Valley War Machine 2021 2022 WTO Medicines Topic

Public Investment Counterplan

DA:

#### The pandemic’s effect on the medical industry puts us on the brink – health services can only recover if they continue to innovate and catch up Thelwell 21:

The **COVID-19** virus **has had a profound impact on global healthcare** provision, focusing care on the virus and causing the postponement of many routine and serious operations for other conditions. **It will** likely **take years for health services to catch up**. Yet amid the chaos, the virus has kickstarted **a fast-tracking of innovation** that could be the **[is] key to delivering a level of healthcare provision in the future** fitting to the changing demographics of the global population. There is, as the saying goes, no harder taskmaster than necessity. The past 12 months have seen unprecedented disruption to multiple industries, but the COVID-19 pandemic has also led to change taking place in months that would previously have taken years. Restaurants have pivoted overnight to home delivery services offering chef-created food to be finished off at home, while Tesco doubled its number of weekly delivery slots to 1.2 million – a figure that, before lockdown, was planned to take at least two years. Unsurprisingly, frontline health services also had to change rapidly to face the crisis: students were thrown into frontline services; former staff were recalled; NHS workers were re-deployed from non-essential services and business facilities were repurposed into new hospitals in weeks. Healthcare systems, typically wary of untested change, sprang into action to address the crisis. But perhaps the most remarkable success story has been that of vaccines. Less than a calendar year after the world woke up to a global pandemic, there are three vaccines approved to be used in the UK and USA with several others lined up for regulatory approval. The speed of the global rollout has been nothing short of sensational – quite unlike a typical rollout of new vaccines that, in ‘normal’ circumstances, might take more than a decade to come to market. The pandemic has acted as a powerful impetus for change in the healthcare industry. Recent research from McKinsey has shown that two industries which have most increased their focus on innovation are the pharmaceutical and medical device sectors. But why is this so important and will it continue once COVID-19 is under control? Rebalancing the scales **Innovation in medical technology (medtech) is uniquely important to the future of healthcare** for two fundamental reasons. On an economic level, costs associated with the pandemic led to a £5.1bn deficit for the NHS in England in the first four months of the financial year, compared with the pre-pandemic budget. Some of the factors which have contributed to this deficit include extending the workforce to meet the healthcare demand; absences from sickness; providing extra bed capacity; and, at the beginning of the lockdown, higher costs of prescribing. But healthcare systems around the world were battling the demographic odds even before the first outbreak of COVID. Over the course of a century, from 1950 to 2050, it is estimated that the proportion of people in employment, compared to those in retirement, will change from 14 adults in work to every one in retirement, to two in work to every one retired. An ageing global population causes strain for healthcare systems for more than one reason: older people generally need more care but, with less people employed and more retired, there are fewer taxpayers to fund this. This is further complicated by the advances in medicine which are continuing to take place. There are now medical conditions that people can happily live with (assuming the right treatment is given), which only a few decades ago would have had a significant impact on life expectancy. This is cause for celebration, but the increased longevity of patients places yet more burdens on healthcare systems which were already squeezed, even before COVID-19. This is where technology has an important role to play. **Innovation in medicine has historically been driven by pharmaceutical interventions that are expensive to develop**, **take time to gain regulatory approval and require significant clinical testing to ensure the interventions do no harm**. **Medical technology promises an alternative – using innovation in technology to develop electronic devices that can be deployed simply and effectively to address multiple medical issues without the risk of harmful side effects[,]**. This has the potential to **transform[ing] both the effectiveness and the cost of healthcare in the 21st century**. **Technology is** increasingly being seen as **the bridge between unlimited demand and limited resources – enabling healthcare systems to develop new ways to treat conditions and rebalancing the scales to reduce the financial pressure on healthcare services**, while at the same time **[and] enhanc[e]**ing **patient outcomes**. … Carrying the torch **New technologies and innovations** have the potential to **improve patient outcomes, reduce the strain on healthcare professionals and, ultimately, save** **healthcare systems money across the globe**. **The pandemic has been pivotal to** enacting **changes** to the **[in] infrastructure of healthcare** which has assisted healthcare professionals in making the switch to innovation-enabled care. **This momentum must** now **be maintained**. Healthcare systems do not have an innovation problem; the issue is about replication: in the past, successful projects and changes to clinical practice have rarely been reproduced elsewhere in the system. The pandemic has changed this, allowing innovation to break through with greater pace. Long may it continue.

#### The medical industry relies on IP protections to further innovation—R&D is expensive and risky, the reason so many life-saving medicines exist today is due to patent protections being sufficient incentive for companies IFPMA 21:

**Innovation ecosystems are sustainable when governments,** research institutions, and business collectively **address** the **elements necessary to drive investments in new technology and science,** underpinned by a stable and transparent rule of law and an incentive system to attract the right talent, expertise, and investment. Open dialogue and collaboration with all stakeholders, including the private sector, is critical to the policymaking process to create policies that support the emergence of sustainable innovation ecosystems. **Innovation** in technology dependent sectors, **requires a significant risk appetite**. However, **without innovation, there would not be any advancement in the science and the arts. Recognizing this dichotomy early on, countries have rewarded and incentivized researchers through the intellectual property (IP) system to undertake the risks needed to provide the solutions. Thus, effective and predictable intellectual property systems have proven to provide an important incentive for investing in innovation and enable innovative ideas to be commercialized and scaled. A stable intellectual property system provides the certainty necessary to build confidence for investments in the creation of technologies. Intellectual property incentives also support technological partnerships by providing the legal framework necessary for collaborative innovation** and the exchange of technology and knowledge. Effective intellectual property regimes bring clarity and certainty to the market, encouraging the introduction of technology to new places and enabling innovative ideas to be scaled. In addition, an effective **enforcement regime, ensures no individual in the country is robbed of years of research,** skill building, creation of arts. It lends confidence in the country to its people that their rights are protected and surety of law. In short, IP incentivized the innovator/creator by way of a limited term protection to disclose his creation or invention to the public and spurring future research to take place, thus, striking the right balance between the interests of innovators and the wider public interest. The IP system aims to foster an environment in which creativity and innovation can flourish.[[1]](https://www.ifpma.org/subtopics/ip-2/#_ftn1) Role of Intellectual Property in the Biopharmaceutical Industry The **biopharmaceutical industry’s business model is based on competitive R&D, intellectual property** **(IP),** the incentive for innovation, and a science-based regulatory system. Our industry **plays a key role in providing the world with the medicines,** treatments and vaccines that save and improve the lives of people across the world. **Intellectual Property Rights incentivize innovation, research and development and allow the biopharmaceutical industry to improve existing and bring new medicines, vaccines** and treatments to people and in turn help improve and save lives. The **industry has developed over 650**[**[2]**](https://www.ifpma.org/subtopics/ip-2/#_ftn2) **new medicines for the world’s emerging health needs in the last twenty years, also focusing on treatment of cancers, cardiovascular diseases, and diabetes**. Today, with **more than 8400 drugs in development across all therapeutic fields**[[3]](https://www.ifpma.org/subtopics/ip-2/#_ftn3), the industry still drives the exploratory research, taking care of translating early research into patient-ready treatments. As shown by recent studies, a **strong IP system and protection allows faster launch and access to new medicines for patients across the world**, both in developing and developed countries. In fact, having a **strong IP system allows for incentives for the introduction of many medicines which would not be otherwise available**.[[4]](https://www.ifpma.org/subtopics/ip-2/#_ftn4) With the success rate of clinical trials being less than 12%[[5]](https://www.ifpma.org/subtopics/ip-2/#_ftn5), inventing, developing, **and launching new medicines is a long, resource-intensive and risky process.** However, despite setbacks, risks and uncertainty, the industry continues to invest in pharmaceutical R&D.[[6]](https://www.ifpma.org/subtopics/ip-2/#_ftn6) The temporary and limited period of protection given by patents is part of the factors incentivizing the industry to keep investing in the uncertain and long process that is pharmaceutical R&D. **In return for this limited protection, the IP system requires the patent applicant to publicly disclose the invention** so to allow others to learn and build upon prior advances, **creating a perfectly balanced policy system.**

IFPMA. “Intellectual Property Incentives Matter. Innovation Saves Lives.” *IFPMA*, 12 Apr. 2021, www.ifpma.org/subtopics/ip-2/.

#### Innovation saves millions of lives, halves mortality rates, responds to public health crises, and reduces medicine costs Jenner:

Many lower and middle-income countries are making important investment in developing their healthcare infrastructure as part of their commitment to achieving Universal Health Coverage. Increasing access to new medicines and vaccines can help sustain such investment by reducing the need for costly surgical interventions and hospitalization. In many cases, the **use of innovative medicines** by health systems can pay for themselves several times over. One study found that a reduction in the age of drugs used reduces non-drug spending 7.2 times as much as it increases drug expediture, with most of the savings coming from reduced hospitalization and physician office-visit expenditures. Vaccines, for instance, have proven to be one of the most effective preventative technologies in the fight against infectious diseases with an almost unparalleled impact on public health, saving the lives of over 2.5 million children each year. Estimates show that increasing access to six vaccines (including new vaccines for rotavirus and malaria) **could save USD 6.2 billion in treatment costs globally. Increased productivity** due to averted illness **could gain** the world **an additional $145bn**. The upfront cost of procuring vaccines is dwarfed by these benefits. **In addition to** these **economic benefits,** the **innovation** we bring along **has transformed the lives of millions of patients all over the world.** For instance, **improvements in existing cancer treatments have cut** annual **death rates by half** in the United States. High cholesterol and **other** heart **diseases, which required extensive treatment** in the 1970s, **can now be easily managed** with oral therapy. Our industry has played a crucial role in researching and developing the medicines that have contributed to this. The mission of the life sciences industry – in New Jersey, across the United States and around the world – is as ambitious as it is straightforward: to research and develop new medicines, therapies, medical devices, technologies and diagnostics to detect, treat and cure disease and improve the quality of life for patients. Driven to improve global human health, for more than 100 years, the life sciences industry – which includes biopharmaceutical, biotechnology and medical technology, device and diagnostics companies – has helped people live longer, more productive and fulfilling lives. **Medical innovation has consistently responded to the challenge in times of crisis and is currently at the forefront of the battle against the COVID-19 pandemic** as it has been through so many other health emergencies. **Discovering and developing new medicines,** therapies, medical devices and technologies **is a complex, time-consuming, expensive and risk-laden process** that life sciences companies willingly undertake, spending more than $100 billion annually in search of alleviating human suffering. **The societal value of new medical innovation lies not only in improving human health, but in doing so in a cost-effective manner that brings efficiency to the delivery of health care.  When medical breakthroughs can cure a disease** rather than requiring an organ transplant, or when chemotherapy can be administered orally rather than by infusion, **the patient, the health care system and the economy all benefit**. MEDICAL INNOVATION: EXTENDING LIFE – SAVING LIVES **Collectively, new therapies have been among the greatest contributors to increased life expectancy over the past century. U.S. life expectancy** at birth h**as risen from 47 years** at the turn of the 20th century **to 78 years today. New therapies accounted for 73 percent of the increased life expectancy in 30 developing and high-income countries** between 2000-09. U.S. **cancer survivorship alone has more than tripled** since 1970, **with nearly 16.9 million** cancer **survivors alive** in the country as of January 1, 2019. **This number is expected to increase to 22.2 million by 2030. As of 2018, the cancer death rate** for men and women combined **had fallen 31 percent from its peak in 1991.** This decline translates to **3.2 million deaths avoided.  Biopharmaceutical innovation**, through improvements in treatment**, has contributed to 76 percent of the improvements in mortality rates for HIV/AIDS patients and 60 percent of improvements in life expectancy** for breast cancer patients. **Heart disease mortality has been improved by 52 percent due to advancements** in medicines. MEDICAL INNOVATION’S ADDED VALUE – COST SAVINGS AND ECONOMIC PRODUCTIVITY In addition to improving patient outcomes, medical innovation offers other, often underappreciated benefits – reducing costs in the health care system and increasing economic productivity.  With new technologies and therapies that can detect and treat a disease earlier in its onset, and medicines to manage chronic disease, the cost of health care can be significantly reduced. Less than 10 cents of the U.S. health care dollar was spent on prescription medicines in 2019. This percentage has remained unchanged since the 1960’s. In 2013, the Congressional Budget Office (CBO) started to incorporate the savings from prescription medicines into the cost of Medicare policies. For every 1 percent increase in the number of prescriptions, the CBO incorporates a 0.2 percent decrease in spending on medical services.  According to the Centers for Disease Control and Prevention, improved medication adherence can save $100-$300 billion annually in direct health care costs. Between 1980 and 2010, advanced medical technology helped cut the number of days patients spent in hospitals by 58 percent. Treating people with chronic disease (e.g., heart disease, stroke, cancer, diabetes, obesity, arthritis) (about half of all U.S. adults) accounts for 86 percent of our nation’s health care costs. **By investing in** prevention and **treatment** of the most common chronic diseases, the **cost of treatment in the U.S. could decrease by $218 billion per year, and the impact of disease on the economy would be reduced by $1.1 trillion annually.** MEDICATION ADHERENCE – KEY TO IMPROVED OUTCOMES AND REDUCING HEALTH CARE COSTS Medication **adherence is a critical factor in improving patient outcomes** and bringing efficiency and cost savings to the health care system. Of the approximately 187 million Americans who take one or more prescription medications, it is estimated that up to one-half do not take their medications as prescribed, with more than 1 in 5 new prescriptions not being filled. Non-adherence in the U.S. is estimated to result in approximately 125,000 deaths and at least 10 percent of hospitalizations. Medication **non-adherence costs the U.S. roughly $330 billion annually in unnecessary medical expenses**, as estimated by Express Scripts in 2015. An extra $1 spent on medicines for adherent patients with congestive heart failure, high blood pressure, diabetes and high cholesterol can generate $3-$10 in savings on emergency room visits and inpatient hospitalizations. Adherence to medications for congestive heart failure could result in $22.4 billion saved in the U.S. over a 10-year period. Nearly 1 million hospitalizations could be avoided with better adherence to, and treatment with, hypertensive medicines. LIFE SCIENCES RESEARCH AND DEVELOPMENT – RESOURCES AND RISK IN SEARCH OF THE NEXT TREATMENT  Thousands of scientists go to their labs every day in search of the next treatment, therapy or technology to improve human health and alleviate the suffering of patients.  With the odds heavily against success, life sciences companies invest billions of dollars annually to support the work of these dedicated scientists in their quest to discover the next medical breakthrough.  America’s biopharmaceutical industry in total invested $102 billion in U.S. research and development in 2018. **The biopharmaceutical industry is responsible for 17 percent of R&D spending** by U.S. businesses, the single largest share of any industry. **91 percent of drugs are developed by the private sector** with no direct government role. **On average, it costs $2.6 billion and takes 10-15 years to discover, develop and bring a new medicine to market. Only 5 of 5,000 compounds** that enter preclinical testing **will enter a clinical trial, and only one** will be **commercialized**. **Only 12 percent of new molecular entities** that enter clinical trials eventually **receive FDA approval**. **Only 2 of 10 new medicines** that come to market **will be deemed a commercial success – meaning** they will **produce revenues that exceed** the average R&D **cost**. **More than 7,000 medicines currently are in development** around the world for cancer, cardiovascular disease, diabetes, HIV/AIDS, immunological disorders, infectious disease and other disease states. **Of these 7,000 treatments, 70 percent are potential first-in-class therapies,** meaning they use a completely new approach to fighting disease.

Jenner, Andrew. “Value of Innovation.” IFPMA, IFPMA, 23 Feb. 2016, www.ifpma.org/subtopics/value-of-innovation/.

Restricting IP to make medicines more accessible (A) places the economic burden of universal health care on corporations rather than the state and (B) is self-defeating because IP protections are key to promoting innovation in the first place.

Thus the counterplan: the agents of action in the AC should commit to international investment in universal health care according to the principles laid out in the 2019 UN “Political Declaration of the High-level Meeting on Universal Health Coverage,” [<https://www.un.org/pga/73/wp-content/uploads/sites/53/2019/05/UHC-Political-Declaration-zero-draft.pdf>] **according to which** nations would make significant investments in health care to ensure equitable access to everyone regardless of national origin. **Instead of stealing IP from producers, states should fulfill their burden of care and pay for the necessary health care and medications.**

1) Universal health care promotes everyone’s well being because it improves both global health and international economic and political stability;

2) Corporations are willing to cooperate with international initiatives that ensure the equitable distribution of medication while leaving IP protections intact;

3) These initiatives pay for themselves in the long run in the form of lower health risks, fewer negative impacts to the global economy, and greater global stability. Cueni:

**“**That is why **the political declaration on universal health coverage** **adopted** last month by 193 countries **at the U**nited **N**ations **is** so **important** for patients but also for healthcare providers overall.  **Let’s hope the rhetoric is** swiftly **matched by action. Achieving UHC** by 2030 **means helping people across the globe access** the good quality and affordable **healthcare** they need **without** suffering **financial hardship.** It also means either **doubling health coverage** within ten years or leaving up to 5bn people without essential healthcare” let alone **[and] accessing innovative medicines and treatments** the pharmaceutical industry can provide.  Health for all, in the words of Tedros Adhanom Ghebreyesus , director-general of the World Health Organization, is a smart economic choice. **Investing in UHC** enables **increases** in **GDP via** productivity gains. Invest US$1 in immunisation and you will get $54 back ” in **saved healthcare costs and wages not lost due to illness,** along with broader societal benefits. Healthy individuals create wealth and shared prosperity. **The benefits for individuals, families, communities, businesses, and national economies are enormous.** How innovative medicines are priced can be a major barrier to access for patients in low- and middle-income countries (LMICs) when patients have to pay for their medicines out of pocket. Obviously, even with a UHC system, affordability of healthcare services may remain challenging.  However, **the biopharmaceutical industry is ready to improve access to** quality **medicines**. It is sensitive to the debate about cost and pricing. **Through innovative financing mechanisms, transformative treatments are already** now r**eaching patients. New partnerships**, not least **with industry, are enabling health authorities to reach many more patients** in LMICs.”

Cueni, Thomas. “Rich countries must pay more to achieve health for all in poorer countries.” *Financial Times,* October 29, 2019.

**The counterplan sets a precedent to seamlessly shift to a direct support model during pandemics--that solves future pandemics but avoids the innovation DA.**

Brink **Lindsey 21**. Vice President, Niskanen Center; Writes for Brookings, “Why Intellectual Property and Pandemics Don’t Mix,” Brookings, June 3, 2021, https://www.brookings.edu/blog/up-front/2021/06/03/why-intellectual-property-and-pandemics-dont-mix/, RJP, DebateDrills.

PUBLIC HEALTH EMERGENCIES AND DIRECT GOVERNMENT SUPPORT

**For pandemics** and other public health emergencies, **patents’** mix of **costs and benefits is misaligned** with what is needed for an effective policy response. **The basic patent bargain**, even when well struck, **is** to pay for more **innovation down the road with slower diffusion of innovation today. In the context of a pandemic**, that bargain is a bad one and should be rejected entirely. Here **the imperative is to accelerate** the diffusion of vaccines and other treatments, not slow it down. Giving drug companies the power to hold things up by blocking competitors and raising prices pushes in the completely wrong direction.

What approach to encouraging innovation should we take instead? How do we incentivize drug

makers to undertake the hefty R&D costs to develop new vaccines without giving them exclusive rights over their production and sale? **The most effective approach** during a public health crisis **is direct government support**: public funding of R&D, advance purchase commitments by the government to buy large numbers of doses at set prices, and other, related payouts. And when we pay drug makers, we should not hesitate to pay generously, even extravagantly: we want to

offer drug companies big profits so that they prioritize this work above everything else, and so

that they are ready and eager to come to the rescue again the next time there’s a crisis. **It was**

**direct support via Operation Warp Speed that made possible** the astonishingly rapid

development of **COVID-19 vaccines** and then facilitated a relatively rapid rollout of vaccine

distribution (relative, that is, to most of the rest of the world). And it’s worth noting that a major

reason for the faster rollout here and in the United Kingdom compared to the European Union

was the latter’s misguided penny-pinching. The EU bargained hard with firms to keep vaccine

prices low, and as a result their citizens ended up in the back of the queue as various supply line

kinks were being ironed out. This is particularly ironic since the Pfizer-BioNTech vaccine was

developed in Germany. As this fact underscores, the chief advantage of direct support isn’t to

“get tough” with drug firms and keep a lid on their profits. Instead, it is to accelerate the end of

the public health emergency by making sure drug makers profit handsomely from doing the

right thing.Patent law and direct support should be seen not as either-or alternatives but as

complements that apply different incentives to different circumstances and time horizons.

Patent law provides a decentralized system for encouraging innovation. The government

doesn’t presume to tell the industry which new drugs are needed; it simply incentivizes the

development of whatever new drugs that pharmaceutical firms can come up with by offering

them a temporary monopoly. It is important to note that patent law’s incentives offer no

commercial guarantees. Yes, you can block other competitors for a number of years, but that

still doesn’t ensure enough consumer demand for the new product to make it profitable. DIRECT

SUPPORT MAKES PATENTS REDUNDANT The situation is different **in a pandemic**. Here the **government knows exactly what it wants** to incentivize: the **creation of vaccines** to prevent the

spread of a specific virus and other drugs to treat that virus. Under these circumstances, the

decentralized approach isn’t good enough. **There is no time to sit back and let drug makers take the initiative** on their own timeline. Instead, the government needs to be more involved to

incentivize specific innovations now. As recompense for letting it call the shots (pardon the

pun), the government sweetens the deal for drug companies by insulating them from

commercial risk. If pharmaceutical firms develop effective vaccines and therapies, the

government will buy large, predetermined quantities at prices set high enough to guarantee a

healthy return. For the pharmaceutical industry, it is useful to conceive of patent law as the

default regime for innovation promotion. It improves pharmaceutical companies’ incentives to

develop new drugs while leaving them free to decide which new drugs to pursue – and also

leaving them to bear all commercial risk. **In a pandemic** or other emergency, however, it is

appropriate to **shift to the direct support regime**, in which the government focuses efforts on

one disease. In this regime, it is important to note, the government provides

qualitatively superior incentives to those offered under patent law. Not only does it offer public

funding to cover the up-front costs of drug development, but it also provides advance purchase

commitments that guarantee a healthy return. It should therefore be clear that the

**pharma**ceutical industry **has no** legitimate **basis for objecting to a TRIPS waiver. Since**, because

of the public health crisis, **drug makers** now **qualify for** the superior **benefits of direct**

**government support, they no longer need** the default benefits of **patent support**. Arguments

that a TRIPS waiver would deprive drug makers of the incentives they need to keep developing

new drugs, when they are presently receiving the most favorable incentives available, can be

dismissed as the worst sort of special pleading. That said, it is a serious mistake to try to cast the current crisis as

a morality play in which drug makers wear the black hats and the choice at hand is between private profits and public health. We

would have no chance of beating this virus without the formidable organizational capabilities of the pharmaceutical industry, and

providing the appropriate incentives is essential to ensure that the industry plays its necessary and vital role. It is misguided to

lament that private companies are profiting in the current crisis: those profits are a drop in the bucket compared to the staggering

cost of this pandemic in lives and economic damage. What matters isn’t the existence or size of the profits, but how they are

earned. We have good reason to want drug makers to profit from vaccinating the world: the comparative price is minuscule, and the

incentive effects are a vital safeguard of public health in the event of future crises. What we want to avoid at all costs is putting drug

makers in the position where drug companies can profit from standing in the way of rapid global vaccination. That is why intellectual

property rights need to be taken out of the equation. Vaccinating the world in any kind of reasonable time

frame will require large-scale technology transfer to drug firms in other countries and rapid

expansion of their production capacity. And looking beyond the current pandemic to the longer

term, we need ample, redundant global vaccine production capacity that is widely distributed

around the planet. To achieve these goals as rapidly as possible will require the active

cooperation of the U.S. pharmaceutical industry, which is why the direct support model now

needs to be extended. What is needed now is an Operation Warp Speed for the world, in which

we make it worth current vaccine producers’ while to share their know-how broadly and ramp

up global capacity. Here again, we must recognize that the choice isn’t between people on the

one hand and profits on the other. Rather, **the key to good pandemic response policy** is ensuring

that **incentives** are structured so that drug company profit-seeking and global public health are

**well aligned**. That means opting out of the default, decentralized patent bargain in favor of

generous but well-focused direct government support.

1. **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).

1. **Public funding works best, Lindsey 21:**

Brink Lindsey, 21 — [Brink Lindsey, “Why intellectual property and pandemics don’t mix,” Brookings, 6-3-2021, https://www.brookings.edu/blog/up-front/2021/06/03/why-intellectual-property-and-pandemics-dont-mix/] Valley JS

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

It was **direct support** via Operation Warp Speed that **made possible the astonishingly rapid development of COVID-19 vaccines and** then **facilitated a relatively rapid rollout of vaccine distribution** (relative, that is, to most of the rest of the world). And it’s worth noting that a major reason for the faster rollout here and in the United Kingdom compared to the European Union was the latter’s [misguided penny-pinching](https://www.nytimes.com/2021/05/17/opinion/europe-vaccines-commission.html?smid=tw-share). The EU bargained hard with firms to keep vaccine prices low, and as a result their citizens ended up in the back of the queue as various supply line kinks were being ironed out. This is particularly ironic since the Pfizer-BioNTech vaccine was developed in Germany. As this fact underscores, **the chief advantage of direct support isn’t to “get tough” with drug firms** and keep a lid on their profits. Instead, **it is to accelerate the end of the public health emergency by making sure drug makers profit handsomely from doing the right thing.**

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

1. **The WTO consistently screws over the poorest countries, they never had any credibility to begin with, 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 ambiguities** between 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](http://www.theguardian.com/global-development/poverty-matters/2011/nov/14/wto-fails-developing-countries). Valley JS.

1. Aff no solvency, WTO doesn’t enact the resolution, it’s the member nations, so the WTO can’t take credit.