Intellectual Property and the Politics of Public Good during COVID-19: Framing Law, Institutions, and Ideas during TRIPS Waiver Negotiations at the WTO

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Abstract

Context: To facilitate the manufacturing of COVID-19 medical products, in October 2020 India and South Africa proposed a waiver of certain intellectual property (IP) provisions of a World Trade Organization (WTO) agreement. After nearly two years, a narrow waiver agreement that did little for vaccine access passed the ministerial despite the pandemic's impact on global trade, which the WTO is mandated to safeguard.

Methods: The authors conducted a content analysis of WTO legal texts, key-actor statements, media reporting, and the WTO's procedural framework to explore legal, institutional, and ideational explanations for the delay.

Findings: IP waivers are neither legally complex nor unprecedented within WTO law, yet these waiver negotiations exceeded their mandated 90-day negotiation period by approximately 18 months. Waiver opponents and supporters engaged in escalating strategic framing that justified and eventually secured political attention at head-of-state level, sidelining other pandemic solutions. The frames deployed discouraged consensus on a meaningful waiver, which ultimately favored the status quo that opponents preferred. WTO institutional design encouraged drawn-out negotiation while limiting legitimate players in the debate to trade ministers, empowering narrow interest group politics.

Conclusions: Despite global political attention, the WTO process contributed little to emergency vaccine production, suggesting a pressing need for reforms aimed at more efficient and equitable multilateral processes.

Keywords WTO, framing, TRIPS waiver, COVID-19, pandemic

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The COVID-19 pandemic disrupted economies and daily life globally. The promise of a vaccine was that it could prevent death and reopen economies, which brought it to the forefront of global policy discussions. One policy response to help speed production of vaccines, proposed by the governments of India and South Africa in October 2020, was a temporary waiver of select provisions of the World Trade Organization (WTO) Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement.[1] The proposed waiver, which had both legal precedent and procedural pathways, would have removed the requirement that all WTO member states maintain the same minimum standards of intellectual property (IP) protection of COVID-19 vaccines, diagnostics, and treatments, leaving policy-making authority over provision of patents and other IP to national governments. Governments in countries with pharmaceutical manufacturing capacity could in turn waive patent enforcement without fear of violating WTO obligations so that companies in their jurisdiction could legally make technologies like mRNA vaccines even without the permission of originator companies. They would not be required to go through product-by-product compulsory processes and onerous WTO mechanisms that scholars and policy makers have identified as too slow for pandemic response and, at times, nearly impossible to navigate (Abbas and Riaz 2018; Thambisetty et al. 2022; Vincent 2021). The proposal drew wide support, with more than 100 WTO members backing the effort (Green 2021). Yet what started as an urgent emergency action stalled in the WTO for nearly 2 years, with only a severely limited version of the waiver—with few of the original provisions included—passing in June 2022.

This article analyzes how the proposed waiver became not only a political flashpoint but in some ways also an obstacle to global vaccine access. Since the vast majority of world trade depended on a swift end to the pandemic, it is puzzling that the waiver debate stalled in the hands of the global governance institution charged with overseeing global trade. Indeed, in the first months of the pandemic, businesses, communities, medical practitioners, national governments, and international organizations alike rallied around ideas of collective action and solidarity to bring a swift end to the pandemic. For example, the heads of state of France, Germany, Italy, Norway, and Canada joined the president of the European Union in declaring that vaccines should be a "global public good" (European Commission 2020a), recognizing what leaders in entire sectors of the economy saw: getting vaccines to as many people on the planet as fast as

1. IP/C/W/669.

possible was critical for reopening the economy (AFA 2021b; ITUC 2021; ITWF 2021). Likewise, the G20 put out a statement saying, "We commit to take all necessary health measures and seek to ensure adequate financing to contain the pandemic and protect people, especially the most vulnerable. We will share timely and transparent information; exchange epidemiological and clinical data; share materials necessary for research and development; and strengthen health systems globally" (G20 2020). The emergency conditions brought on by COVID-19 expanded the window of what was deemed an acceptable and sensible policy choice (Russell 2006).

During this time, before any vaccine had yet been approved, the policy window opened to include a wide array of ideas on how to make enough COVID-19 vaccines for everyone on the planet, among which a WTO waiver was just one element. Indeed, a WTO waiver was among the less radical ideas tabled. The president of Costa Rica proposed a memorandum of understanding through the World Health Organization (WHO) in which all member states would share their publicly funded technology, including "regulatory test data, know-how, cell lines, copyrights and blueprints for manufacturing" with all other WHO member states for free production (Quesada 2020). In addition, a set of governments proposed that all COVID-19 vaccine and treatment research be required to be published with open access, that precompetitive drug discovery be done through an international collaborative, and that funding agreements require companies to license their products for global use (WHO 2020). Bill Gates proposed investing billions in public funding to build factories immediately for global production of the top vaccine candidates, even if it meant losing money on those that did not prove effective (Gates 2020). Meanwhile, a parallel policy process focused on how to buy and equitably distribute COVID-19 vaccines once they were produced, an effort that ultimately produced the COVAX initiative. COVAX eventually raised more than $15 billion and distributed 950 million vaccine doses by the end of 2021 (Open Consultants 2022).

Ultimately, however, the world produced far fewer vaccines than were needed during the acute phase of the pandemic, and distribution was deeply unequal. Of the 9 billion doses procured in the first year, just 1% of them were delivered in low-income countries (OWD 2022). The COVAX initiative was able to procure only half its target number of doses, as large orders from high-income countries received priority from the companies—based in the United States and Europe—with a monopoly on mRNA vaccine production (Open Consultants 2022; Rutschman 2021; Wenham et al.

2021). A WTO waiver alone would not have solved this problem. WHO Director-General Tedros Ghebreyesus (2020), a waiver supporter, acknowledged that "there is no silver bullet. There is no simple solution. There is no panacea." However, the temporary waiver on all COVID-related IP proposed by India and South Africa was designed to help overcome specific IP-related barriers to manufacturing COVID-19 products in low- and middle-income countries, including mRNA vaccines, which were covered by 113 separate patent families (Martin and Lowery 2020). Limited disclosure and overlapping patent rights limit manufacturers' freedom to operate without the risk of litigation or seizure of goods in transit for alleged infringement, while trade secrets are one of several barriers to technology transfer (Correa 2021; Ghebreyesus 2021; Rimmer 2022; Stiglitz 2022; Thambisetty et al. 2022). We note that the existence of these barriers was disputed by others skeptical of the waiver's impact (e.g., Hilty et al. 2021), but in at least one case of mRNA vaccine manufacturing in South Africa, manufacturers themselves reported that these barriers slowed efforts to set up factories and secure investments (Jerving 2022a, 2022b). Given the huge stakes and the massive political attention on this issue, it is remarkable that the WTO waiver not only took up so much attention but also sat at an impasse in a global emergency.

As Sell and Prakash (2004) argue, both nongovernmental organizations (NGOs) and business interests engage in strategic ideational framing to get what they want. Accordingly, we will show how both advocates and opponents of the TRIPS waiver maintained particular interests in the outcome of a possible waiver and how they framed those ideas strategically to sway the TRIPS Council and key political players.

It took nearly 2 years to find consensus on some semblance of a waiver. By the time the 12th WTO Ministerial Conference (MC12) rolled around in June 2022, the waiver had captured an outsized level of international political attention focused on COVID-related medical supplies. Most of the policies aimed at sharing technology aside from a WTO waiver got little political attention (Kavanagh and Singh 2023), in part because of just how much attention was focused on the WTO. With such strong declarations of solidarity and "doing whatever it takes" made at the beginning of the pandemic, how did this happen?

We argue that, contrary to claims that a waiver was legally complex and required this level of attention to secure, the explanation lies in how key actors in the waiver debate got locked into a game of political one-upmanship, using escalating strategic framing efforts and leveraging the institutional design of the WTO in ways that simultaneously stalled the debate and garnered outsized political attention. Proponents of the waiver

framed it, at first, as an obvious and straightforward emergency response to secure equity in COVID-19 technologies, while opponents effectively maintained the status quo by framing the debate as legally and technically complex. A key moment in the process—the US position shift—increased the political stakes and led to opponents newly framing the WTO waiver as a radical proposal and dangerous threat to innovation, while advocates framed it no longer as one of several issues but as a moral, life-saving necessity. This successfully captured head-of-state level political attention. But contrasting framing efforts in the context of a consensus-based WTO helped narrow the number of acceptable policy choices (Russell 2006). Many of the more out-of-the-box ideas, such as those proposed by Costa Rica, never got full attention, while at the WTO the extreme framing created a stalemate from which neither side could back down. In the end, opposition actors won in the WTO institutional context because they only needed to prevent policy change, whereas waiver advocates were attempting the politically much more difficult task of changing policy (Baumgartner and Jones 1993).

Agenda Setting and Narrow Interests

The interests of most actors in the global economy were aligned with doing everything possible to deploy biotechnology to counter the pandemic and stop its spread. It was only the interests of a very narrow economic sector—vaccine manufacturers in a handful of countries—that were well served by not giving countries as much policy room as possible to expand vaccine manufacturing. It is puzzling, then, how the issue of vaccine equity and the sharing of technology to make vaccines around the world became mired in technical debates over a WTO waiver of IP rights enforcement obligations. Indeed, a legally straightforward WTO waiver was always an option. But in the end, monopolies over the production of vaccines were maintained by a handful of pharmaceutical companies.

Political science literature has long described agenda-setting processes around issues to be debated for public action and the range of solutions to those issues to be seriously considered by decision-makers (Baumgartner and Jones 1993; Brummer et al. 2019; Green-Pedersen and Walgrave 2014; Kingdon 1995; Sell and Prakash 2004). In global health, agenda setting occurs in a wide variety of venues, including at decision-making bodies like the UN General Assembly, within international organizations such as the WHO, in the funding decisions of agencies such as the World Bank or the Gates Foundation, and through media outlets, research institutions, and

beyond (Smith and Shiffman 2018). In each of these contexts, the leadership of governments and organizations has limited political attention, so agenda setting involves the allocation of that scarce attention to certain issues and solutions over others (Jones and Baumgartner 2005).

While a variety of theories have been proposed for how issues arrive on agendas, there is broad agreement that crises provide an opening—a window of opportunity or a punctuation of the equilibrium in which policy change is possible (Baumgartner and Jones 1993; Kingdon 1995)—and COVID-19 certainly constituted such a window (Mintrom and True 2022). Indeed, as we describe below, in that window were opportunities for rapid action and policy shifts to support sharing technology and building global capacity to produce vaccines, drugs, and tests in the context of the pandemic. Yet these solutions arrived in a contested space in which some actors, including certain key governments and NGOs, pushed for wide and rapid solutions that were threatening to, and resisted by, a narrower set of actors—primarily pharmaceutical companies based in high-income countries and certain high-income country governments.

We explore two areas that might explain how these debates played out: framing and institutional design. To understand why COVID-19 technology-sharing policy discussions resulted in slow movement and ultimately very limited action, we turn to the concept of the Overton window (Russell 2006). The concept, developed by Joseph Overton, describes how politicians and the public come to understand policy ideas as ranging from the unthinkable to the popular and obvious (Lynch 2020). Especially in a moment of crisis like COVID-19, the window of possibility might expand to include ideas that were previously unthinkable. Policy advocates can shift the window to include or exclude their preferred policy by framing and discussing both the issue and its solutions in certain ways. In global health, a wide variety of actors are involved in framing political priorities (Shiffman and Shawar 2022), but ultimately the waiver debate came down to WTO member states and civil society groups that supported the proposal, and a narrower group of states and industry actors that opposed the proposal, each of which engaged heavily in strategic framing and reframing. We will show how this framing was exercised in the institutional context of the WTO—which, while highly political, is also a consensus-based institution—and how this framing therefore had the effect of narrowing the Overton window. This helps explain slow and limited policy movement, including a final decision that remained closer to the status quo than to what might have been expected in a global pandemic.

Methods

This article presents a qualitative analysis intended to understand why, during a pandemic that became a top global political priority, a waiver proposal under a relatively simple mechanism enshrined in WTO law garnered so much of the world's scarce high-level political attention. Our inquiry seeks to explain the strategic frames that prominent actors in the TRIPS waiver debate used and how this framing narrowed the Overton window of acceptable policy choices in the institutional context of the WTO, thereby delaying the passage of a waiver for nearly 2 years. To address this, we conducted a legal and documentary review to identify the frames used by prominent actors across the debate and how these frames were positioned within the larger process at the WTO.

First, we reviewed the original proposal alongside WTO law on waivers—including the Marrakesh Agreement, the Doha Declaration, and precedent—to understand the legal underpinnings and constraints that hindered the process at the WTO. We then collected and analyzed a range of documents from major actors in the waiver issue: official documents of the WTO (namely, TRIPS and General Council meeting minutes and working documents), as well as statements or press releases by various governments (including the United States, the United Kingdom, the European Union, India, South Africa, Australia, and Pakistan), companies (namely large pharmaceutical companies and industry lobbying organizations such as PhRMA, IFPMA, and the US Chamber of Commerce), civil society organizations (including groups such as People's Vaccine Alliance, MSF, Oxfam, and the Heritage Foundation), and international organizations (including the WHO, UNAIDS, and the World Bank). Because we were conducting an analysis of framing strategies deployed within the public record, qualitative document analysis was a suitable approach for our research (Bowen 2009; Dalglish, Khalid, and McMahon 2021; Wesley 2014).

We followed an inductive approach to our thematic analysis and allowed common codes to emerge from the documents. We then used those codes to trace the policy debate chronologically through the eventual passage at MC12 in June 2022. To analyze trends over time, we organized our documents by broad position (support vs. oppose the waiver), by category (government, civil society organization, etc.), and by date. In this way we were able to elucidate the major narratives used by important actors throughout the debate. From there, we could see how the debate shifted over time, including the emergence of clear framing strategies that managed to seize political attention and delay a decision by the WTO.

Results

Legal Basis for Waivers of International Trade Obligations

In October 2020, India and South Africa submitted a proposal to the WTO requesting a waiver of member states' obligations to enforce IP rights on COVID-19 technologies as required under the TRIPS Agreement. When they tabled the proposal—before most vaccines' clinical trials had been completed—there was every legal possibility that it could be dealt with quickly. This was despite opponents' suggestions that it was complex, novel, or, as one UK negotiator said at the time, "an extreme measure."[2] WTO law contains explicit and regularly exercised provisions for the granting of waivers—including in emergency circumstances—and clear legal text, including direction that waiver proposals be decided upon within 90 days.[3] In this section, we show that neither legal complexity nor novelty explains why the waiver took 20 months and occupied so much political attention. We argue that this is better explained by a combination of institutional political context and strategic framing by key actors on both sides. Before we turn to the political factors, however, we explore the legal text and precedent through which waivers are provided for in WTO law that could have allowed adoption of a simple waiver in a matter of weeks rather than years.

India and South Africa proposed a relatively short and straightforward legal text. After a brief preambular review of the exceptional circumstances of the COVID-19 pandemic, in operative text of less than 1 page, they proposed the WTO agree that:

> *"The obligations of Members to implement or apply Sections 1, 4, 5 and 7 of Part II of the TRIPS Agreement or to enforce these Sections under Part III of the TRIPS Agreement, shall be waived in relation to prevention, containment or treatment of COVID-19, for [X] years from the decision of the General Council."*[4]

The period of time for the waiver was open for debate, with the cosponsors asking that it extend "until widespread vaccination is in place globally, and the majority of the world's population has developed immunity,"[5] which was later updated to propose 3 years.[6]

2. IP/C/M/96/Add.1.
3. Marrakesh Agreement, article IX.
4. WTO, *Waiver from Certain Provisions of the TRIPS Agreement for the Prevention, Containment and Treatment of COVID-19*, *Communication from India and South Africa*, IP/C/W/669.
5. Marrakesh Agreement Establishing the World Trade Agreement, April 15, 1994, 1867 U.N.T.S. 154. https://www.wto.org/english/docs_e/legal_e/04-wto_e.htm.
6. IP/C/W669R1.

This was quite a narrow proposed intervention compared to the broad set of solutions regarding COVID-19 technology access that, as described above, had been put on the global policy agenda. It did not require member states to share technologies like vaccine "recipes"; nor did it compel companies to pool their IP. It also did not automatically remove IP protection from COVID-19 products within any jurisdiction. Instead, it simply would have temporarily given WTO member governments the right to decide for themselves whether and how to enforce IP rights to COVID-19 technologies. Most countries, including those in Europe and North America with the biggest markets, had already signaled that they would maintain IP protection, thus ensuring monopolies for companies in those markets regardless of any WTO waiver. Yet despite this narrow scope, the waiver became a global flashpoint and focus for nearly 2 years. We argue this was *not* a result of the legal complexity of the proposal; nor was it, as some suggested, an extreme or surprising approach. Instead, as we describe below, it was political maneuvering and framing that both stalled the waiver and kept it central in global debates.

Waivers are a regular and often-used part of WTO law (Feichtner 2011). The Marrakesh Agreement Establishing the World Trade Organization, the governing international trade law, makes explicit provision for waivers in article IX:3, stating that "in exceptional circumstances, the Ministerial Conference may decide to waive an obligation imposed on a Member by this Agreement or any of the Multilateral Trade Agreements, provided that any such decision shall be taken by three fourths of the Members." The agreement further creates a standard process by which a waiver would be agreed: first based on consensus, then defaulting to a three-fourths vote, with IP-related issues originating in the TRIPS Council, and a requirement for a date of termination and annual review. Waivers can cover one or more countries and be granted over multiple years with review each year. In practice, waivers are usually made by the General Council, which acts on behalf of the Ministerial Conference (MC) when it's not in session; such is the unexceptional nature of the practice of granting waivers. Even before the WTO was created, however, waivers had been a standard part of trade law, with GATT article XXV:5 allowing for a waiver of trade obligations with a two-thirds vote.[7]

Waivers under article IX have been frequent. The WTO's annual reports detail each waiver granted, with the 1998 report documenting seven new waivers granted; 2010 had nine counted; 2019, before the pandemic began,

7. https://www.wto.org/english/docs_e/legal_e/gatt47_02_e.htm#articleXXV.

shows five new waivers granted; and the most recent report, from 2022, documents six new waivers—these are in addition to regular renewals of eight to 10 multiyear waivers each year (WTO 1998, 2010, 2019, 2022a). Members of WTO-designated least developed countries have had their obligations to enforce IP on pharmaceutical products waived under TRIPS every year since 2002 (WTO 2002). Waivers, therefore, are far from exceptional.

Waiver approval processes are also explicitly intended to be rapid. The Marrakesh Agreement requires the MC to establish a timetable to consider each waiver request, "which shall not exceed 90 days." As we describe below, opponents of the waiver worked diligently to frame a need for continued debate on the COVID-19 waiver to justify why the process laid out in article IX:3 could not be implemented rapidly. Capitalizing on this, waiver advocates blamed the deadlock on those opposed to the waiver, suggesting that opponents had answered all of their questions (not mentioning whether those responses were seen as adequate or convincing) and were merely using this to maintain politics as usual.

Alongside the Marrakesh Agreement, the 2001 Doha Declaration on the TRIPS Agreement and Public Health reflects agreement reached at the height of the AIDS pandemic (George 2011) that the TRIPS Agreement "can and should be interpreted and implemented in a manner supportive of WTO Members' right to protect public health and, in particular, to promote access to medicines for all."[8] The members also recognized the need to offer flexibilities under the TRIPS Agreement to combat public health crises, "including those relating to HIV/AIDS, tuberculosis, malaria and other epidemics, [which] can represent a national emergency or other circumstances of extreme urgency." This shows a clear intention within WTO policy and practice to allow greater flexibility in a time of public health crisis, for which the COVID-19 pandemic, a declared public health emergency of international concern, certainly qualifies. These flexibilities have been used extensively—more than 100 times by at least 89 countries—in procuring medicines, and this use of TRIPS flexibilities is a major method through which generic competition has helped reduce the price of HIV drugs by more than 99% (FM't Hoen et al. 2018). But these are only on a medicine-by-medicine basis, and the procedures established by the TRIPS Council to enable countries with manufacturing capacity to issue compulsory licenses to export to a country without manufacturing capacity proved basically unworkable when Rwanda and Canada tried to use it for HIV drugs (Abbas and Riaz 2018; Morin and Gold 2010).

8. WT/MIN(01)/DEC/2.

In summary, from a legal perspective there was a well-trodden path for the proposed waiver to follow, with clear provisions in WTO legal texts and significant precedent to draw on, directing it to be decided within 90 days. WTO law actually slants against the years of delay and political escalation. But, of course, legal text needs to be understood in context of political and institutional reality.

Political Factors Explain the Path of the TRIPS Waiver

If the delay and agenda-warping attention that came to define the debate over a TRIPS waiver for COVID-19 cannot be explained by *legal* complexity, then what factors do explain it? We argue that two critical *political* factors drove the process of narrowing the agenda on access to vaccines to detailed technical issues of international patent law. First, tracing the discourse through the waiver negotiations, we show that both waiver advocates and opponents engaged in strategic framing that together stalled the WTO process and eventually favored the status quo. That framing justified and eventually secured increasing levels of political attention, rising to the level of head-of-state engagement, that eventually made the waiver *the* central political issue on expanding production while simultaneously making consensus on a meaningful waiver impossible. Second, that framing may have mattered less if not for the institutional design of the WTO, which not only encouraged a drawn-out negotiation through its consensus-based norms but also limited the legitimate players in the debate to trade ministers, empowering the pharmaceutical industry through common interests. Together, these political factors ensured a nearly 2-year delay and eventual passage of a proposal that departed little from the status quo and was fundamentally different from the waiver originally proposed.

Framing the Debate: Narrowed Political Attention and Delayed Process

We present framing results chronologically (fig. 1), noting three key phases throughout the debate, characterized by iterative and escalating turns in the framing of debate by the two increasingly polarized sides, each of which responded to the other's rhetoric and to shifts in the political context. The first phase, from the waiver proposal until early 2021, was characterized by what we call the "shared urgency" frame by proponents and the "technical complexity" frame by opponents—which at the outset were not inherently

Figure 1 Timeline of TRIPS waiver debate.

opposing frames. Proponents focused on vaccines as a global public good and on the urgency of acting quickly on a simple waiver, given the cross-cutting shared interest in stopping the pandemic. Opponents, on the other hand, focused on technical questions and the sense that a waiver was too complex to oppose rapid passage, but carefully couched in larger claims of solidarity and equity. Significantly, this phase coincided with the earlier moments of the pandemic, before most major vaccines had been authorized and when there was uncertainty around when a vaccine might become available and how it could be distributed equitably.

The next phase, from early to mid-2021, saw opponents respond to shifts in the political environment with increasingly polarized frames of "moral necessity and pharma complicity" vs. "radical, extreme threat." Waiver proponents increasingly framed the waiver as a moral imperative that was necessary to save lives, and arguments against it as putting profit ahead of lives, while opponents shifted from framing the waiver as complex to labeling it a radical, dangerous threat to innovation. These frames were a successful part of attracting the attention of macropolitical players like President Joe Biden. It was also significant that this phase aligned with the height of vaccine inequality, multiple emerging variants, and increasing discussions of vaccine hesitancy (Kavanagh and Singh 2023; Mathieu et al. 2021).

In the final phase, from early 2022 through final waiver approval in June 2022, closed-door negotiations led to a narrow proposed compromise text that barely resembled the original waiver proposal. The frame of debate shifted again—this time to what we call "Quad or (WTO goes) Bust"—and focused on the need to immediately pass this text, which most closely resembled the status quo, to avert a crisis of legitimacy for the WTO. This was also a time when sufficient vaccines were available, but because of hoarding and the slowing of vaccine trade or charitable delivery mechanisms like COVAX, there was still a gross inequality in distribution of vaccines worldwide (Quan, Anh, and Taylor-Robinson 2023; UNICEF 2023; WTO 2022b).

Ultimately, this framing exercise elevated the political attention paid to the waiver debate—to the exclusion of other linked and important elements necessary to secure distributed vaccine production—while simultaneously stalling that debate for nearly 2 years. Eventually, it secured a text that is unlikely to result in significant challenge to global monopolies on COVID-19 pharmaceutical products.

Phase I: "Shared Urgency" vs. "Technical Complexity". As described above, before any vaccine was available for COVID-19, the pandemic produced an unforeseen widening of the Overton window, with many governments, spanning from Pakistan and South Africa to the European Commission and China, agreeing that health products related to ending the pandemic should constitute a global public good (European Commission 2020b; Haugen 2021; UNAIDS 2020; Wheaton 2020). The TRIPS waiver proposal was one of the ideas being floated in pursuit of global health equity. It was framed not as a silver bullet but rather as a single step among others to help get the pandemic under control. As the South African delegation said in their opening statement to the TRIPS Council in October 2020, "The co-sponsors agree that global cooperation and collaboration is key to addressing the COVID-19 pandemic; initiatives such as the COVAX facility are helpful but insufficient. Our waiver proposal is designed to work synergistically with such initiatives by enabling the rapid scaling of production by multiple producers across many countries, enabling the sharing of knowledge and transfer or technology with the aim of addressing the pandemic."[9] As two of the countries in the world with the largest capacity for generics manufacturing, South Africa and India certainly both had vested interests in the waiver's success.

9. IP/C/M/96/Add.1.

The original proposal covered a broad spectrum of products,[10] which could include any health technologies produced for ending the pandemic, embedding the idea of the waiver as a step toward the global public good (table 1). Furthermore, during opening debates in the October TRIPS Council meeting, waiver-supporting member states pleaded for a quick resolution from the start: "This proposal is not one which can be discussed endlessly. When human lives are at stake, we must find definitive conclusions to our discussions as soon as possible" (Pakistan) and "We need to take time-bound action now rather than limiting ourselves to indefinite debate" (India). Such pleas demonstrate that a protracted, politicized debate was expected, and supporters framed their position as being about saving lives, while opponents then framed the waiver as a technical problem requiring a complex solution.

A small set of countries—unsurprisingly, those mainly high-income countries with the largest interests in the pharmaceutical industry (i.e., the United States, the UK, the EU, Canada, Switzerland, Norway, Japan, Australia, and Brazil)—did not lend support for the waiver. One might have expected that these countries would exercise power directly (Lukes 2021), and under the rules of the WTO they certainly could have. Opponents could have come out early in direct opposition to the waiver, and indeed, some did—namely the United States, Japan, Australia, and Norway. Europe could have joined the United States and together they could have pressured allies to join them in killing the waiver, building a strong blocking minority coalition of at least a quarter of the WTO members. But they were reluctant to do so in the middle of a pandemic, particularly since their heads of state (e.g., France's Macron, Germany's Merkel, and Canada's Trudeau) had already framed COVID-19 vaccines and medicines as "global public goods" and pledged cooperation (European Commission 2020a). For example, the EU declared that "no effort must be spared to obtain safe, effective and affordable treatments, vaccines, tests and medical devices necessary to fight this pandemic and to ensure that these products are equitably distributed on a global scale."[11]

Therefore, certain opponents (namely the EU, the UK, Canada, Switzerland, and Brazil) established their commitment to collaboration for ensuring equitable access to COVID-19 health products and technologies, while suggesting that IP was not the main issue, that the TRIPS Agreement provided sufficient means for sharing IP, or that other venues like COVAX were

10. IP/C/W/669.
11. IP/C/M/96/Add.1.

Table 1 Main Points of TRIPS Council Waiver Proposals

Date (document)	Sponsor(s)	Main points
10/2/2020 (IP/C/M/96/Add.1)	India, South Africa	Covers: Open—anything related to prevention, containment, or treatment of COVID-19 Time period: Open for debate Eligibility: Open
5/25/2021 (IP/C/W/669/Rev.1)	India, South Africa, cosponsors	Covers: "Health products and technologies including diagnostics, therapeutics, vaccines, medical devices, personal protective equipment, their materials or components, and their methods and means of manufacture for the prevention, treatment or containment of COVID-19" Time period: At least 3 years Eligibility: Open
6/18/2021 (IP/C/W/681)	EU	Covers: Slight loosening of existing TRIPS flexibilities, but otherwise reliant on TRIPS Agreement Time period: 3 years Eligibility: "Members in need"
5/3/2022 (IP/C/W/688)	"Quad" (official)	Covers: COVID-19 vaccines Time period: 3 or 5 years (to be decided) Eligibility: All developing country Members; except those who exported more than 10% of world exports (to be debated)
6/17/2022 (WT/MIN(22)/30 WT/L/1141)	WTO	Covers: COVID-19 vaccines (with a number of clarifications and limits based on the existing TRIPS Agreement, mainly pertaining to Article 28.1) Time period: 5 years Eligibility: All developing country Members; except those who have made a binding commitment to opt out (China)

a more favorable solution. In framing their opposition as support for the larger goal of global equity and access, they were able to oppose the waiver based on legal or technical questions rather than as an unpopular appeal to corporate protectionism. However, as legal analysts have also described (Tetteh 2011; Thambisetty et al. 2022), the TRIPS Agreement flexibilities on compulsory licensing provide only a product-by-product and country-by-country solution, a policy fact noted by supporting member states. Nevertheless, this was an important framing device used by waiver opponents, notably the EU.

Throughout the early stages of the debate, the consensus-based WTO rules led to a back-and-forth on technical and legal clarifications, and member states relied on the WTO's formal communication channels to pursue the debate. South Africa sent a memo outlining numerous concrete examples of the IP barriers that justified the waiver.[12] At the end of November 2020, Australia, Canada, Chile, and Mexico cosponsored a set of questions mainly seeking proof that IP-related issues were credible challenges that have "impeded or prevented the timely procurement of COVID-19 diagnostics, equipment, therapeutics or vaccines,"[13] turning the debate into an unnecessarily technical one. As described above, the waiver would not have compelled members to share technologies; rather, it would have allowed them to decide how to enforce IP rights, so such concerns were largely superfluous.

Because of the extent of questions and the timing—eight questions requesting detailed examples sent a month before the end of the 90-day deliberation period stipulated in the Marrakesh Agreement—the TRIPS Council failed to reach consensus within the allotted 90 days and opted instead to extend negotiations, turning the waiver into a political football. Proposal cosponsors addressed questions in two responses totaling 42 pages, reaffirming that the waiver was the only moral response. With all questions answered, including the clarification that members could implement the waiver as they saw fit, one might have expected an end to the debate and a vote. Instead, we observed increased concern and even less willingness to compromise from either side, creating augmented global political attention and a narrowed Overton window.

Phase II: Shifting Political Ground: "Moral Necessity and Pharma Complicity" vs. "Radical, Extreme Threat". In the United States, President Biden was elected and sworn in, representing a monumental ideological

12. IP/C/W/670.
13. IP/C/W/671.

shift in the executive of one of the biggest players on the TRIPS Council. Although the United States opposed the waiver outright during Trump's administration, the new government would prove a major turning point in the TRIPS waiver debate. Domestically, there was pressure on President Biden from members of his party to make swift departures from his predecessor's policies. For example, Senate Democrats, led by Bernie Sanders, stated in a letter: "To bring the pandemic to its quickest end and save the lives of Americans and people around the world, we ask that you prioritize people over pharmaceutical company profits by reversing the Trump position and announcing US support for the WTO TRIPS waiver" (Sanders et al. 2021). Such moralization framing mimics other waiver advocacy framing, and it demanded that world leaders support the waiver. This was not restricted to the United States; for example, NGOs sent letters to European Commission President von der Leyen to urge support of the waiver (CONCORD 2021). Such actions also clearly demonstrate how even heads of state were being involved in the debate at the TRIPS Council, garnering an enormous amount of global political attention.

In parallel to domestic political changes in the United States and pressure on world leaders to support the waiver, changes were afoot at the WTO. Ngozi Okonjo-Iweala was voted in as director-general (DG) of the WTO on February 15, 2021, ending seven months of a leaderless WTO. In her thank-you speech, she reminded members of the WTO's shaky position on the global governance stage, pressing for a swift agreement to "signal to the world that the WTO is back."[14] With the WTO already in a crisis of legitimacy, moving the stalled negotiations forward became an important way for delegates to prove their effectiveness on the global stage. The waiver had been caught in circular deliberations for so long that supporters began to demand "text-based negotiations," a maneuver that would encourage progress in the process. Furthermore, waiver-supporting member states increasingly framed the opposition as favoring profits over lives. For example, in the February 2021 TRIPS Council meeting, the South African delegate stated, "Many of the opposing WTO Members, under pressure from the pharmaceutical industry, have for more than 2 decades been known to dissuade developing countries from incorporating TRIPS flexibilities."[15] During the same meeting, the Sri Lankan delegate stated, "It is high time we learn lessons from our past, where we ignored the health care needs of millions in developing countries in the interest of maximizing profits for a few companies." Such framing repeats a strong

14. JOB/GC/250.
15. IP/C/M/97/Add.1.

moralization argument and paints all opposition as being in the pockets of pharmaceutical companies, a framing tactic we identify as a "moral necessity and pharma complicity" stance.

Such framing, alongside the US ideological shift away from being one of pharma's biggest supporters and a new WTO DG warning of WTO obsolescence, activated the pharmaceutical industry. Starting in early March 2021, lobbying organizations began to publish statements in strong opposition to the waiver. Through these statements, industry characterized the waiver as "problematic," "misguided," and "radical." In addition, throughout the winter TRIPS Council sessions, many member state opponents argued that the "real issues" were such things as manufacturing (Switzerland, EU, Australia) and delivery (EU, Japan) capacity. Others (UK, Canada) maintained that they still had unanswered questions about whether IP barriers were the real problem. Indeed, most argued that rather than being a problem, IP was indeed what had laid the important groundwork for the voluntary collaboration seen thus far in the pandemic response. Moreover, member states such as the UK, the EU, and Japan invoked their contributions to COVAX to justify their claim that the waiver was unnecessary. Supporting members responded to such arguments with increased moralization framing, arguments that COVAX was not meeting expectations, and repeated pleas to begin engaging in text-based negotiations.

On May 5, 2021, US Trade Representative Katherine Tai declared support for the TRIPS waiver proposal: "The Administration believes strongly in intellectual property protections, but in service of ending this pandemic, supports the waiver of those protections for COVID-19 vaccines." In this statement Tai explicitly mentioned the desire to enter into text-based negotiations, saying that "those negotiations will take time given the consensus-based nature of the institution and the complexity of the issues involved." Although the US position had shifted, the waiver was still being framed as too complicated to negotiate quickly. This also highlights the differences found across supporters of the waiver debate. While civil society organizations such as Amnesty International and Doctors without Borders advocated for the waiver as a simple, immediate, and life-saving tool for a broad-based pandemic response, this US position toed a diplomatic line of supporting a time-limited waiver for vaccines only, which they still saw as technically complex.

Multiple parties interested in the process evinced strong reactions to the US position shift. Supporters of the waiver—including Democratic members of Congress, organizations like UNAIDS, and NGOs like Amnesty International—hailed the switch and applauded the Biden administration, calling the decision "the right thing to do" (Schakowsky 2021). Predictably,

the pharmaceutical industry was disturbed by the news: "The Biden Administration has taken an unprecedented step that will undermine our global response to the pandemic and compromise safety . . . [doing] nothing to address the real challenges to getting more shots in arms, including last-mile distribution and limited availability of raw materials" (PhRMA 2021). In general, the themes that occurred most frequently across analyzed industry statements were that the waiver would undermine current efforts to produce vaccines, destroy innovation, and create safety concerns. Outside of industry, the World Bank also opposed the waiver, citing reduction of innovation and taking a political stance against the Biden administration's decision (Lawder 2021). All of these themes found across analyzed documents are ideational arguments that have long propped up the industry and helped to maintain its power (Kapczynski 2022).

After the United States modified its position, the waiver cosponsors tabled a revised waiver proposal,[16] refining and narrowing the original waiver text to add specificity on some key points of contention (table 1). Alongside this proposal, cosponsors increased the demand for text-based negotiations. Shortly thereafter, the EU delegates responded with a proposal on June 4, 2021, essentially mimicking what is already set out in the TRIPS Agreement (table 1).[17] The EU proposal has been reported as a tactic to distract from the push for text-based negotiations (TWN 2021c), and it was therefore not deemed a serious proposal by observers of the process (Chawla and Singh 2021; Hu 2021). Still, this proposal laid out the EU's stance and became a point of discussion, alongside the revised waiver proposal, in the TRIPS Council meetings of summer 2021. Whereas in the June 2021 TRIPS Council meeting, India suggested that "we look at concluding these negotiations by the end of July,"[18] minutes from the meeting of July 20, 2021, reiterate that "disagreement remained on the fundamental question of what might be the most efficient and appropriate approach to address the shortage of vaccines and other COVID-related products."[19] It had already taken eight months of the process to agree to something as nonbinding as text-based negotiations, but it would take another year (and some back-door politicking) to finally reach a decidedly unpopular agreement.

Although text-based negotiations were finally on the table, discussions stalled, and calls for negotiations continued. For example, during the October 2021 TRIPS Council meeting, the Pakistan delegate stated, "The

16. IP/C/W/669/Rev.1.
17. IP/C/W/681.
18. https://e-trips.wto.org/En/CouncilMinuteNotifications/Intervention/22410.
19. IP/C/M/101.

proposal had seemingly reached a text-based negotiation stage. However, the process has not seen any meaningful engagement on the text by a few delegations. Their repeated, stonewalling questions, which have already been answered orally in formal, informal and small group meetings and in various written submissions by the co-sponsors, have yielded a circular discussion."[20] Such statements frame waiver opponents as being entirely to blame for the stalled debate, while disregarding the insistence of waiver advocates that the waiver was the only sensible solution to the vaccine equity issue. Indeed, DG Okonjo-Iweala noted this by stating, "By focusing only on the TRIPS Waiver, I think people are missing a very important point, and are not focusing on some very critical issues for solving this problem of access to vaccines" (Global Counsel 2021).

In fact, she had already attempted to move things along. In March 2021 at the Global C19 Vaccine Supply Chain and Manufacturing Summit, Okonjo-Iweala urged vaccine manufacturers to "walk and chew gum at the same time," suggesting that they could continue to debate the TRIPS waiver while simultaneously seeking alternative solutions for increasing production (WTO 2021a). Later, in April 2021, Okonjo-Iweala convened industry and select trade ministers at the "COVID-19 and Vaccine Equity: What Can the WTO Contribute?" meeting in an attempt to address a range of barriers to vaccine production besides IP and the TRIPS waiver (e.g., supply chains and export rules) in which the WTO could have a role (WTO 2021b). But civil society groups responded to the new DG's attempts to expand the agenda by accusing her of violating the Marrakesh Agreement (TWN 2021a) and undermining the ongoing TRIPS waiver negotiations (TWN 2021b). This is a key point, because it demonstrates how waiver supporters themselves were increasingly making the waiver the main policy option on which most political attention was being focused.

This attention and urgency were still apparent in the November 2021 TRIPS Council meeting, when the United States stated, "With MC12 coming up in fewer than two months, we are at a critical juncture. . . . Unless Members are able to make some real compromises, we worry that there may be the possibility of no outcome, which would be extremely regretful. It is time for the WTO to come together and deliver the constructive and practical outcome that the world needs."[21] This pressure on the WTO to deliver built over the next six months, coming to a head during MC12 the following June. Given the impasse at the TRIPS Council, Okonjo-Iweala took it upon herself to assemble a group of ministers from the United States,

20. IP/C/M/103/Add.1.
21. IP/C/M/103/Add.1.

the EU, India, and South Africa to carry on negotiations together, a decision that would later come to be known as the "quad" negotiations. This is crucial, because it demonstrates how the calls for text-based negotiations and the complaints over a stalled process at the flailing WTO secured the need for serious, closed-door negotiations among a narrow set of actors.

Phase III: Quad or (WTO Goes) Bust. In March 2022, the proposed text from the quad negotiations was leaked, creating a thunderous effect on the waiver debate. It was immediately apparent that the available policy options had, through this informal negotiation process, narrowed even further. The quad text was limited to only the COVID-19 vaccine (a provision pushed by the United States); the diagnostics, therapeutics, and other health products and technologies that had been present in both the original and the revised versions of the waiver had been removed. The further narrowing of the proposal closely resembled the EU's position, indicating that the originators of the waiver proposal seemed to have been overpowered in the negotiation process. Expectedly, supporters of the original waiver bemoaned the narrowness of this new proposal, framing it as worse than no outcome at all. A letter from two economics professors and an Oxfam director to South Africa's president stated that "the recently leaked draft text does not waive the IP barriers necessary to deliver any meaningful access to vaccines, treatments, or tests. We support you fully in rejecting this misleading and ineffectual proposal, which represents the European Union's belligerent blockade of any actual waiver of IP barriers and the United States' insistence that the IP waiver it supports be limited to vaccines" (Ghosh, Stiglitz, and Kamalingin 2022). While advocates were unhappy, so, too, were opponents. During the March 2022 TRIPS Council meeting, a number of (mainly opposing) member states lamented the lack of transparency found in the quad process.[22] Despite the negative response to the quad process on both sides of the debate, on May 3, DG Okonjo-Iweala forwarded the official quad text to the chairperson of the TRIPS Council.[23]

In the final TRIPS Council deliberations before MC12, a number of waiver-supporting delegates called for continuation of text-based negotiations over the original proposal,[24] demonstrating how unwilling advocates were to compromise on the waiver, remaining steadfast in their

22. China, Brazil, Hong Kong, the UK, Switzerland, Singapore, and Russia.
23. IP/C/W/688.
24. Including Egypt, Bangladesh, Indonesia, Tanzania (and the African Group), Colombia, India, Sri Lanka, Nigeria, Nepal, Namibia, and Venezuela.

desire to include diagnostics and therapeutics: "Indonesia would like to highlight the importance and relevance of the inclusion of the therapeutics and diagnostics in the prevention, containment and treatment of COVID-19."[25] Yet, despite complaints about the extensive narrowing of the original waiver, the quad text had become the only one realistically available for discussion and became the basis for the draft decision text at MC12.[26] This demonstrates that despite strong support, waiver advocates were fighting an uphill battle against the status quo, in that the quad text resembled the status quo more closely than the waiver proposal.

Therefore, by the time delegates were at MC12, the waiver was a fragment of the original proposal, yet the negotiations sidelined other multilateral options that were being proposed at the time, such as the mRNA hub. While the EU touted aid for the hub, a number of recipient members were still focused on the waiver: "[Nigeria] welcomes the initiatives by the European Union and African Union that facilitate the production of mRNA vaccines in a few countries including Nigeria. However, we would like to underscore the need to ensure that intellectual property rights do not create barriers to the scaling-up of research, development, manufacturing and supply of materials essential to combat COVID-19 pandemic."[27] With all eyes on the WTO, Okonjo-Iweala pleaded for a resolution: "This is a time to demonstrate that . . . the WTO can deliver for the international community, and the people we serve. . . . If we do not deliver . . . the costs to your domestic constituencies will be substantial." This clarion call set the tenor of MC12. Although most developing-country members still hoped for a return to the original waiver, the DG had convened the quad and was now pushing an agreement with urgency. Likewise, a number of members urged the successful completion of negotiations over the waiver, often invoking the WTO's precarious position to make their case. For example, Indonesia stated, "The WTO Response to the Pandemic is paramount. This MC12 is the real test to the system on whether we can deliver what people really need."[28] Australia (a notable waiver opponent) argued that "the world is watching, and waiting for us to deliver this week. . . . I urge all Members to do what it takes to finalise a meaningful multilateral pandemic response at MC12 which includes a TRIPS waiver."[29]

25. IP/C/M/104/Add.1.
26. WT/MIN(22)/W/15.
27. IP/C/M/104/Add.1.
28. WT/MIN(22)/ST/136.
29. WT/MIN(22)/ST/85.

Notably, neither the Indian nor South African delegations commented on the TRIPS waiver in their opening statements at MC12. This may reflect the frustration those sponsoring countries felt at watching their already modest proposal become a nearly useless trophy. Yet it also shows how despite the overwhelming support for the original waiver, calls to pass an agreement at MC12, however watered-down it might be, were set to win and drowned out the majority. As India stated in a press release in the midst of MC12: "My own sense right now with the number of meetings that are being held and with the number of green room engagements, is that the effort they are putting in, is more to showcase to the world that 'Oh! we found a wonderful solution, we agreed with 80 countries or more to give a TRIPS waiver.' Now the common man does not understand that this is nothing near a TRIPS waiver, they do not understand that this is a little elevation from compulsory licensing" (Goyal 2022). This statement frames the process as a narrow set of interests that managed to seize the content of the proposal and frame it as effective collaboration. It also demonstrates how the outcome favors the status quo position over the original waiver, with little compromise beyond what is already included in the TRIPS Agreement.

By the end of MC12, the framing of the debate centered on footnote 1 about "eligible Members" (table 1). It was clear to observers that this footnote was placed there by the US delegates who wanted to limit China's power. In the final hours of MC12, an agreement that was limited to vaccines and really only included a waiver of article 28.1 of the TRIPS Agreement on rights to patents—unlike the initial proposal, which sought to also include copyright and related rights, industrial designs, and protection of undisclosed information—was reached. A number of other clarifications and limitations, largely based on the existing TRIPS Agreement, were also included (see Love 2022 for further analysis). In the end, no policy preferences had shifted, and no consensus was built; effective framing and closed-door negotiations had simply narrowed the policy space so dramatically that what was left was essentially nonfunctional. Therefore, after 20 months of clever framing, heated debate, and a flailing WTO, the world ended up with a bland text that some waiver advocates say is even worse than doing nothing at all (Love 2022).

Institutional Design: Consensus and Limited Interests

Institutions shape the range of possible policy outcomes by constraining participant actions, creating the norms of decision-making, and setting the

range of actors who are legitimate players in a given decision (North 1990). One of the norms that the WTO's institutional design uses to realize its mandate of maintaining stability in the multilateral trading system is its consensus-based decision-making procedures.[30] By essentially granting "veto points" (Hawkins and Holden 2016) to any country that blocks consensus, requiring unanimity in the decision-making process frequently leads to stall-outs in debate and protracted resolutions, as was the case with the Doha negotiation rounds that began in the early 2000s (Matthews 2004) and WTO processes concerning treatment for HIV/AIDS in the 1990s (George 2011). Vidigal (2021: 1) warns that if members wish to prevent stall tactics in consensus from "becoming a regularly employed negotiation tactic, they must explicitly establish that this possibility is not an integral feature of the institutional design of the WTO."

As discussed above, the Marrakesh Agreement requires waivers to be considered under consensus decision-making rules within no more than 90 days after they are first introduced, or to be brought to a vote requiring three-fourths approval to pass. This process was sidelined during the waiver debate because of stronger institutional norms of using stalling as a political tactic. The original waiver was first discussed at the TRIPS Council meeting on October 15–16, 2020, where, after many hours of discussion and statements by member states on both sides, the United States declared, "The decision-making process for the TRIPS Council is by consensus and we request that this agenda item be suspended for further consultations."[31] Just like that, the United States—firm in their opposition and with the institutional design of consensus behind them—closed the conversation and precluded further debate on the issue until the following informal meeting in November 2020. Despite continued back-and-forth discussion over another year, no consensus was reached and no vote was requested at the General Council, and frustration over the sustained stonewalling increased. The COVID debates at the WTO, along with deliberations that strategically employed stalling, demonstrate how consensus has become an integral feature of the WTO's practice.

A second feature of the WTO's institutional context that shaped the waiver's outcome is the players at the TRIPS Council. Since the Marrakesh Agreement of 1994 tied IP to trade, the TRIPS Council has been the de facto venue for the waiver debate, limiting the set of actors to trade

30. Marrakesh Agreement, article IX: 1.
31. IP/C/M/96/Add.1.

ministers rather than health ministers (Murphy and Kellow 2013). Even at the WTO, though, trade ministers charged with advancing the interests of an entire economy had many incentives to support a waiver if it would expand access and stop the pandemic. For example, in a call to support the waiver, the Association of Flight Attendants stated, "For a full recovery of the aviation industry, we must work to ensure that people around the world have access to the vaccine" (AFA 2021a).

The TRIPS Council is indeed a particularly narrow part of the WTO, dealing with highly technical IP rules that primarily affect only a handful of industries including pharmaceuticals, software, film, and publishing, who have established influence on the council (Sell 2003). Our analysis shows that after October, few economic interests outside of pharma, biotech, IP, and trade intervened in waiver debates, despite possessing undeniable stakes in a swift end to the pandemic.

These two components of the institutional landscape—the narrowing of actors and a priority on consensus—help explain, but do not fully account for, the nearly 2 years of high politics, with the debate coming up at G20 and G7 meetings as well as various World Health Assemblies, with very little to show for it. We argue, however, that the synergy of the particular institutions of the WTO, alongside the strategic framing and political maneuvering employed by actors within the constraints of those institutions, *do* explain it.

Conclusion

COVID-19 posed a major test of global governance capacity to respond to crisis. The pandemic killed millions and disrupted international trade in a manner unprecedented in recent memory. Despite high-level political attention declaring that COVID-19 vaccines, diagnostics, and treatment must be a "global public good" to ensure the kind of equitable coverage that could most effectively stop the pandemic, the ultimate response was highly unequal. During the acute phase of the pandemic the most effective vaccines were in scarce supply, with a handful of companies exercising monopolies over production and distribution, and prioritizing orders from powerful high-income countries. By the end of the first year, just 1% of all doses produced had been delivered to low-income countries.

The World Trade Organization had a potentially significant role to play in a crisis that not only disrupted global trade but also engendered debate on equitable trade in health commodities. As WTO DG Ngozi

Okonjo-Iweala said, given the large number of trade-related concerns linked to vaccine production, from the importance of open cross-border trade for access to raw materials to identifying and using existing manufacturing capacity across states to the transfer of technology, "WTO must play a central part in the response to this crisis. . . . This is something in members' control."[32]

Ultimately, however, the issue that predominated both within the negotiating rooms of the WTO and well beyond was whether to provide a temporary waiver of member states' obligations to enforce the same minimum IP rules over COVID-19 products. Answering this question took nearly 2 years and ultimately produced an agreement far closer to the status quo than to the kind of "do things differently" idea that the DG proposed.[33]

We argued that a concerted framing effort on both sides of the debate, supported by an institutional design that amplified the effects of those framing efforts, created the conditions for a protracted waiver debate. An IP waiver is neither novel nor legally complex in WTO law. But strategic framing on both sides of the debate eventually helped garner global attention at the head-of-state level, while making agreement on a meaningful waiver difficult. This allowed a small set of members to delay the process and protect the status quo, despite a widespread sense of urgency and threats to WTO's legitimacy over the long term. Relying on the consensus-based nature of the TRIPS Council, opponents of the waiver were able to maintain their position and prevent a vote at the General Council. Supporters' increasing emphasis on the waiver, and framing opposition to it as immoral and life-threatening, increased political pressure and attention on a waiver as a central solution, even to the exclusion of other possible solutions. But this did not ultimately dislodge opposition. Thus, what began as broad calls for global solidarity ended with a fight over the wording of a footnote. The result of the much-awaited MC12 was a barely recognizable agreement, passed nearly 2 years after it was originally introduced, that did little to increase the global supply of COVID-related medical supplies.

At the outset, the pandemic widened the Overton window of acceptable policy choices, forcing all those involved in pandemic response to contend with loud calls for solidarity and collective coordination. By the time a TRIPS waiver was up for discussion at MC12, the debate had narrowed so

32. https://www.wto.org/english/news_e/spno_e/spno7_e.htm.
33. https://www.wto.org/english/news_e/spno_e/spno1_e.htm.

precisely that India's Minister for Commerce and Industry remarked that "the kind of fights over small commas, full stops, one word here or there seems to suggest that this will continue through the 5 years" (Goyal 2022). The waiver debate, in other words, had narrowed its focus so much that one of the smallest forms of punctuation—the comma—had become the topic of political attention.

Despite the unwavering support of the vast majority of members for the original waiver proposal, the EU (a strong regional organization with effective legal mechanisms to support it; see Greer et al. 2022), the United States (still broadly considered the largest world power), and some key allies were the powerful minority that managed to craft a weak waiver that barely resembled the original proposal and had almost no support. The polarization on the issue of IP as a barrier to health equity engendered a stalemate, whereby powerful actors were able to control the outcome and bypass effective means of coordinated discussion (Ney 2012). This experience suggests that, without reform of the WTO's institutional structures and how they shape participation and ideation, the organization faces serious hurdles to being an asset in fighting pandemics and other crises in the future. Indeed, part of the MC-12 agreement was to make a decision on extending the waiver to diagnostics and therapeutics by December 2022. More than a year after MC-12 (and more than 6 months beyond the initial deadline), debates are ongoing and little progress has been made, with members maintaining their entrenched positions and some signaling this as a credibility issue for the WTO (WTO 2023).

The politics of COVID-19 provides researchers an important opportunity to examine the status quo operations of global governance institutions as they attempt to respond to the emergency conditions of the pandemic. Research in this vein sheds important light on the operation of institutions in a set of conditions for which they were not designed. In the case of the WTO during the pandemic, we find—and we hope future research agendas continue to explore—that the important characteristics of urgency and equity were superseded by political stalling. As the world moves into an era with more and more climate-induced political emergencies, including extreme weather events, novel zoonotic disease emergence, and resource scarcity, it is crucial that research examines their associated policy consequences. This example of the stalled TRIPS waiver sheds light not only on the complex political economy of vaccines during the COVID-19 pandemic but also on important policy concerns that are set to increase in relevance as the world experiences growing periods of crisis.

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References

Abbas, Muhammad Z., and Shamreeza Riaz. 2018. "WTO 'Paragraph 6' System for Affordable Access to Medicines: Relief or Regulatory Ritualism?" *Journal of World Intellectual Property* 21, nos. 1–2: 32–51. https://doi.org/10.1111/jwip.12083.

AFA (Association of Flight Attendants). 2021a. "Tell President Biden to Support the TRIPS Waiver." https://www.afacwa.org/action_alert_tell_president_biden_to_support_the_trips_waiver (accessed August 28, 2023).

AFA (Association of Flight Attendants). 2021b. "Covid 19—Trade Related Aspects of Intellectual Property Rights (TRIPS) Waiver." April 9. https://unitedafa.org/news/2021/4/9/covid-19-trade-related-aspects-of-intellectual-property-rights-trips-waiver/.

Baumgartner, Frank R., and Bryan D. Jones. 1993. *Agendas and Instability in American Politics*. Chicago: University of Chicago Press.

Bowen, Glenn A. 2009. "Document Analysis as a Qualitative Research Method." *Qualitative Research Journal* 9, no. 2: 27–40. https://doi.org/10.3316/QRJ0902027.

Brummer, Klaus, Sebastian Harnisch, Kai Oppermann, and Diana Panke. 2019. *Foreign Policy as Public Policy? Promises and Pitfalls*. Manchester: Manchester University Press.

Chawla, Kavita, and Priyamvada Singh. 2021. "COVID-19: How Credible Is the EU's Alternate Proposal to the Global IP Waiver?" *Wire*, June 22. https://thewire.in/trade/covid-19-eu-alternate-proposal-global-ip-waiver.

CONCORD. 2021. "Letter to Ursula von der Leyen: Call for Equitable Vaccine Drive." February 15. https://concordeurope.org/2021/02/15/open-letter-to-ursula-von-der-leyen-for-an-equitable-vaccine-approach/.

Correa, Carlos M. 2021. "Expanding the Production of COVID-19 Vaccines to Reach Developing Countries: Lift the Barriers to Fight the Pandemic in the Global South." South Centre, April. https://www.southcentre.int/wp-content/uploads/2021/04/PB-92.pdf.

Dalglish, Sarah L., Hina Khalid, and Shannon A. McMahon. 2021. "Document Analysis in Health Policy Research: The READ Approach." *Health Policy and Planning* 35, no. 10: 1424–31. https://doi.org/10.1093/heapol/czaa064.

European Commission. 2020a. "Joint Op-Ed on the Global Response against Coronavirus." May 3. https://ec.europa.eu/commission/presscorner/detail/mt/ac_20_795.

European Commission. 2020b. "Von der Leyen on Coronavirus Global Response." May 5. https://ec.europa.eu/commission/presscorner/detail/en/ac_20_811.

Feichtner, Isabel. 2011. *The Law and Politics of WTO Waivers: Stability and Flexibility in Public International Law*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9781139003346.

FM't Hoen, Ellen, Jacquelyn Veraldi, Brigit Toebes, and Hans V. Hogerzeil. 2018. "Medicine Procurement and the Use of Flexibilities in the Agreement on Trade-Related Aspects of Intellectual Property Rights, 2001–2016." *Bulletin of the World Health Organization* 96, no. 3: 185–93. http://dx.doi.org/10.2471/BLT.17.199364.

G20 (Group of Twenty). 2020. "G20 Leaders' Summit—Statement on COVID-19: 26 March 2020." March 26. https://www.gov.uk/government/news/g20-leaders-summit-statement-on-covid-19-26-march-2020.

Gates, Bill. 2020. "Here's How to Make Up for Lost Time on Covid-19." *Washington Post*, April 1. https://www.washingtonpost.com/opinions/bill-gates-heres-how-to-make-up-for-lost-time-on-covid-19/2020/03/31/ab5c3cf2-738c-11ea-85cb-8670579b863d_story.html.

George, Erika. 2011. "The Human Right to Health and HIV/AIDS: South Africa and South-South Cooperation to Reframe Global Intellectual Property Principles and Promote Access to Essential Medicines." *Indiana Journal of Global Legal Studies* 18, no. 1: 167–97. https://doi.org/10.2979/indjglolegstu.18.1.167.

Ghebreyesus, Tedros. 2020. "Address by Dr. Tedros Adhanom Ghebreyesus, Director-General." World Health Organization, May 18. https://apps.who.int/iris/handle/10665/355456.

Ghebreyesus, Tedros. 2021. "WHO Director-General's Opening Remarks at the 2021 SADC Seminar on TRIPS Waiver." World Health Organization, November 23. https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-2021-sadc-seminar-on-trips-waiver---23-november-2021.

Ghosh, Jayati, Joseph Stiglitz, and Peter Kamalingin. 2022. Letter to President Ramaphosa. March 21. https://healthjusticeinitiative.org.za/wp-content/uploads/2022/03/Letter-to-President-Ramaphosa-from-Stiglitz-Ghosh_220322_172652-1.pdf.

Global Counsel. 2021. "Reviving the Multilateral Trading System." October 1. https://vimeo.com/619940719.

Goyal, Shri Piyush. 2022. "Statement by Shri Piyush Goyal during the WTO 12th Ministerial Conference at the Meeting with Co-Sponsors of TRIPS Waiver." June 14. https://pib.gov.in/PressReleasePage.aspx?PRID=1834066.

Green, Andrew. 2021. "Where Are We on COVID-19 after a Year of TRIPS Waiver Negotiations?" Devex, October 7. https://www.devex.com/news/sponsored/where-are-we-on-covid-19-after-a-year-of-trips-waiver-negotiations-101795.

Green-Pedersen, Christoffer, and Stefaan Walgrave, eds. 2014. *Agenda Setting, Policies, and Political Systems: A Comparative Approach*. Chicago: University of Chicago Press.

Greer, Scott L., Ana B. Amaya, Holly Jarman, Helena Legido-Quigley, and Martin McKee. 2022. "Regional International Organizations and Health: A Framework for Analysis." *Journal of Health Politics, Policy and Law* 47, no. 1: 63–92. https://doi.org/10.1215/03616878-9417456.

Haugen, Hans Morten. 2021. "Does TRIPS (Agreement on Trade-Related Aspects of Intellectual Property Rights) Prevent COVID-19 Vaccines as a Global Public Good?" *Journal of World Intellectual Property* 24, nos. 3–4: 195–220. https://doi.org/10.1111/jwip.12187.

Hawkins, Benjamin, and Chris Holden. 2016. "A Corporate Veto on Health Policy? Global Constitutionalism and Investor–State Dispute Settlement." *Journal of Health Politics, Policy and Law* 41, no. 5: 969–95. https://doi.org/10.1215/03616878-3632203.

Hilty, Reto, Pedro Henrique D. Batista, Suelen Carls, Daria Kim, Matthias Lamping, and Peter R. Slowinski. 2021. "Covid-19 and the Role of Intellectual Property." Max Planck Institute for Innovation and Competition, Position Statement, May 7. https://www.ip.mpg.de/fileadmin/ipmpg/content/stellungnahmen/2021_05_25_Position_statement_Covid_IP_waiver.pdf.

Hu, Tiffany. 2021. "WTO Panel Debates EU's Alternative to IP Waiver Proposal—Law360." June 24. https://www.law360.com/articles/1397412/wto-panel-debates-eu-s-alternative-to-ip-waiver-proposal.

ITUC (International Trade Union Confederation). 2021. "Large Expansion in Vaccine Production and Equitable Distribution Are Vital." January 3. https://www.ituc-csi.org/large-expansion-in-vaccine.

ITWF (International Transport Workers Federation). 2021. "No One Is Safe until We Are All Safe." October 14. https://tripswaiver.itfglobal.org/.

Jerving, Sara. 2022a. "Without Shared Tech, South Africa's MRNA COVID-19 Jab Faces 2-Year Lag." Devex, February 4. https://www.devex.com/news/sponsored/without-shared-tech-south-africa-s-mrna-covid-19-jab-faces-2-year-lag-102603.

Jerving, Sara. 2022b. "Moderna's Patents Stand in Way of MRNA Vaccine Hub's Grand Vision." Devex, April 21. https://www.devex.com/news/sponsored/moderna-s-patents-stand-in-way-of-mrna-vaccine-hub-s-grand-vision-103055.

Jones, Bryan D., and Frank R. Baumgartner. 2005. *The Politics of Attention: How Government Prioritizes Problems*. Chicago: University of Chicago Press.

Kapczynski, Amy. 2022. "The Political Economy of Market Power in Pharmaceuticals." *Journal of Health Politics, Policy and Law* 48, no. 2: 215–39. https://doi.org/10.1215/03616878-10234184.

Kavanagh, Matthew M., and Renu Singh. 2023. "Vaccine Politics: Law and Inequality in the Pandemic Response to COVID-19." *Global Policy* 14, no. 2: 229–46. https://doi.org/10.1111/1758-5899.13203.

Kingdon, John W. 1995. *Agendas, Alternatives, and Public Policies*. 2nd ed. New York: HarperCollins.

Lawder, David. 2021. "World Bank Opposes Vaccine Intellectual Property Waiver as WTO Talks Resume." Reuters, June 8. https://www.reuters.com/business/healthcare-pharmaceuticals/world-bank-chief-says-does-not-support-vaccine-intellectual-property-waiver-wto-2021-06-08/.

Love, James. 2022. "The June 17, 2022 WTO Ministerial Decision on the TRIPS Agreement." *Knowledge Ecology International*, June 17. https://www.keionline.org/37830.

Lukes, Steven. 2021. *Power: A Radical View*. 3rd ed. London: Bloomsbury Academic.

Lynch, Julia. 2020. *Regimes of Inequality: The Political Economy of Health and Wealth*. Cambridge: Cambridge University Press.

Martin, Cecilia, and Drew Lowery. 2020. "MRNA Vaccines: Intellectual Property Landscape." *Nature Reviews Drug Discovery*, July 28. https://doi.org/10.1038/d41573-020-00119-8.

Mathieu, Edouard, Hannah Ritchie, Esteban Ortiz-Ospina, Max Roser, Joe Hasell, Cameron Appel, Charlie Giattino, and Lucas Rodés-Guirao. 2021. "A Global Database of COVID-19 Vaccinations." *Nature Human Behaviour* 5, no. 7: 947–53. https://doi.org/10.1038/s41562-021-01122-8.

Matthews, Duncan. 2004. "WTO Decision on Implementation of Paragraph 6 of the Doha Declaration on the Trips Agreement and Public Health: A Solution to the Access to Essential Medicines Problem?" *Journal of International Economic Law* 7, no. 1: 73–107. https://doi.org/10.1093/jiel/7.1.73.

Mintrom, Michael, and Jacqui True. 2022. "COVID-19 as a Policy Window: Policy Entrepreneurs Responding to Violence against Women." *Policy and Society* 41, no. 1: 143–54. https://doi.org/10.1093/polsoc/puab017.

Morin, Jean-Frédéric, and E. Richard Gold. 2010. "Consensus-Seeking, Distrust, and Rhetorical Entrapment: The WTO Decision on Access to Medicines." *European Journal of International Relations* 16, no. 4: 563–87. https://doi.org/10.1177/1354066110366054.

Murphy, Hannah, and Aynsley Kellow. 2013. "Forum Shopping in Global Governance: Understanding States, Business, and NGOs in Multiple Arenas." *Global Policy* 4, no. 2: 139–49. https://doi.org/10.1111/j.1758-5899.2012.00195.x.

Ney, Steven. 2012. "Making Sense of the Global Health Crisis: Policy Narratives, Conflict, and Global Health Governance." *Journal of Health Politics, Policy and Law* 37, no. 2: 253–95. https://doi.org/10.1215/03616878-1538620.

North, Douglass C. 1990. *Institutions, Institutional Change, and Economic Performance*. Cambridge: Cambridge University Press.

Open Consultants. 2022. "External Evaluation of the Access to COVID-19 Tools Accelerator (ACT-A)." October 10. https://www.who.int/publications/m/item/external-evaluation-of-the-access-to-covid-19-tools-accelerator-(act-a).

OWD (Our World in Data). 2022. "COVID-19 Data Explorer." https://ourworldindata.org/explorers/coronavirus-data-explorer (accessed July 10, 2023).

PhRMA (Pharmaceutical Research and Manufacturers of America). 2021. "PhRMA Statement on WTO TRIPS Intellectual Property Waiver." May 5. https://phrma.org/Coronavirus/PhRMA-Statement-on-WTO-TRIPS-Intellectual-Property-Waiver.

Quan, Nguyen Khoi, Nguyen Le My Anh, and Andrew W. Taylor-Robinson. 2023. "The Global COVID-19 Vaccine Surplus: Tackling Expiring Stockpiles." *Infectious Diseases of Poverty* 12, no. 1: 21. https://doi.org/10.1186/s40249-023-01070-7.

Quesada, Carlos Alvarado. 2020. Letter to Dr. Tedros Adhanom Ghebreyesus. March 23. https://www.keionline.org/wp-content/uploads/President-MoH-Costa-Rica-Dr-Tedros-WHO24March2020.pdf.

Rimmer, Matthew. 2022. "A Submission to the Senate Select Committee on COVID-19 on the TRIPS Waiver: Intellectual Property, Access to Essential Medicines, and the Coronavirus COVID-19." SSRN, July 25. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4169335.

Russell, Nathan. 2006. "An Introduction to the Overton Window of Political Possibilities." Mackinac Center for Public Policy, January 4. https://www.mackinac.org/7504.

Rutschman, Ana Santos. 2021. "Is There a Cure for Vaccine Nationalism?" *Current History* 120, no. 822: 9–14. https://doi.org/10.1525/curh.2021.120.822.9.

Sanders, Bernard, Elizabeth Warren, Tammy Baldwin, Sherrod Brown, Richard Blumenthal, Christopher S. Murphy, Jeffrey A. Merkley, Edward Markey, Chris Van Hollen, and Raphael Warnock. 2021. TRIPS Letter to President Biden. April 15. https://www.sanders.senate.gov/wp-content/uploads/SenateTRIPSletter4.15.21.pdf.

Schakowsky, Jan. 2021. "Members of Congress That Led Push for TRIPS Waiver Applaud Biden Administration Announcement." May 5. http://schakowsky.house.gov/media/press-releases/members-congress-led-push-trips-waiver-applaud-biden-administration.

Sell, Susan K. 2003. *Private Power, Public Law: The Globalization of Intellectual Property Rights*. Cambridge: Cambridge University Press.

Sell, Susan K., and Aseem Prakash. 2004. "Using Ideas Strategically: The Contest between Business and NGO Networks in Intellectual Property Rights." *International Studies Quarterly* 48, no. 1: 143–75. https://doi.org/10.1111/j.0020-8833.2004.00295.x.

Shiffman, Jeremy, and Yusra Ribhi Shawar. 2022. "Framing and the Formation of Global Health Priorities." *Lancet* 399, no. 10339: 1977–90. https://doi.org/10.1016/S0140-6736(22)00584-0.

Smith, Stephanie L., and Jeremy Shiffman. 2018. "The Politics of Global Health Agenda Setting." In *The Oxford Handbook of Global Health Politics*, edited by Colin McInnes, Kelley Lee, and Jeremy Youde, 325–45. Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780190456818.013.20.

Stiglitz, Joseph E. 2022. "The Patent System." *Washington Post*, May 27. https://www.washingtonpost.com/outlook/2022/05/27/spring-cleaning-2022-stoicism-biopics-sourdough/.

Tetteh, Ebenezer K. 2011. "Pharmaceutical Innovation, Fair Following, and the Constrained Value of TRIPS Flexibilities." *Journal of World Intellectual Property* 14, no. 2: 202–28. https://doi.org/10.1111/j.1747-1796.2010.00415.x.

Thambisetty, Siva, Aisling McMahon, Luke McDonagh, Hyo Yoon Kang, and Graham Dutfield. 2022. "Addressing Vaccine Inequity during the COVID-19 Pandemic: The TRIPS Intellectual Property Waiver Proposal and Beyond." *Cambridge Law Journal* 81, no. 2: 384–416. https://doi.org/10.1017/S0008197322000241.

TWN (Third World Network). 2021a. "Seven Countries Urge WTO DG to Hold Direct Talks with Big Pharma." March 11. https://www.twn.my/title2/wto.info/2021/ti210314.htm.

TWN (Third World Network). 2021b. "WTO-TRIPS Waiver: 'Third Way' Set to Reinforce Status Quo?" April 12. https://www.twn.my/title2/wto.info/2021/ti210405.htm.

TWN (Third World Network). 2021c. "WTO Members Agree to Text-Based Negotiations on Revised TRIPS Waiver." June 11. https://www.twn.my/title2/wto.info/2021/ti210606.htm.

UNAIDS (United Nations Joint Programme on HIV/AIDS). 2020. "Uniting behind a People's Vaccine against COVID-19." May 14. https://www.unaids.org/en/resources/presscentre/featurestories/2020/may/20200514_covid19-vaccine-open-letter.

UNICEF (United Nations Children's Fund). 2023. "COVID-19 Market Dashboard." https://www.unicef.org/supply/covid-19-vaccine-market-dashboard (accessed August 28, 2023).

Vidigal, Geraldo. 2021. "Loophole or Fire Alarm? The Consensus Requirement for the Appointment of Appellate Body Members and the Institutional Design of the WTO." *Legal Issues of Economic Integration* 48, no. 1: 67–94. https://doi.org/10.54648/leie2021005.

Vincent, Nicholas G. 2021. "TRIP-ing Up: The Failure of TRIPS Article 31bis." SSRN, March 18. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3778945.

Wenham, Clare, Matthew Kavanagh, Irene Torres, and Gavin Yamey. 2021. "Preparing for the Next Pandemic." *BMJ* 373: article ID n1295. https://doi.org/10.1136/bmj.n1295.

Wesley, Jared J. 2014. "The Qualitative Analysis of Political Documents." In *From Text to Political Positions: Text Analysis across Disciplines*, edited by Bertie Kaal, Isa Maks, and Annemarie van Elfrinkhof, 135–62. Amsterdam: John Benjamins Publishing.

Wheaton, Sarah. 2020. "Chinese Vaccine Would Be 'Global Public Good,' Xi Says." *Politico*, May 18. https://www.politico.com/news/2020/05/18/chinese-vaccine-would-be-global-public-good-xi-says-265039.

WHO (World Health Organization). 2020. "Solidarity Call to Action." May 29. https://www.who.int/publications/m/item/solidarity-call-to-action.

WTO (World Trade Organization). 1998. *Annual Report 1998*. https://www.wto.org/english/res_e/booksp_e/anrep_e/anre98_e.pdf (accessed August 28, 2023).

WTO (World Trade Organization). 2002. "Council Approves LDC Decision with Additional Waiver." June 28. https://www.wto.org/english/news_e/pres02_e/pr301_e.htm.

WTO (World Trade Organization). 2010. *Annual Report 2010*. https://www.wto.org/english/res_e/booksp_e/anrep_e/anrep10_e.pdf (accessed August 28, 2023).

WTO (World Trade Organization). 2019. *Annual Report 2019*. https://www.wto.org/english/res_e/booksp_e/anrep19_e.pdf (accessed August 28, 2023).

WTO (World Trade Organization). 2021a. "DG Calls on COVID-19 Vaccine Manufacturers to Increase Production in Developing Countries." March 9. https://www.wto.org/english/news_e/news21_e/dgno_09mar21_e.htm.

WTO (World Trade Organization). 2021b. "COVID-19 and Vaccine Equity: What Can the WTO Contribute?" April 14. https://www.wto.org/english/news_e/spno_e/spno7_e.htm.

WTO (World Trade Organization). 2022a. *Annual Report 2022*. https://www.wto.org/english/res_e/publications_e/anrep22_e.htm (accessed August 28, 2023).

WTO (World Trade Organization). 2022b. "WTO-IMF Vaccine Trade Tracker." May 31. https://www.wto.org/english/tratop_e/covid19_e/vaccine_trade_tracker_e.htm.

WTO (World Trade Organization). 2023. "Members Continue Discussion on TRIPS Decision Extension to Therapeutics and Diagnostics." March 17. https://www.wto.org/english/news_e/news23_e/heal_17mar23_e.htm.