# 10

# The WHO and the A1H1 Flu: Fine-tuning for Pandemic Responses

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## 10.1 INTRODUCTION

Traditional scholarship on international institutional law tells us that an organization, in principle, maintains relations only with its member states.[1] This follows a simple line of reasoning: if the legal personality of organizations is, in principle, subjective, then it is, in principle, opposable only to those who have accepted its existence as a matter of law – its members.[2] The life of international organizations, however, shows us that the legal fiction of subjectivity is imprecise as a matter of fact. Organizations routinely engage, affect or regulate activities in which *others* – either non-members or just third parties, public and private – are affected to a greater or lesser extent.[3]

One way of dealing with this nuance has been to relativize the form of engagement, that is, to distinguish between effects of institutional actions and other forms of direct legal relationships (such as procurement).[4] Affecting

[1] See, for example, H. G. Schermers and N. Blokker, *International Institutional Law: Unity within Diversity*, 5th ed. (Martinus Nijhoff, 2011), para 1687.

[2] J. Klabbers, *An Introduction to International Institutional Law*, 2nd ed. (Cambridge University Press, 2009), 38–39.

[3] In the field of financial regulation, for example, it has become commonplace for relevant organizations to regulate third-party activity. See, for example, Article 11(12) of EU Regulation 648/2012 related to derivatives contracts, which applies to 'third country entities'; or the OECD's Base Erosion and Profit Shifting (BEPS) Project whose scope of application far exceeds OECD membership, amongst others.

[4] The so-called Brussels Effect is a good example of this. See A. Bradford, *The Brussels Effect: How the European Union Rules the World* (Oxford University Press, 2020). It is also noteworthy that the EU has relied on this nuanced distinction for much of its regulation, e.g. through the 'qualified effects case' or the 'implementation test' in antitrust matters. See, e.g., case C-413/14 P, *Intel v. Commission*, ECLI:EU:C:2017:632.

third parties can then be theorized in terms which are not necessarily tied to membership, recognition or subjectivity, but rather in the language of political economy. In this way, it is not necessary to be blind to the different forms of transactions through which organizations exist and operate and can bring otherwise background tones to the forefront. It makes an inquiry into the extent to which the existence of international organizations – and all the different activities performed during the course of their operation – have the potential of reshuffling the costs and benefits of third parties possible. At the heart of this inquiry lies a tension between constituent powers and organizational teleology; between mission and market, so to speak.

To this end, in this chapter I undertake a case-study of the World Health Organization's ('WHO') handling of the 2009 'Swine' influenza pandemic ('A1H1 Pandemic'). The objective is to discuss some ways in which the WHO's response to the 2009 A1H1 Pandemic had powerful redistributive effects that can be theorised in the context of this tension between mission and market, in order to import notions of political economy which are legally meaningful. In this vein, Section 10.2 begins by framing the legal context under which the WHO and its different organs reacted to the A1H1 Pandemic. In Section 10.3, I discuss some of the concrete economic impacts of the discussions and decisions emanating from the WHO in order to contain the A1H1 influenza, followed by some of the backlash to these determinations in Section 10.4. In Section 10.5, I offer some remarks on the legacy of the WHO's handling of the A1H1 virus and its impact on the COVID-19 pandemic, while I make some broader conclusions on the topic in Section 10.6.

## 10.2 LEGAL CONTEXT

After the highly disruptive COVID-19 virus it might seem quaint to reflect on its distant cousin: the A1H1 Pandemic. After all, any comparison in death toll and economic loss reveals that both situations are in different orders of magnitude.[5] The relatively small scale of the A1H1 Pandemic, however, offers its own advantages: the more modest radiating effect of the health-related decision-making makes it a manageable case-study to reflect on its legacy for international institutional law.

[5] The WHO reports that the official death toll of the Swine Flu was 18,499 people, although latter studies suggest that the real number is closer to 200,000. See F. S. Dadwood et al., 'Estimated Global Mortality Associated with the First 12 Months of 2009 Pandemic Influenza A H1N1 Virus Circulation: A Modelling Study' (2012) 12 *The Lancet Infectious Diseases* 687.

There was already a long tradition of treaty-making in the field of public health before the World Health Organization's constitution entered into force on 7 April 1948.[6] The regime of 'international health law' has a history which points to similar anxieties to those we live with today, mostly rooted in the need for international cooperation from Western states to coordinate quarantine and isolating measures to protect themselves from 'Asiatic' diseases (such as cholera, plague or yellow fever).[7]

The drafting of the WHO constitution, however, did not follow the collaborative frameworks established by its predecessor, the International Sanitary Convention of 1926. It is worth noting that, before the WHO, international cooperation on public health issues was grounded on the International Sanitary Convention of 1926, a successor to the International Sanitary Convention of 1892. Interestingly, the language and different obligations enshrined in the Sanitary Convention already show a concern with the potentially disruptive effect that health measures can have on international trade. For example, Part II of the Convention deals only with special provisions related to regulatory measures in the Suez Canal. Instead, the drafters believed that the technical nature of disease control and prevention would permit harder mechanisms of enforcement which would not be prone to the arbitrariness of international politics and endowed the WHO with a 'quasi-legislative process that was, at the time of WHO's origins in the late 1940s, a radical approach to international law'.[8] Even by today's standards, the explicit, constitutional treaty-making capacity and mandatory regulatory powers that the WHO enjoys make it a comparatively powerful organization.

In addition to the broad powers vested in the WHO constitution, both the Director-General and the Executive Board enjoy far-reaching authority in cases of public health emergencies. Pursuant to Article 28(j) of the constitution, the Executive Board may:

[6] See J. E. Alvarez, *The Impact of International Organizations on International Law* (Martinus Nijhoff, 2017), 190–194.

[7] Ibid., 191.

[8] D. Fidler, 'The Future of the World Health Organization: What Role for International Law?' (1998) 31 *Vanderbilt Journal of Transnational Law* 1079, 1088. Fidler is referring to articles 21 and 22 of the WHO constitution, according to which the organization can adopt binding regulations on all of its members in five different areas: sanitary and quarantine requirements; disease nomenclature; international standards for diagnostic procedures; the safety of biological and pharmaceutical products; and the advertisement and labelling of relevant products in global trade. It is important to note that Fidler considers that the creation of the WHO represents a genuine break in the history of international public health by merging the collective security system of the UN with a human rights regime.

> take emergency measures within the functions and financial resources of the Organization to deal with events requiring immediate action. In particular it may authorize the Director-General to take the necessary steps to combat epidemics, to participate in the organization of health relief to victims of a calamity and to undertake studies and research the urgency of which has been drawn to the attention of the Board by any Member or by the Director-General.

These emergency powers should be read in conjunction with the International Health Regulations ('IHR') – a robust set of binding obligations related to the implementation of WHO actions – relied on during the A1H1 outbreak. The ambitious wording of the constitution, coupled with a tradition of teleological interpretation of its own powers, gives the WHO (and the Director-General in particular) some unusual and overarching regulatory capacity in the international arena.[9] The preamble of the WHO constitution is remarkably ambitious for its time. The final pre-ambulatory paragraph establishes that 'Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures'. For a document written in 1948, it contrasts with other attempts at internationalizing what was considered an essentially domestic matter, such as the regulation of non-international armed conflicts of common Article 3 to the Geneva Conventions or the Additional Protocol II adopted 30 years later. This is probably one of the most significant changes in the regime of international public health, as the Sanitary Conventions of 1926 or 1892 were only concerned with inter-State phenomena. Furthermore, most of the decisions emanating from the WHO and its organs tend to be about life and death, which has led to scholars referring to the Director-General as the 'second most difficult job in the world'.[10]

It is in this context that the WHO and its organs have the power to intervene in the international arena and directly bind 194 States of the world community. The pressure is significant and its recent history is riddled with claims of being constitutionally conservative,[11] historically neglectful of international

[9] Much of the criticism directed to the WHO is not based on the liberal interpretation of its constitutional powers bur rather the opposite: a perceived timidness to act to the fullest of its potential under a human rights paradigm. Fidler, for example, considers that '[s]ince 1948, the potential for international legal activity created by the WHO Constitution has remained untapped'. See Fidler, 'The Future', 1089; Alvarez, *The Impact*, 257.

[10] J. Klabbers, 'The Second Most Difficult Job in the World: Reflections on COVID-19' (2020) 11 *Journal of International Humanitarian Legal Studies* 270.

[11] Alvarez, *The Impact*, 198.

law[12] and with periods 'of decline, weak leadership, allegations of corruption at all levels, and paranoid defensiveness when any kind of external scrutiny was conducted'.[13]

It is thus safe to say that the WHO operates in a tense context. Its institutional architecture and organizational practices have made it prone to scathing critique. Moreover, the Director-General who was leading the Organization at the time of the A1H1 outbreak, Margaret Chan, had been elected and re-elected in a particularly controversial, drawn-out process.[14] It is in this context that the A1H1 flu arrived on stage in 2009: the first epidemic of the twenty-first century. In addition to the structural difficulties in operating the WHO to which I have alluded, it is noteworthy that this first pandemic occurred soon after the adoption of the IHR.[15] After decades of being called to adopt generic and binding regulations, the A1H1 outbreak made for an immediate test of the efficiency and impact of the newly adopted set of obligations pursuant to Articles 48 and 49 of the IHR which provide for the composition and procedure of Emergency Committees.[16]

In all these respects, the handling and decision-making at the WHO as a response to the A1H1 virus of 2009 represented a watershed moment in the history of international health policy and the organization itself. This importance of its response is not only marked by the suitability of the newly adopted IHR (in 2005) but due to the additional stress put on the technocratic vocation of the organisation. The WHO, as a model specialised agency of modern international law, was designed as if it were supposed to act above international politics and exclusively in the medical interest of the world community.

Yet the breadth of its mission and its constitutional powers have all too often remained unused. It is not just the failure to adopt any meaningful reform for over 70 years, but the coy approach to its 'hard' powers.[17] During its lifetime,

[12] Fidler, 'The Future', 1082.

[13] 'The Brundtland Era Begins' (1998) 351 *The Lancet* 381.

[14] H. Brown, 'And the Next Director-General of WHO Is . . .' (2006) 368 *The Lancet* 1757.

[15] The scope of application of the IHR is generic and not reserved for any specific disease, unlike any of its predecessors. Article 2 states: 'The purpose and scope of these Regulations are to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade.'

[16] D. Fidler, 'The Swine Flu Outbreak and International Law', *ASIL Insights*, 27 April 2009, www.asil.org/insights/volume/13/issue/5/swine-flu-outbreak-and-international-law#_edn1, accessed 23 August 2021.

[17] The power to make binding decisions at moments of urgency pursuant to Article 28(j) of the WHO constitution often gets compared to the powers that the Security Council has under chapter VII of the UN Charter. See, for example, Alvarez, *The Impact*, 198.

the WHO has witnessed the 'Asian' Flu of 1957, the 'Hong Kong' Flu of 1968, the 1976 'Swine Flu', the 1977 'Russian Flu', the 1997 'Avian Flu', as well as the 2009 'Swine Flu' and 2019 COVID pandemics. During all this time, however, the Organization had recourse to its powers under Article 19 of its constitution (the adoption of conventions within the scope of the organization) only once – for the adoption of the Framework Convention on Tobacco Control – and only twice adopted regulations pursuant to Article 21 with lacklustre effects,[18] until the IHR came to effect in 2007.[19]

All in all, it is fair to say that the WHO has not operationalized its powers to the full extent of its constitutional capacity.[20] The lofty ideal of placing technocracy above politics has never been fully realized and, in some cases, the opposite seems to be true.[21] This does not mean, however, that the softer forms of decision-making surrounding the WHO's participation in global pandemics do not have a powerful impact. The economic magnitude of pandemics highlights the astronomical stakes at which any related institutional decision can have. Indeed, it is estimated that, during the twentieth century, pandemic losses amounted to 0.7–4.8 per cent of the global GDP,[22] while pre-COVID (2019) modelling suggests that there was a 10 per cent

[18] A. Taylor, 'Controlling the Global Spread of Infectious Diseases: Toward a Reinforced Role for the International Health Regulations' (1997) 33 *Houston Law Review* 1327, 1341–1346.

[19] To be fair, there are good reasons to suspect that there have been some structural limitations to a broader role for the WHO, as illustrated by the failed attempt at getting an Advisory Opinion from the International Court of Justice on the legality of the use of nuclear weapons. In that case, the Court considered that '[t]he question put to the Court in the present case relates, however, not to the effects of the use of nuclear weapons on health, but to the legality of the use of such weapons in view of their health and environmental effects. Whatever those effects might be, the competence of the WHO to deal with them is not dependent on the legality of the acts that caused them. Accordingly, it does not seem to the Court that the provisions of Article 2 of the WHO Constitution, interpreted in accordance with the criteria referred to above, can be understood as conferring upon the Organization a competence to address the legality of the use of nuclear weapons, and thus in turn a competence to ask the Court about that.' On the other hand, this might very well be attributed to the high political stakes of the request rather than a conservative notion of the WHO's scope and constitution.

[20] Fidler, for example, considers '[t]he structural and public health reasons behind the need for international law, combined with WHO's historical neglect of international law, produce arguments that WHO should dramatically change its attitude toward international law'. See D. Fidler, 'International Law and Global Public Health' (1999) 1 *University of Kansas Law Review* 1, 57–58.

[21] See: M. Kavanagh, R. Singh and M. Pillinger, 'Playing Politics: The World Health Organization's Response to COVID-19', in S. Greer et al. (eds.), *Coronavirus Politics* (University of Michigan Press, 2021), 34.

[22] W. McKibbin and A. Sidorenko, 'Global Macroeconomic Consequences of Pandemic Influenza', https://cama.crawford.anu.edu.au/sites/default/files/publication/cama_crawford_anu_edu_au/2021-06/26_mckibbin_sidorenko_2006.pdf, accessed 25 August 2021.

chance that the average losses in this century will be more than $120 billion per year.[23]

It is in this context that the WHO's Executive Board and Director-General must make decisions that can, quite literally, make or break health-related firms.[24] This much seems to have been clear to the drafters of the IHR, which explicitly states as the purpose of the instrument (Article 2) to 'prevent, protect against, control and provide a public health response to the international spread of disease in *ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade*' (emphasis added). Coupled with the fact 'that international organizations, their structures, activities, and decisions generate distributive or redistributive effects',[25] it is worth asking: who wins and who loses when the WHO intervenes in pandemic scenarios?

In Section 10.3, I will address this question in the context of the 2009 A1H1 virus. There are a few reasons why this pandemic can provide some insight as a case-study. On the one hand, the events are recent enough to have unfolded under the purview of the 2005 IHR while, on the other hand, they are distant enough to permit some dispassionate critique. Considering the disruptive impact of the 2019 COVID-19 pandemic and the increased probability of health-related emergencies becoming more and more frequent,[26] it is a good moment to reflect on the political economy of institutional decision-making at this level.

## 10.3 THE WINNERS AND THE LOSERS

The redistribution of economic resources arising out of an institutional action, such as the WHO, is not necessarily a zero-sum game nor a win–win situation for the parties involved.[27] There are, nevertheless, manifest winners and losers

[23] A. El Turabi and Ph Saynish, 'Modelling the Economic Threat of Pandemics' (Commission on a Global Health Risk Framework for the Future, 2016), 113, www.nam.edu/GHRF, accessed 25 August 2021.

[24] The obvious example are pharmaceuticals, though the radiating effect of public health decisions – especially in pandemics – can affect any number of economic sectors (such as textile companies that produce facemask prime materials or digital start-ups who create apps for the tracking of a particular virus).

[25] Klabbers, 'The Second Most Difficult Job', 271.

[26] At least two human-made phenomena will contribute to the increased frequency of pandemics: global warming and land-use change. See R. Gibb et al., 'Zoonotic Host Diversity Increases in Human-Dominated Ecosystems' (2020) 584 *Nature* 398.

[27] In the history of economic ideas, it was after *The Wealth of Nations* that the case for a win–win trade approach overcame the mercantilist notion of zero-sum international trade. For a historic analysis, see S. Pincus, 'Rethinking Mercantilism: Political Economy, the British Empire, and

when the WHO intervenes in a public health crisis. Some of these can be safely presumed. For example, pharmaceutical companies that can produce the necessary vaccine to treat a given pandemic will typically be the winners. Tourism industries in general, and airlines in particular, usually have much to lose in cases of infectious disease outbreaks.

In the case of the 2009 A1H1 outbreak there is one obvious loser: the pigs. While the misnamed 'Swine Flu' indeed transferred from pigs to humans, contact with the animals was not a source of infection – pork was safe to eat.[28] As with other respiratory disease outbreaks (like COVID-19), the A1H1 virus mutated and spilled from an animal onto humans, which meant that infection was likely from contact with other humans who were hosting the mutated virus, not the pigs in which the virus had originally mutated.[29] Little did any of this matter when, for example, Egypt decided to slaughter all the pigs in its territory (roughly 300,000 animals), while Afghanistan quarantined the only pig in the country for two months.[30]

In addition to the pig and hog slaying, the pandemic characterization prompted some significant shifts in the global meat trade. Once the WHO declared the A1HI flu virus a public health emergency of international concern (later upgraded to 'Phase 6' pandemic), Russia, China, the Philippines, Kazakhstan, Ukraine, and Ecuador all banned pork imports from Mexico and the United States. The Food and Agriculture Organization (FAO) estimated that, during 2009, global trade of meat products dropped

the Atlantic World in the Seventeenth and Eighteenth Centuries' (2012) 69 *The William and Mary Quarterly* 3.

[28] The H1A1 virus, like other influenza A viruses, mutates from another animal (in this case a pig) to infect human beings. As such, pork was not the source of infection, but rather the humans (pig farmers) who hosted the original mutation. For a more technical overview, see: W. Shao et al., 'Evolution of Influenza A Virus by Mutation and Re-assortment' (2017) 18 *International Journal of Molecular Sciences* 1650.

[29] C. Parrish et al., 'Cross-Species Virus Transmission and the Emergence of New Epidemic Diseases' (2008) 72 *Microbiology and Molecular Biology Reviews* 457; C. H. Schmidt, 'Swine CAFOs & Novel H1N1 Flu: Separating Facts from Fears' (2009) 117 *Environmental Health Perspectives* A394.

[30] For an overview of the unnecessary slaughter of all Egyptian pigs, see S. Seef and A. Jeppsson, 'Is It a Policy Crisis or It Is a Health Crisis? The Egyptian Context: Analysis of the Egyptian Health Policy for the H1N1 Flu Pandemic Control' (2013) 14 *Pan African Medical Journal* 59. For his part, the director of the Kabul zoo, Aziz Gul Saqib, told Reuters that the pig had been unnecessarily quarantined only to quash the concern of zoo-goers who believed that the 'Swine Flu' could be contracted from swine. See P. Walker, 'Life Goes from Bad to Worse for Kabul's Only Pig', *The Guardian* (6 May 2009), www.theguardian.com/world/2009/may/06/kabul-pig-quarantined, accessed 27 August 2021.

by 4.8 per cent, while trade in pig meat contracted by 11.8 per cent.[31] Even though the FAO, WHO, and OIE (formerly the Office International des Epizooties, now the World Organization for Animal Health) went as far as to publish a joint statement in which they stated that '[i]nfluenza viruses are not known to be transmissible to people through eating processed pork or other food products derived from pigs . . . [p]ork and pork products, handled in accordance with good hygienic practices recommended by the WHO, Codex Alimentarius Commission and the OIE, will not be a source of infection,'[32] members of the WTO couched their pork-import bans in terms of sanitary and phytosanitary protection.[33] This drew immediate rebuke from the affected states, calling it lacking in 'legal or scientific basis', 'pointless' and otherwise contrary to international trade obligations.[34] Though China lifted its import ban on pork meat only a few months after, it did not continue to buy from foreign pig farmers at pre-A1H1 Pandemic volume, as it used this time to subsidise its domestic industry and stockpile large amounts of the produce.[35] In this sense, the A1H1 Pandemic afforded China the context it needed to increase its market share of pig meat.

But even if it is not a zero-sum game,[36] like an accordion, it must be squeezed on one end to produce sound at the other. It makes sense, then, to suspect that an import ban by the world's leading pig meat consumer *could* create a demand for alternative forms of animal produce. The impact of 'food

[31] 'Food Outlook: Global Market Analysis' (Food and Agriculture Organization, 2009), www.fao.org/3/ai482e/ai482e00.htm, accessed 27 August 2021. In the report, it argued that 'FAO's forecast for world pig meat trade points to a 7 percent contraction to 5.4 million tonnes in 2009, as consumer concerns related to a possible link between Influenza type A/H1N1 and swine flu are expected to depress import demand . . . International pig meat prices, which were relatively strong by the end of 2008, are expected to decline in 2009, largely reflecting a faltering global import demand. Apart from the recent outbreaks of diseases, the economic downturns, the imposition of non-tariff measures and a weakening of currencies in major import markets are all expected to drive international prices lower in 2009.'

[32] 'Joint FAO/WHO/OIE Statement on Influenza A(H1N1) and the Safety of Pork', www.oie.int/en/joint-fao-who-oie-statement-on-influenza-ah1n1-and-the-safety-of-pork/, accessed 27 August 2021.

[33] 'Summary of the Meeting of 23–24 June 2009', para 5, http://spsims.wto.org/en/SpecificTradeConcerns/View?ImsId=279, accessed 30 August 2021.

[34] These statements were made by the representatives of Mexico, the European Communities and the United States, respectively. See: 'Import Restrictions on Pork Products Relating to Influenza A/H1N1 – Extracts from SPS Committee Meeting Summary Reports', http://spsims.wto.org/en/SpecificTradeConcerns/View?ImsId=279, accessed 30 August 2021.

[35] 'China Lifts Import Ban on U.S., Canada, Mexico Pork', *Reuters* (1 December 2009), www.reuters.com/article/us-china-pork-idUSTRE5B00IW20091201, accessed 30 August 2021.

[36] For a recent study about win–win trade specifically with China, see D. Irwin, 'The Truth about Trade: What Critics Get Wrong about the Global Economy' (2016) 95 *Foreign Affairs* 84.

scares' in global supply chains, however, are much more disruptive than a model of perfect competition where one product can be replaced by a like-product. When demand for pork meat dropped, so did the demand for all associated agricultural products needed to maintain global pork trade (i.e., soybeans and corn used to feed hogs).[37] This meant that some grain-related commodity prices increased, affecting other meat industries that rely on the same commodities for feeding. In turn, this affected the global supply of live cattle, though its capacity to replace pork meat finally allowed it to increase its exports marginally and thus come out ahead from the A1H1 crisis.[38] On the other hand, for example, a recent outbreak of A1H1 flu made China once again restrict the import of certain foreign pork, and, in the process, save the Thai poultry industry from bankruptcy by increasing its exports by 60 per cent.[39]

Naturally, pharmaceutical companies came out ahead as well. Novartis, who produces the A1H1 Monovalent Vaccine, increased its stock price roughly by 24 per cent after the WHO declared the pandemic.[40] Roche, whose affiliated researchers participated in the WHO's declaration of the pandemic, saw an increase in stock price of 33 per cent.[41] GlaxoSmithKlein (GSK) – owner of the Pandemrix vaccine used for all A1H1 flu strains – saw its stock price rise by 26 per cent during the same time.[42] It is noteworthy that Pandemrix is a generic vaccine which was, in fact, patented in 2006, *before* the A1H1 influenza outbreak. Its use is only authorised once a pandemic has been officially declared by the WHO,[43] tying its financial dividends to the decisions of the seemingly technocratic Emergency Committee.[44] In this

[37] R. Johnson, 'Potential Farm Sector Effects of 2009 H1N1 "Swine Flu": Questions and Answers' (Congressional Research Service of the United States 2009), 10–11 https://sgp.fas.org/crs/misc/R40575.pdf, accessed 30 August 2021.

[38] W. Attanavich, B. McCarl and D. Bessler, 'The Effect of H1N1 (Swine Flu) Media Coverage on Agricultural Commodity' (2011) 33 *Applied Economic Perspectives and Policy* 241, 248.

[39] P. Tanakasempipat, 'Thai Chicken Exports to China Set to Rise amid Swine Fever Outbreak' *Reuters* (19 December 2019).

[40] Stock quotes taken from the Bloomberg website. See, www.bloomberg.com/quote/NOVN:SW, accessed 26 November 2021.

[41] See, www.bloomberg.com/quote/ROG:SW, accessed 26 November 2021.

[42] See, www.bloomberg.com/quote/GSK:US. Only in Europe, around 31 million people received a Pandemrix vaccine. See: I. Sample, 'Swine Flu Vaccine Can Trigger Narcolepsy, UK Government Concedes', *The Guardian* (19 September 2013), www.theguardian.com/society/2013/sep/19/swine-flu-vaccine-narcolepsy-uk.

[43] 'Pandemrix EPAR Summary for the Public', https://web.archive.org/web/20091015042718/http://www.emea.europa.eu/humandocs/Humans/EPAR/pandemrix/pandemrix.htm, accessed 31 August 2021.

[44] In its European Public Assessment Report, the European Medicines Agency considers that the risks of Pandemrix are outweighed by its benefits only in situations where the WHO has officially declared a pandemic. See, 'Assessment Report for Pandemrix', www.emea.europa.eu/humandocs/Humans/EPAR/pandemrix/pandemrix.htm, accessed 26 November 2021.

context, it is worth highlighting that Article 28(j) of the WHO constitution gave the Director-General far-reaching executive power to 'combat epidemics', though Article 12 and Article 49 of the 2005 IHR now allow him to declare a public health emergency of international concern upon consultations with its Emergency Committee.[45] In other words, the characterization of a health emergency as a pandemic triggers a cascade of events that enormously profits pharmaceutical companies that have developed and stocked the relevant vaccines (and in particular GSK with its patented Pandemrix), while leaving other firms on the losing side of the competition. One of GSK competitor's – Baxter International – saw the price of its stock contract roughly by 18 per cent during the time of the A1H1 Pandemic even though they were amongst the selected providers of A1H1 vaccines.[46]

In addition to the financial wins and losses, there are some other economic costs arising out of the WHO involvement in the A1H1 outbreak. Believing that the virus had originated in Mexico, its nationals suffered particularly bitter responses. China forced healthy Mexican residents and travellers into quarantine, while Chilean authorities refused to host Mexican football teams for international competitions.[47] Its national airline – AeroMéxico – was hit particularly hard by the pandemic, forcing its owners at the time to consider a merger with its rival, Mexicana.[48] Mexico, however, was not even in the top

[45] Two features stand out from this procedure: on the one hand, the IHR are binding on all members of the Organization, and, on the other hand, the Emergency Committee is composed of members appointed entirely by the Director-General.

[46] See, www.bloomberg.com/quote/ROG:BAX. Paul Flynn, a Labour MP lamented in the British Parliament that '[t]he [UK] Government bought 23.9 million doses of vaccine from drug manufacturer GlaxoSmithKline and five million from rival company Baxter. They are still smiling. The question remains, how powerful were the tentacles of the pharmas in the WHO. Who was calling the tune?', available at https://paulflynnmp.typepad.com/my_weblog/2010/01/. The market logic, however, cuts both ways – even though Baxter provided millions of vaccines to the UK, its shareholders saw their investment contract, probably due to the comparative disadvantage with other pharmaceutical companies. GSK not only stocks anti-pandemic drugs, but its research and development expertise includes the production of medicine for respiratory infectious diseases, while Baxter's expertise lies with kidney disease-related pharmaceuticals.

[47] M. Lacey and A. Jacobs, 'Even as Fears of Flu Ebb, Mexicans Feel Stigma', *The New York Times* (4 May 2009), www.nytimes.com/2009/05/05/world/asia/05china.html, accessed 31 August 2021.

[48] 'AeroMéxico announced in late Jun-09 that it has no immediate plans to merge with rival Mexicana, despite wide speculation that a deal was planned as a way for the airline to survive the catastrophic decline in tourism caused by the economic crisis and the flu outbreak'. See: 'AeroMéxico: A US Bank's Baby' *CAPA - Centre for Aviation* (3 July 2009), https://centreforaviation.com/analysis/reports/aeromexico—a-us-banks-baby-8249, accessed 31 August 2021.

10 countries of A1H1 infections per capita, and had fewer overall infections than the United States, Brazil or India.[49]

This general overview of the redistributive effects arising from the WHO involvement in the A1H1 Pandemic gives a good sense of the sort of directions that the relevant economic resources can take. It is a game in which billions of dollars, global market shares and nationalist stereotypes are up for grabs. Naturally, the affected parties do not go gently into the good night, and pushback to the different decisions generally ensues. I discuss this backlash in Section 10.4.

## 10.4 BACKLASHES

There are three broadly defined areas where the WHO's handling of the A1H1 Pandemic provoked some criticism: (1) issues with nomenclature; (2) issues with transparency; and (3) issues with the science.

The most pressing issue when the A1H1 virus broke was its problematic name. In a noble attempt to avoid stigmatization, the WHO purposely tried to avoid any connection with Mexico and instead attempted to find a generic name which could be closely associated with the disease: pigs.[50] Once the needless pig slaughter and transmission misinformation followed, the WHO renamed it to A1H1 influenza virus.[51] The economic and animal damage from the misnomer, however, was already significant, as the Chicago Board of Trade's futures price for lean hogs dropped nearly 15 per cent within a week of the 'Swine Flu' announcement, equivalent to roughly 7 million dollars in lost revenue.[52] Joseph Domenech, the chief veterinary officer at the FAO, further criticised Egypt's needless slaughter of pigs, by stating that '[t]his is one of the results of this strange way of defining the disease as a swine influenza. That's why the FAO and OIE are fighting to get that name changed because it's a totally undue focus on swine'.[53]

[49] 'ECDC Daily Update: Pandemic (H1N1) 2009' (European Centre for Disease Prevention and Control, 2010), https://reliefweb.int/sites/reliefweb.int/files/resources/F52C202A5DE3176A492576B600098FCA-Full_Report.pdf, accessed 1 September 2021.

[50] Attanavich et al., 'Effect of H1N1'.

[51] M. Enserink, 'Swine Flu Names Evolving Faster than Swine Flu Itself' (2009) 324 *Science* 871.

[52] 'Putting H1N1 Flu in Perspective, Detailing the Economic Impact', *National Hog Farmer* (11 May 2021), www.nationalhogfarmer.com/news/0511-H1N1-flu-economic-impact, accessed 1 September 2021.

[53] Ph Stewart, 'UN Agency Slams Egypt Order to Cull All Pigs', *Reuters*, 29 April 2009, www.reuters.com/article/idUSLT11250, accessed 1 September 2021.

The WHO learned its lesson from this hiccup. Pursuant to Articles 2 and 21 of the WHO constitution, the Organization has 'to establish and revise as necessary international nomenclatures of diseases' and has the power (through the Health Assembly) to adopt 'nomenclatures with respect to diseases, causes of death and public health practices'. In connection to this function and authority, the WHO produced the International Classification of Diseases (ICD, now in its 11th version). The related best practices for disease classification now explicitly forbid the use of geographical locations or animal species (such as 'Swine Flu' or 'Mexican Flu'),[54] in order to avoid negative consequences for trade and persons. The negative impact of the A1H1 misnomer, however, has left some important lessons which have affected future nomenclature procedures.[55]

In addition, some of the harshest criticism to the WHO's handling of the A1H1 Pandemic was related to the lack of transparency in its actions. Let us recall that the declaring of a public health emergency, and even more so when it gets upgraded to a pandemic, has some immediate economic effects.[56] To begin with, once a pandemic is declared, some stockpiled, generic vaccines for A1 strains of influenza are authorised for use. This is the case, for example, of GSK's Pandemrix vaccine.[57] And although the scientific community has been urging pharmaceutical companies to stock a broad range antiviral drugs,[58] large pharmaceutical companies like Pfizer have presumably taken a 'one bug, one drug' approach as pandemic-related vaccinations have little market once the crisis is held at bay.[59]

[54] 'World Health Organization Best Practices for the Naming of New Human Infectious Diseases', www.who.int/news/item/08-05-2015-who-issues-best-practices-for-naming-new-human-infectious-diseases, accessed 1 September 2021.

[55] Nomenclature procedures, mechanisms and databases are now designed to be able to respond to the sort of misnaming in the A1H1 scenario, which has also brought more scientific awareness. See F. Konings et al., 'SARS-CoV-2 Variants of Interest and Concern Naming Scheme Conducive for Global Discourse' (2021) 6 *Nature Microbiology* 821.

[56] In this specific case, the controversy surrounding the declaration of a pandemic was so extreme that it led to the unusual situation of the Council of Europe officially criticizing the World Health Organization, in what Deshman calls a case of 'horizontal review'. See A. Deshman, 'Horizontal Review between International Organizations: Why, How, and Who Cares about Corporate Regulatory Capture' (2011) 22 *European Journal of International Law* 1089.

[57] The marketing authorisation for Pandemrix has now expired and no renewal has been sought, presumably for lack of demand.

[58] See, for example, J. S. MacKenzie et al., 'The WHO Response to SARS and Preparations for the Future', in S. Knobler et al. (eds.), *Learning from SARS: Preparing for the Next Disease Outbreak* (National Academic Press, 2004), 42.

[59] E. Dolgin, 'The Race for Antiviral Drugs to Beat COVID: and the Next Pandemic' (2021) 592 *Nature* 340.

More noteworthy, though, is the relationship between the WHO's organs (especially the Director-General and the Executive Board) and the scientific community at large. After all, 'the WHO relies to a large extent on what may be called epistemic authority – the authority that comes from knowledge and experts',[60] who are all part of the same professional, academic and social circles. It should not come as a surprise, then, that many of the members of the Emergency Committee who gave green light for the pandemic declaration had previously and simultaneously worked with pharmaceutical companies that benefitted from the WHO's decisions. It is worth noting that the IHR Emergency Committee met on nine occasions from April 2009 to August 2010. Out of its 15 members, 4 declared a conflict of interest with pharmaceutical companies: (1) Professor Arnold Monto, who had consulted for GSK, Novartis, Roche, Baxter and Sanofi; (2) Dr John Wood, who consulted for Sanofi Pasteur, Novartis, the International Federation of Pharmaceutical Manufacturers and Associations, and Powdermed; (3) Professor Maria Zambon, whose lab at the British Health Protection Agency had received funding from Sanofi, Novartis, GSK, CSL and Baxter; and (4) Professor Neil Ferguson, who had consulted for Roche, Novartis, and GSK. None of these consultancies was remunerated for more than USD 10,000.

At the time, the Organization took the risky step of maintaining the identities of the members secret in order 'to protect the committee from outside influences'.[61] Notwithstanding, later investigations showed that 'some 13 of the 29 members of the review panel are members of the International Health Regulations itself and one is the chair of the Emergency Committee. To critics that might suggest a somewhat incestuous approach'.[62] This prompted a rare and strong-worded rebuke from the WHO, stating that '[t]he world is going through a real pandemic. The description of it as a fake is wrong and irresponsible. We welcome any legitimate review process that can improve our work'.[63]

[60] Klabbers, 'The Second Most Difficult Job', 277. For a more detailed account of the epistemic authority exercised by and through the WHO, see J. Klabbers, 'The Normative Gap in International Organizations Law: The Case of the World Health Organization' (2019) 16 *International Organizations Law Review* 272.

[61] D. Cohen and Ph Carter, 'WHO and the Pandemic Flu "Conspiracies"', (2010) 340 *British Medical Journal* 1274, 1278. In the time since, the WHO has made these names and conflict of interest statements public on their website.

[62] Ibid., 1279.

[63] 'Statement of the World Health Organization on Allegations of Conflict of Interest and "fake" Pandemic', https://apps.who.int/mediacentre/news/statements/2010/h1n1_pandemic_20100122/en/index.html, accessed 2 September 2021.

In addition, some significant criticism was levelled at the decision to raise the A1H1 outbreak from Phase 5 (sustained community transmission) to Phase 6 (pandemic phase). To begin with, by the time of this declaration (May 2009) only 61 deaths had been verified to have been caused by the A1H1 virus, which seemed trivial in comparison to the economic impact of the characterization.[64] To make matters worse, and after the WHO had been encouraging states to rely on a series of documents which outlined some pandemic preparedness guidelines, some member(s) of the Secretariat erased the relevant documents from the WHO's public information system and amended the definition of 'pandemic' to exclude a death-toll threshold.[65]

Both the Emergency Committee's findings and the new definition of Phase 6 – which relied exclusively in the geographical spread of the disease – were dispositive factors in the declaration of a pandemic. As pressure grew in the final months before the World Health Assembly's meeting for the WHO to revise its internal procedures in order to determine whether the declaration of the A1H1 Pandemic was in accordance with the Organization's policies, a review committee was convened to audit the decision-making process.[66] The review concluded, in its relevant parts, that '[a]though confidentiality represented an understandable effort to protect the members from external pressures, this paradoxically fed suspicions that the Organization had something to hide' and that there had been a '[l]ack of a sufficiently robust, systematic and open set of procedures for disclosing, recognizing and managing conflicts of interest among expert advisers. In particular, potential conflicts of interest among Emergency Committee members were not managed in a timely fashion by WHO'.[67] In relation to the conflict of interests, and the confusion over the definition of 'pandemic' and whether the declaration had satisfied the requirements of Phase 6, the review unequivocally stated that:

> Some commentators accused WHO of rushing to announce Phase 6 and suggested the reason was to enrich vaccine manufacturers, some of whose advance-purchase agreements would be triggered by the declaration of Phase 6. Far from accelerating the declaration of Phase 6, WHO delayed

[64] A. Kamradt-Scott, 'What Went Wrong? The World Health Organization from Swine Flu to Ebola', in A. Kruck, K. Oppernann and A. Spencer (eds.), *Political Mistakes and Policy Failures in International Relations* (Palgrave Macmillan, 2018), 199.

[65] Ibid.

[66] C. SooHoo, 'WHO to Revise Definition of Pandemic Phases amidst 2009 H1N1 Pandemic' (2009) 7 *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 117.

[67] 'Report of the Review Committee on the Functioning of the International Health Regulations (2005) in Relation to Pandemic (H1N1) 2009', 131–132, https://apps.who.int/gb/ebwha/pdf_files/WHA64/A64_10-en.pdf, accessed 1 September 2021.

> declaration until evidence of sustained community spread in multiple regions of the world was undeniably occurring. As far as the Review Committee can determine, no critic of WHO has produced any direct evidence of commercial influence on decision-making.[68]

Lastly, in relation to the science surrounding the A1H1 pandemic, it should be noted that the reference to pigs in the naming of the disease is the culprit for the relevant criticism. As discussed before, all trade-related concerns were grounded on the relationship between the A1H1 virus and swine, which was scientifically unrealistic.[69] Even though the IHR of 2005 includes an explicit awareness of the potential negative externalities of its executive decisions, markets react to WHO decisions far more sensitively than their institutional expectations.[70] The lack of scientific basis for these sanitary and phytosanitary concerns ultimately led to the issue being resolved: according to the WTO, partial resolution of this issue was communicated on 29 October 2020. Though no major trade irritants were reported at the WTO, the large gap between scientific evidence and phytosanitary restrictions imposed by China led some scholars to argue for a more robust WHO–WTO institutional collaboration.[71]

## 10.5 AFTERTHOUGHTS ON COVID-19

To talk about the WHO's role in global health crisis now seems to require a distinction between two epochs: pre-COVID-19 and post-COVID-19.[72] It is worthwhile recalling that the major constitutional changes to the WHO's executive powers came precisely before the A1H1 outbreak with the adoption

[68] Ibid., 133.

[69] 'Import Restrictions on Pork Products Relating to Influenza A/H1N1: Extracts from SPS Committee Meeting Summary Reports' (supra note 34); Schmidt, 'Swine CAFOs'.

[70] Article 2 of the IHR of 2005 reads in full: '[t]he purpose and scope of these Regulations are to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade'.

[71] See T. Mackey and B. Liang, 'Lessons from SARS and H1N1/A: Employing a WHO–WTO Forum to Promote Optimal Economic–Public Health Pandemic Response' (2012) 33 *Journal of Public Health Policy* 119.

[72] See S. Rana, 'Seismic Shifts: The COVID-19 Pandemic's Gendered Fault Lines and Implications for International Law' (2021) 39 *Australian Yearbook of International Law Online* 91; Y. Shany, 'The COVID-19 Pandemic Crisis and International Law: A Constitutional Moment, A Tipping Point or More of the Same', in M. Mbengue and J. d'Aspremont (eds.), *Crisis Narratives in International Law* (Martinus Nijhoff, 2021), 100; A. Peters, 'International Law between COVID-19 and the Next Pandemic' (2022) Research Paper No. 2022-18 *Max Planck Institute for Comparative Public Law & International Law*.

of the IHR – in particular, it granted the Director General with broad powers to handle emergencies – which were tested in 2015 with the Ebola outbreak.[73] In this sense, it was not in the context of institutional powers that the WHO's involvement in the COVID-19 crisis was different.

And yet different it was. The sheer scale of disruption of COVID-19 is on a different level of magnitude, with some models estimating a death toll between 12 and 22 million,[74] and an economic cost of 16 trillion.[75] Any other comparable emergency was either protracted (e.g. the AIDS pandemic which lasted for about 40 years) or medieval (e.g. the Bubonic Plague of the fourteenth century). Within modern health emergencies, there is no other comparable outbreak that required an institutional response of this scale.

The reactions to the WHO's declaration of the COVID-19 pandemic rang some familiar notes. As with previous outbreaks, the timing of the organization for the different phasic decisions was heavily criticized, though this time around the problem was with delay rather than prematurity, perhaps in deference to China.[76] This might well be a backlash from previous experiences – such as the A1H1 flu – where the organization seemed to have jumped the gun. In any event, an independent review organized by the WHO pursuant to the World Health Assembly's resolution 73.1 concluded that

> [T]he [WHO's] alert system does not operate with sufficient speed when faced with a fast-moving respiratory pathogen, that the legally binding IHR (2005) are a conservative instrument as currently constructed and serve to constrain rather than facilitate rapid action and that the precautionary principle was not applied to the early alert evidence when it should have been.[77]

Notwithstanding these critiques, it is important to remember that Article 2 of the IHR establishes that the Director-General must consider 'unnecessary interference with international traffic and trade' before making any determinations on the classification of an outbreak. In addition, as discussed in this

[73] M. Espinal et al., 'International Health Regulations, Ebola, and Emerging Infectious Diseases in Latin America and the Caribbean' (2018) 108 *American Journal of Public Health* S466.

[74] D. Adam, 'The Pandemic's True Death Toll: Millions More than Official Counts' (2022) 601 *Nature* 312.

[75] D. Cutler and L. Summers, 'The COVID-19 Pandemic and the $16 Trillion Virus' (2020) 324 *Journal of the American Medical Association* 1495.

[76] G. L. Burci, 'The Outbreak of COVID-19 Coronavirus: Are the International Health Regulations Fit for Purpose?', *EJIL: Talk!* (27 February 2020), ejiltalk.org, accessed 16 November 2022.

[77] 'COVID-19: Make It the Last Pandemic' (The Independent Panel for Pandemic Preparedness & Response), 26, https://theindependentpanel.org/, accessed 16 November 2022.

chapter, any decision made by the Director-General has an impressive radiating effect, from the capacity to bankrupt major international companies (such as commodity traders, airlines) to the immediate reshuffling of major financial resources.

Precisely because of the redistributive potential of its decisions, it is doubtful that the WHO will ever be able to react to an international crisis in a way which commentators will find entirely suitable and timely. In hindsight it might be possible to argue that it was too early with the A1H1 pandemic and too late with COVID-19, though striking the perfect balance while information rapidly flows will be an extremely difficult balancing act even after these experiences. To deepen this difficulty, it is worth remembering that, as a general rule, legal decision-making in international law relies on asymmetric information, multiple stakeholder sensitivity and general uncertainty.[78]

In this context, it is perhaps more pragmatic to reflect on the effects of this international health governance model and its implications, rather than the audacity of the organization and its Director-General in handling some of the most complex international emergencies of our time.

## 10.6 CONCLUSION

If the last 20 years of institutional practice of the WHO – and particularly during the COVID-19 pandemic – have taught us anything, it is perhaps that the theoretically powerful constitution of the Organization is exactly that: *theoretically* powerful. Even when expanding its mandate, the WHO has not resorted to its constitutional authority but rather to the 'undertaking of new tasks'.[79]

The A1H1 Pandemic, however, reveals an additional layer of this non-explicit exercise of authority. To be fair, both the infection rate, lethality and the economic impacts of the crisis look petty in comparison to the COVID-19 pandemic, or even the Ebola outbreak of 2014. But the disease does not need to have far-reaching or pandemic effects for the WHO to have a profound redistributive capacity. Regardless of the conclusions of the relevant reviews and audits, it is clear that the relationship between the WHO and third parties, in particular the private sector (mostly pharmaceutical companies), can muddy the ultimate purpose: safety for human life.

[78] See, e.g., F. Kratochwil, *The Status of Law in World Society* (Cambridge University Press, 2014).
[79] Alvarez, *The Impact*, 261.

The billions of dollars won and lost, the effects on human and animal life, as well as the WHO's self-awareness and administration in the wake of the A1H1 outbreak, show that seemingly small decisions in seemingly trivial places – such as the appointment of Emergency Committee members, or the definition of diseases and guidelines – have a real and lasting impact. If, indeed as we expect, pandemics will become more frequent and more devastating, then some thought and critique into the relevant institutional decision-making seems warranted. It is important not to forget that some of the questionable effects of the WHO decisions are entirely unintentional, inviting us to ponder whether piling onto the logistical challenges imposed by world-wide pandemics may be curbed or avoided entirely.[80]

This presents us with a choice. We can either commit to an institutional theory that cannot account for the full picture of the entanglement between organizations and the world or we can theorize about these relationships in a way that is not blind to the arrangements and organizational practices that ultimately affect third parties. Considering the sort of technocratic expertise and impeccable political shrewdness that we expect from the WHO civil servants, it might come in handy to conceive their work in a context that does justice to tension between their mission and their markets.

[80] Perhaps one of the most straightforward ways to avoid conflicts of interests between pharmaceutical companies and public health management is to restrict the patenting of pandemic vaccines, in the same vein that Jonas Salk – the inventor of the Polio vaccine – asked 'could you patent the sun?' See J. Smith, *Patenting the Sun: Polio and the Salk Vaccine* (Morrow, 1990).