disclosure:

1) There will always be better disclosure practices that even Evan doesn’t meet. Things like disclosing entire dropboxes, unread prep, and full text of entirely paywalled articles are good practices per disclosure that no one abides by. Proves a competing interps model can never create the perfect rule and even their own interp is suspect.

2) Competing Interps means debaters always read disclosure theory, finding smaller and smaller violations to win cheap ballots, destroying the purpose of debate and the topic. I’ve won sufficient defense to the shell and there’s no reason why my disclosure was actively bad. Winning that x is the best practice does not mean my less good but not bad practice should be rejected. Independently, no abuse—I haven’t destroyed education, I’m just not doing the maximum.

Brightlines aren’t arbitrary, they’re warranted and prevent intervention, the judge just has to decide whether my argument is correct or not which is inherent to the structure of debate

Reasonability on aff shells, they get weighing in the 2ar but i don’t have a 3nr to compensate.

1. **TURN: IP waiver decreases access to vaccines, McMurry-Heath:**

McMurry-Heath, Michelle. [Michelle McMurry-Heath is a physician-scientist and president and CEO of the Biotechnology Innovation Organization.] “Waiving Intellectual Property Rights Would Harm Global Vaccination.” STAT, 18 Aug. 2021, www.statnews.com/2021/08/18/waiving-intellectual-property-rights-compromise-global-vaccination-efforts/?fbclid=IwAR0JmrQFmyJJm40JHjQItLs3DPScP1NOOhLRfZ43AonZGT3eIafZb\_fvexw.

Covid-19 vaccines are already remarkably cheap, and companies are offering them at low or no cost to low-income countries. Poor access to clinics and transportation are barriers in some countries, but the expense of the shot itself is not. In fact, **if the W**orld **T**rade **O**rganization **grants the IP waiver, it could make** these **vaccines more expensive**.

Here’s why. Before Covid-19 emerged, the world produced at most [5.5 billion doses](https://www.barrons.com/articles/a-plan-to-break-the-vaccine-manufacturing-bottleneck-51621952245) of various vaccines every year. Now the world needs an additional [11 billion doses](https://www.who.int/director-general/speeches/detail/director-general-s-opening-remarks-at-the-g7-summit---12-june-2021) — including billions of doses of mRNA vaccines that no one had ever mass-manufactured before — to fully vaccinate every eligible person on the planet against the new disease.

Even as Covid-19 vaccines were still being developed, pharmaceutical companies began retrofitting and upgrading existing facilities to produce Covid-19 vaccines, at a cost of [$40 to $100 million each](https://www.americanprogress.org/issues/healthcare/reports/2020/07/28/488196/comprehensive-covid-19-vaccine-plan/). Vaccine developers also licensed their technologies to well-established manufacturers, like the Serum Institute of India, to further increase production.

As a result, **almost every facility in the world that can quickly and safely make Covid-19 vaccines is already doing so, or will be in the next few months**.

The cutting-edge mRNA vaccines from Moderna and Pfizer-BioNTech face an even bigger capacity issue. Since the underlying technology is new, **there are no mRNA manufacturing facilities sitting idle** with operators just waiting for licensing agreements to turn on the machines. Nor are there trained personnel to run them or ensure safety and quality control. Embedding delicate mRNA vaccine molecules inside lipid nanoparticle shells at temperatures colder than Antarctica isn’t as easy as following a recipe from Bon Appetit.

Another big **barrier** to producing more shots **is a shortage of raw materials. Suspending i**ntellectual **p**roperty **protections** and allowing any manufacturer to try to produce these vaccines, regardless of preparedness or experience, **would increase the demand for scarce raw materials, driving up prices and impeding production.**

Nor could all companies that suddenly get a green light due to suspended intellectual property rights produce vaccines as cheaply or quickly as existing manufacturers. **Building a new vaccine manufacturing facility costs about $700 million, takes** many months — if not **years** — **to build** and, once opened, **requires another four to six months to start producing vaccine doses**. And because **negotiations surrounding the WTO waiver**, which began this summer, **could take until December before they are completed, it wouldn’t be until well into 2023 or later that any additional doses would become available.**

That’s slower than our current production rate. According to a report from Duke University’s [Global Health Innovation Center](https://launchandscalefaster.org/covid-19/vaccinemanufacturing), **companies are on track to manufacture enough shots in 2021** to fully vaccinate at least 70% of the global population against Covid-19 — the level required **to achieve herd immunity**.

Covid-19 vaccines are saving millions of lives and protecting trillions of dollars of economic activity for an exceptionally low cost. Israel, for example, which has one of the world’s highest vaccination rates, paid [$23.50 per dose](https://www.timesofisrael.com/israel-said-to-be-paying-average-of-47-per-person-for-pfizer-moderna-vaccines/) for early shipments, for a total of about $315 million. That’s approximately equal to the gross domestic productivity losses incurred during [just two days of shutdowns](https://www.bmj.com/content/372/bmj.n281) in the country.

Many countries are buying shots for under $10 per dose. India and South Africa — the two countries leading the petition to gut IP rights — are paying just $8 and $5.25 per dose, respectively. For reference, a regular flu shot costs about $14 in the United States, and pediatric vaccines average about $55 per dose.

Meanwhile, low-income countries that can’t afford even modest prices are getting their vaccines at no charge. [COVAX](https://www.who.int/initiatives/act-accelerator/covax), the international nonprofit vaccine distributor, aims to deliver 2 billion doses to developing nations by the end of the year.

President Biden vowed to make America the world’s [“arsenal of vaccines.”](https://www.whitehouse.gov/briefing-room/speeches-remarks/2021/05/17/remarks-by-president-biden-on-the-covid-19-response-and-the-vaccination-program-4/) The U.S. has already committed $4 billion to COVAX, has donated more than 100 million vaccine doses abroad, and is on track to donate [500 million more](https://www.npr.org/sections/goatsandsoda/2021/08/03/1023822839/biden-is-sending-110-million-vaccines-to-nations-in-need-thats-just-a-first-step) by the end of summer. Other countries are following the administration’s leadership and ramping up their donations.

To be sure, the United States and other wealthy nations still need to give considerably more. But the fact remains that **ramping up production** in bona fide facilities **and donating doses are the most straightforward steps to producing** the vaccine **doses needed to end the pandemic. The effort to strip intellectual property rights**, by contrast, **would put success against the global scourge of Covid-19 even further out of reach.**

1. McMurry-Heath already says that big pharma isn’t enforcing patents so the aff is literally pointless.
2. **Waiving patents doesn’t work. Tabarrok 21:**

Alex Tabarrok, 21 — [Alex Tabarrok, Alex Tabarrok is Bartley J. Madden Chair in Economics at the Mercatus Center and a professor of economics at George Mason University. Along with Tyler Cowen, he is the co-author of the popular economics blog Marginal Revolution and co-founder of Marginal Revolution University. He is the author of [numerous academic papers](https://mason.gmu.edu/~atabarro/TabarrokCV.pdf) in the fields of law and economics, criminology, regulatory policy, voting theory and other areas in political economy. He is co-author with Tyler of [Modern Principles of Economics](https://marginalrevolution.com/our-textbook), a widely used introductory textbook. He gave a [TED talk](https://www.ted.com/talks/alex_tabarrok_foresees_economic_growth) in 2009. His articles have appeared in the New York Times, the Washington Post, the Wall Street Journal, and many other publications. “Patents are Not the Problem!,” Marginal REVOLUTION, 5-6-2021, <https://marginalrevolution.com/marginalrevolution/2021/05/ip-is-not-the-constraint.html>, bracketed for grammatical clarity] Valley JS

**Patents are not the problem**. All of the vaccine manufacturers are trying to increase supply as quickly as possible. **Billions of doses are being produced**–more than ever before in the history of the world. **Licenses are widely available. AstraZeneca [has]**have **licensed their vaccine for production** with [manufactures](https://www.astrazeneca.com/what-science-can-do/topics/technologies/pushing-boundaries-to-deliver-covid-19-vaccine-accross-the-globe.html) **around the world**, including in India, Brazil, Mexico, Argentina, China and South Africa. J&J’s vaccine has been licensed for production by multiple firms in the United States as well as with firms in Spain, South Africa and France. Sputnik has been licensed for production by firms in India, China, South Korea, Brazil and pending EMA approval with firms in Germany and France. Sinopharm has been licensed in the UAE, Egypt and Bangladesh. Novavax has licensed its vaccine for production in South Korea, India, and Japan and it is desperate to find other licensees but technology transfer isn’t easy and there are [limited supplies of raw materials](https://endpts.com/as-fears-mount-over-jj-and-astrazeneca-novavax-enters-a-shaky-spotlight/):

Virtually overnight, [Novavax] set up a network of outside manufacturers more ambitious than one outside executive said he’s ever seen, but they struggled at times to transfer their technology there amid pandemic travel restrictions. They were kicked out of one factory by the same government that’s bankrolled their effort. Competing with larger competitors, they’ve found themselves short on raw materials as diverse as Chilean tree bark and bioreactor bags. They signed a deal with India’s Serum Institute to produce many of their COVAX doses but now face the realistic chance that even when Serum gets to full capacity — and they are behind — India’s government, dealing with the world’s worst active outbreak, won’t let the shots leave the country.

**Plastic bags are a bigger bottleneck than patents. The US embargo on vaccine supplies** to India was precisely that the Biden administration used the DPA to prioritize things like bioreactor bags and filters to US suppliers and that meant that India’s Serum Institute was having trouble getting its production lines ready for Novavax. CureVac, [another potential mRNA vaccine](https://www.reuters.com/business/healthcare-pharmaceuticals/curevac-says-mass-vaccine-rollout-thrown-into-doubt-by-us-restrictions-2021-05-04/), is also finding **[makes] it difficult to find supplies** due to US restrictions (**which means supplies are short everywhere**). As [Derek Lowe said](https://blogs.sciencemag.org/pipeline/archives/2021/04/22/a-look-at-novavax):

**Abolishing patents will not** provide more shaker bags or more Chilean tree bark, nor **provide** more of the **key filtration materials needed for production**. These processes have a lot of potential choke points and rate-limiting steps in them, and **there is no wand that will wave that complexity away.**

Technology transfer has been difficult for AstraZeneca–which is one reason they have had production difficulties–and their vaccine uses relatively well understood technology. The mRNA technology is new and has never before been used to produce at scale. Pfizer and Moderna had to build factories and distribution systems from scratch. **There are no mRNA factories idling on the sidelines. If there were, Moderna or Pfizer would be happy to license since they are producing in their own factories 24** hours a day, **seven** days a week (monopolies restrict supply, remember?). Why do you think China hasn’t [yet produced](https://www.scmp.com/news/china/politics/article/3128998/revolutionary-mrna-vaccines-made-chinese-firms-will-be-ready) an mRNA vaccine? Hint: it isn’t fear about violating IP. Moreover, even Moderna and Pfizer don’t yet fully understand their production technology, they are learning by doing every single day. **Moderna has said that they won’t enforce their patents during the pandemic** but **no one has stepped up to produce because no one else can.**

**The US** trade representative**’s announcement** is virtue signaling to the anti-market left and **will do little to nothing to increase supply.**

What can we do to increase supply? Sorry, there is no quick and cheap solution. We must spend. Trump’s Operation Warp Speed spent on the order of $15 billion. If we want more, [we need to spend more and on similar scale](https://science.sciencemag.org/content/371/6534/1107). The Biden administration paid $269 million to Merck to retool its factories to make the J&J vaccine. That was a good start. We could also offer Pfizer and Moderna say $100 a dose to produce in excess of their current production and maybe with those resources there is more they could do. South Africa and India and every other country in the world should offer the same (India hasn’t even approved the Pfizer vaccine and they are complaining about IP!??) We should ease up on the DPA and invest more in the supply chain–let’s get CureVac and the Serum Institute what they need. We should work like hell to find a s[ubstitute for Chilean tree bark](https://www.theatlantic.com/science/archive/2020/10/single-tree-species-may-hold-key-coronavirus-vaccine/616792/). See [my piece in Science](https://science.sciencemag.org/content/371/6534/1107) co-authored with Michael Kremer et. al. for more ideas. (Note also that these ideas are better at dealing with current supply constraints and they also increase the incentive to produce future vaccines, unlike shortsighted patent abrogation.)

Bottom line is that **producing more takes real resources not waving magic patent wands**.

You may have gathered that I am angry. I am indeed angry that the people in power think they can solve real problems on the cheap and at someone else’s expense. This is not serious. I am also angry that **they are sending the wrong message** about business, profits and capitalism. So let me end on positive note. Like the Apollo program and Dunkirk, the creation of the mRNA vaccines by Pfizer and Moderna should be lauded with Nobel prizes and major movies. Churchill called the rescue at Dunkirk a “miracle of deliverance,” well the miracle of Moderna will rescue many more. Not only was a vaccine designed in under a year, an entirely new production process was set up to produce billions of doses to rescue the world. The creation of the mRNA vaccines was a triumph of science, logistics, and management and it was done at a speed that I had thought [possible only for past generations](https://patrickcollison.com/fast).