

ARTICLE

WHO SHOULD BE LIABLE FOR THE COVID-19 OUTBREAK?

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I. INTRODUCTION

In late December 2019, the first cases of COVID-19, a respiratory illness caused by a new strain of coronavirus, officially known as SARS-CoV-2, were reported in Wuhan, the capital city of the Hubei province in the People's Republic of China ("PRC").¹ The outbreak was linked to a local wet market, and scientists have hypothesized that the virus originated in bats and possibly jumped to humans from intermediate hosts (such as pangolins).² Within weeks, the virus rapidly spread across the world, wreaking health and economic havoc. Governments have been trying to cope with the implications, pursuing a delicate balance between the protection of lives and livelihoods. Yet the numbers of confirmed cases and deaths are still on the rise. The global economic impact caused by the uncertainty, by government restrictions on economic activity, and by consumer sentiment is already estimated in the trillions of dollars as businesses collapse and millions have lost their jobs.³

Naturally, direct and indirect victims may seek redress for their physical, economic, and emotional losses. This Article is the first to systematically and critically evaluate the potential liability of various "suspects" along the causal chain, as depicted in Figure 1. It concludes that existing legal frameworks fail to provide an appropriate solution for victims, primarily because any of the potential defendants can easily evade liability. The Article then proposes a new hybrid regime, inspired by the international framework for the compensation of victims of nuclear incidents and by the September 11th Victim Compensation Fund.

¹ See Nectar Gan et al., *Beijing Tightens Grip Over Coronavirus Research, Amid US-China Row on Virus Origin*, CNN (Apr. 16, 2020), <https://edition.cnn.com/2020/04/12/asia/china-coronavirus-research-restrictions-intl-hnk/> [<https://perma.cc/8SJP-FG4A>]; Hannah Osborne, *Coronavirus Outbreak May Have Started as Early as September, Scientists Say*, NEWSWEEK (Apr. 17, 2020), <https://www.newsweek.com/coronavirus-outbreak-september-not-wuhan-1498566> [<https://perma.cc/X2HR-L5JQ>].

² See Kristian G. Andersen et al., *The Proximal Origin of SARS-CoV-2*, 26 NATURE MED. 450, 450 (2020); David Cyranoski, *Did Pangolins Spread the China Coronavirus to People?*, NATURE (Feb. 7, 2020), <https://www.nature.com/articles/d41586-020-00364-2> [<https://perma.cc/NZ5N-NESL>].

³ See, e.g., Emily Cochrane, *Coronavirus to Shave Trillions from the Economy Over 10 Years*, N.Y. TIMES (June 1, 2020), <https://www.nytimes.com/2020/06/01/us/politics/coronavirus-economy.html> [<https://perma.cc/MD5E-PWDS>]; Tiffany Hsu, *Sobering Jobs Outlook: 'We're Expecting a Long Haul.'* N.Y. TIMES (June 11, 2020), <https://www.nytimes.com/2020/06/11/business/economy/unemployment-claims-coronavirus.html> [<https://perma.cc/GXH6-TCSE>].

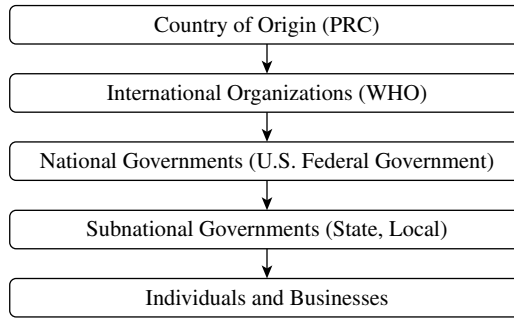


FIGURE 1. THE CAUSAL CHAIN

A pandemic can start due to purely natural causes, such as mutations in viruses or bacteria that have already been circulating among humans, or due to acts or omissions, such as the mishandling or consumption of animals carrying new strains of viruses which are transmissible to and between humans.⁴ Individuals playing the tragic role of pandemic catalysts cannot always be identified, and even where identifiable they are rarely at fault and cannot cover more than a minuscule fraction of the resulting harm. Therefore, the first conceivable defendant in the causal chain is the entity responsible for the prevention of and initial response to the outbreak at ground zero, usually the country in which the first case was diagnosed. In the case of SARS-CoV-2, the country of origin is the PRC. Negligent or reckless preparation for an outbreak or handling of the early cases might be the spark that ignites the fire.

The next link in the chain is international organizations responsible for gathering and disseminating information and providing professional advice, most notably the World Health Organization (“WHO”). The manner in which international organizations carry out their responsibilities has a considerable impact on global information flow, collaboration, and support, and on the development and implementation of national policies. Governments across the world, national and subnational, then take measures to contain the spread and mitigate its consequences while keeping the economy alive. Negligently crafted or implemented response schemes might cause or exacerbate losses. Lastly, individuals and businesses who fail to comply with governmental guidelines and general standards of conduct might increase the prevalence of confirmed cases, severe illness, and death, and contribute to the introduction of stricter measures resulting in further economic losses.

The Article follows this causal chain. Part II discusses the possible claims against the PRC, showing that plaintiffs need to overcome insurmountable legal and practical obstacles, including foreign state immunity

⁴ Adam Felman, *What to Know About Pandemics*, MED. NEWS TODAY (Mar. 30, 2020), <https://www.medicalnewstoday.com/articles/148945> [<https://perma.cc/B4KL-JWRS>].

under the Foreign Sovereign Immunities Act,⁵ difficulties in establishing fault and causation, and the inability to execute any ensuing judgment. Part III turns to the WHO, which seems to enjoy a comparable immunity under the International Organizations Immunity Act,⁶ and possibly an even broader immunity under the Convention on the Privileges and Immunities of the Specialized Agencies.⁷ Apart from this challenge, plaintiffs will once again face difficulties in proving fault and causation and in trying to enforce judgments. Part IV examines possible lawsuits against federal, state, and local governments and officials. It concludes that these too are unlikely to succeed, primarily due to the applicability of different versions of the discretionary function doctrine, but also because of difficulties in establishing duty, fault, and causation, and the common law's reluctance to impose liability for pure economic losses. Part V analyzes the problems with tort actions against businesses and healthcare professionals.

The underlying assumption in the analysis is that any knowledge about the virus, its spread and virulence, and the possible effect of different containment, delay, and mitigation measures is gradually accumulating and far from being complete. Thus, the Article will not make any conclusive factual allegations and will focus primarily on legal arguments and challenges likely to arise. Following this analysis, Part VI proposes a new hybrid international-domestic regime. The proposal builds on the international framework for the compensation of victims of nuclear incidents, which was enhanced in the aftermath of the Chernobyl disaster, and on the September 11th Victim Compensation Fund. It is designed with three goals in mind: (1) fair compensation; (2) deterrence; and (3) promotion of international cooperation.

II. COUNTRY OF ORIGIN

A. *Possible Claims*

1. *Causes of Action*

The first class action against the PRC, some of its agencies, and local governmental bodies for harms resulting from the COVID-19 outbreak was brought in Florida on March 12, 2020.⁸ The Florida plaintiffs were not infected by SARS-CoV-2 but incurred financial losses due to domestic response measures. This action, as opposed to the one brought in Texas only a

⁵ 28 U.S.C. §§ 1602–11.

⁶ 22 U.S.C. §§ 288–288*l*.

⁷ Nov. 21, 1947, 33 U.N.T.S. 261.

⁸ Class Action Complaint, *Alters v. People's Republic of China*, No. 1:20-cv-21108 (S.D. Fla. Mar. 12, 2020); Tyler Olson, *Class-Action Suit Seeks to Bill China for Coronavirus Fallout*, FOX NEWS (Mar. 25, 2020), <https://www.foxnews.com/politics/class-action-suit-seeks-to-make-china-pay> [<https://perma.cc/Y6VK-FFEJ>].

few days later,⁹ was said to transcend politics, as the two firms involved have strong ties on both sides of the aisle.¹⁰ Class actions making similar allegations were soon brought in more U.S. states¹¹ and other countries.¹² Additional lawsuits against the PRC were brought by individual non-class plaintiffs¹³ and even by two states.¹⁴

Relevant causes of action usually require fault. To begin with, liability for physical harm can be imposed under the tort of negligence when four conditions are met: the defendant owed a duty of care to the plaintiff, the defendant breached that duty by failing to take reasonable care, the plaintiff incurred harm, and the defendant's breach was the cause of the plaintiff's harm.¹⁵ If the injury results in death, the direct victim's dependents may bring a wrongful death action for their resulting economic losses,¹⁶ and such actions have previously prevailed even when brought against foreign governments.¹⁷

Emotional harm may be recoverable under the tort of intentional infliction of emotional distress ("IIED") upon proof of four elements: extreme or outrageous conduct, intention or recklessness, severe emotional harm, and a causal link between the conduct and the harm.¹⁸ As per the first requirement,

⁹ Complaint, *Buzz Photos v. People's Republic of China*, No. 3:20-cv-00656 (N.D. Tex. Mar. 17, 2020). The lawsuit was filed by a conservative organization, Freedom Watch, and alleged that the PRC created SARS-CoV-2 as a biological weapon.

¹⁰ See Olson, *supra* note 8.

¹¹ See Shannon Roddel, *Lawsuits Against China, WHO Are Not the Way Forward*, *Expert Says*, NOTRE DAME NEWS (May 27, 2020), <https://news.nd.edu/news/lawsuits-against-china-who-are-not-the-way-forward-expert-says/> [<https://perma.cc/B5LU-FXNE>]; Asher Stockler, *At Least Four Class-Action Suits Filed Against China, Seeking Trillions over Coronavirus Outbreak in U.S.*, NEWSWEEK (Apr. 16, 2020), <https://www.newsweek.com/china-class-action-lawsuits-covid-19-1498400> [<https://perma.cc/5KEK-PVYL>].

¹² *E.g.*, Class Action (DC TA) 53469-03-20 Herzliya for Its Residents Assoc. v. People's Republic of China (May 14, 2020) (Isr.).

¹³ *E.g.*, Complaint, *Smith v. People's Republic of China*, No. 2:20-cv-01958 (E.D. Pa. Apr. 20, 2020).

¹⁴ Complaint, *Mississippi v. People's Republic of China*, No. 1:20-cv-00168 (S.D. Miss. May 12, 2020); *Missouri ex rel. Schmitt v. People's Republic of China*, No. 1:20-cv-00099 (E.D. Mo. Apr. 21, 2020).

¹⁵ See John C.P. Goldberg & Benjamin C. Zipursky, *The Restatement (Third) and the Place of Duty in Negligence Law*, 54 VAND. L. REV. 657, 658–59 (2001). *But cf.* RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL AND EMOTIONAL HARM §§ 3, 6–7 (AM. L. INST. 2010) (restructuring the tort, using lack of duty as a defense rather than an element).

¹⁶ See Ronen Perry, *Relational Economic Loss: An Integrated Economic Justification for the Exclusionary Rule*, 56 RUTGERS L. REV. 711, 717 n.18 (2004) (surveying wrongful death legislation).

¹⁷ See, e.g., *Aldy v. Valmet Paper Mach.*, 74 F.3d 72, 75 (5th Cir. 1996) (allowing wrongful death claims against the manufacturer of the machine that caused death, although it was then owned by Finland); *Olsen v. Gov't of Mexico*, 729 F.2d 641, 643–44 (9th Cir. 1984) (permitting a wrongful death action for negligent piloting of an aircraft owned and operated by the Mexican government); *Stethem v. Islamic Republic of Iran*, 201 F. Supp. 2d 78, 80–81 (D.D.C. 2002) (entering judgment against Iran for training and supporting Hizballah hijackers of an American airliner); *Weinstein v. Islamic Republic of Iran*, 184 F. Supp. 2d 13, 15–16 (D.D.C. 2002) (same).

¹⁸ See RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL AND EMOTIONAL HARM § 46 (AM. L. INST. 2012); RESTATEMENT (SECOND) OF TORTS § 46 (AM. L. INST. 1965); see

the defendant's conduct must be "so outrageous in character, and so extreme in degree, as to go beyond all possible bounds of decency, and to be regarded as atrocious, and utterly intolerable in a civilized community."¹⁹ The severity-of-harm requirement might also be an insurmountable obstacle,²⁰ especially in the few jurisdictions that require culmination in bodily harm.²¹ Furthermore, in some jurisdictions, IIED is considered a "gap-filler" tort, enabling recovery in "those rare instances in which a defendant intentionally inflicts severe emotional distress in a manner so unusual that the victim has no other recognized theory of redress."²² If the gravamen of the claim is a wrong that another cause of action was meant to cover, IIED cannot be employed, whether or not the plaintiff also relies on the other cause of action.²³

A related tort is negligent infliction of emotional distress ("NIED"). In most jurisdictions, a plaintiff relying on this theory must establish serious emotional harm and prove that the defendant placed him or her in danger of immediate bodily harm and that the emotional harm resulted from the physical danger.²⁴ The severity-of-harm threshold may hinder liability for NIED in many cases, as it does with respect to IIED. In the context of COVID-19, the requirement of immediate physical danger, known as the "zone of danger" test, might limit liability to cases of exposure to a real risk of illness.²⁵

In conclusion, to bring an action in tort against the PRC and its agencies, the first analytical step would usually be proof of fault (with one noteworthy exception).²⁶ Plaintiffs may seek to establish one or two of the following types of fault. The first is negligence or even recklessness in failing to prevent the outbreak and contain it at the initial stages. The second is negligence, recklessness, or even intent in providing false or inaccurate information, withholding important data, suppressing independent reporting, or refusing to collaborate with the international community. Claims based on "informational wrongs" appear to have much greater evidentiary support

also *Wal-Mart Stores, Inc. v. Canchola*, 121 S.W.3d 735, 740–41 (Tex. 2003); *Morgan v. Anthony*, 27 S.W.3d 928, 929 (Tex. 2000).

¹⁹ RESTATEMENT (SECOND) OF TORTS § 46 cmt. d (AM. L. INST. 1965); see also *Howell v. N.Y. Post Co.*, 612 N.E.2d 699, 702 (N.Y. 1993) ("[O]f the intentional infliction of emotional distress claims considered by this Court, every one has failed because the alleged conduct was not sufficiently outrageous." (citations omitted)).

²⁰ See *Shira Auerbach*, Note, *Screening out Cyberbullies: Remedies for Victims on the Internet Playground*, 30 CARDOZO L. REV. 1641, 1670–71 (2009).

²¹ See, e.g., *Engel v. Buchan*, 791 F. Supp. 2d 604, 609–10 (N.D. Ill. 2011) (noting that Missouri law requires a plaintiff to prove bodily harm to recover for IIED).

²² *Hoffmann-La Roche, Inc. v. Zeltwanger*, 144 S.W.3d 438, 447 (Tex. 2004).

²³ See *id.* at 447–48.

²⁴ See RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL AND EMOTIONAL HARM § 47 & cmt. b (AM. L. INST. 2012).

²⁵ *Id.* § 47 cmt. e (using the example of emotional harm incurred by "passengers in an apparently doomed aircraft"); see also *Mark P. Henriques et al., General Liability Considerations and Potential Exposure in Reopening from COVID-19 Shutdown*, NAT'L L. REV. (May 1, 2020), <https://www.natlawreview.com/article/general-liability-considerations-and-potential-exposure-reopening-covid-19-shutdown> [<https://perma.cc/6GDD-BZG3>] (discussing variance with respect to business reopening regulations).

²⁶ See *infra* notes 58–67 and accompanying text for a discussion of the exception.

and legal merit than those based on alleged fault in the prevention and containment of the outbreak and will, therefore, be discussed first.

2. *Information Flow*

The PRC has already been accused of withholding critical information from the international community during the SARS outbreak in 2002. The first case of SARS was documented in mid-November 2002, but the PRC officially informed the WHO about the outbreak only in February 2003.²⁷ Initially, Chinese officials said that “the epidemic had infected about 300 people and had petered out in February,” but they admitted in March that more than eight hundred were infected by the end of February 2003.²⁸ Similar disinformation patterns have been attributed to the PRC in the course of the COVID-19 outbreak.

First, as confirmed by a Five Eyes intelligence report made public in early May 2020, the PRC suppressed evidence about (1) the very existence of SARS-CoV-2 and (2) its human-to-human transmission.²⁹ The first human-to-human transmission apparently occurred on December 6, 2019,³⁰ but the PRC did not admit the existence of a novel coronavirus until January 9, 2020³¹ and did not publicly confirm human-to-human transmission until January 20, 2020.³² Moreover, it deliberately destroyed relevant evidence. Specifically, the Chinese government eliminated evidence of the virus’s existence in laboratories and wildlife market stalls.³³ On January 3, 2020, the National Health Commission forbade institutions from publishing any information related to the unknown disease and ordered labs to transfer any samples of the virus to designated institutions or to destroy them.³⁴ Doctors, scientists, human rights activists, and journalists who disseminated information about the outbreak of a new SARS-like disease were persecuted and

²⁷ *Severe Acute Respiratory Syndrome (SARS) Multi-Country Outbreak—Update 6* (Mar. 21, 2003), WORLD HEALTH ORG. [WHO], https://www.who.int/csr/don/2003_03_21/en/ [https://perma.cc/5AZ8-83PM].

²⁸ David Cyranoski, *China Joins Investigation of Mystery Pneumonia*, 422 NATURE 459, 459 (2003).

²⁹ See Sharri Markson, *Coronavirus NSW: Dossier Lays out Case Against China Bat Virus Program*, DAILY TELEGRAPH (May 4, 2020), <http://www.dailytelegraph.com.au/coronavirus/news-story/55add857058731c9c71c0e96ad17da60> [https://perma.cc/F6VP-SPFP].

³⁰ *Id.*

³¹ Gao Yu et al., *How Early Signs of a SARS-Like Virus Were Spotted, Spread, and Throttled*, STRAITS TIMES (Feb. 28, 2020), <https://www.straitstimes.com/asia/east-asia/how-early-signs-of-the-coronavirus-were-spotted-spread-and-throttled-in-china> [https://perma.cc/ZMC4-SBU2].

³² See *id.*; Lily Kuo, *China Confirms Human-to-Human Transmission of Coronavirus*, GUARDIAN (Jan. 20, 2020), <https://www.theguardian.com/world/2020/jan/20/coronavirus-spreads-to-beijing-as-china-confirms-new-cases> [https://perma.cc/Q6XT-FC6A]; Markson, *supra* note 29.

³³ See Markson, *supra* note 29.

³⁴ See Yu et al., *supra* note 31.

silenced.³⁵ The most notable was Dr. Li Wenliang from Wuhan Central Hospital, who warned his classmates of a new disease in late December 2019, and was forced to admit to spreading false rumors (before succumbing to COVID-19).³⁶

Second, according to an intelligence report submitted to the White House, even when the PRC ultimately admitted the existence and human-to-human transmission of the new virus, it concealed the extent of the outbreak in its territory, under-reporting total cases and deaths and downplaying the seriousness of the disease.³⁷ Deborah Birx, the response coordinator of the White House Coronavirus Task Force, said that China's public misreporting influenced working assumptions about the nature of the virus elsewhere in the world.³⁸ For instance, only on February 14, 2020, two months into the crisis, did the PRC disclose that 1,700 healthcare workers were infected— invaluable information about the vulnerability of medical staff.³⁹

Third, the PRC limited access to local research by imposing restrictions on the publication of academic papers about the origins of COVID-19. According to a directive issued by the Chinese Ministry of Education's Department of Science, Technology, and Informatization, "academic papers about tracing the origin of the virus must be strictly and tightly managed."⁴⁰ The directive set out layers of approval for these papers by academic committees at universities, the Department of Science, Technology, and Informatization, and a task force under the State Council. The papers could be submitted to scientific journals only after universities heard back from the task force. Put differently, academic papers on COVID-19, authored by researchers with

³⁵ See, e.g., Mairead McArdle, *Chinese Doctor Disappears After Blowing the Whistle on Coronavirus Threat*, NAT'L REV. (Apr. 1, 2020), <https://www.nationalreview.com/news/coronavirus-china-doctor-disappears-warned-about-covid-19-threat/> [<https://perma.cc/BZ6R-YUM6>]; Rhea Mahbubani, *A Wuhan Doctor Says Chinese Officials Silenced Her Coronavirus Warnings in December, Costing Thousands Their Lives*, BUS. INSIDER (Mar. 12, 2020), <https://www.businessinsider.com/wuhan-doctor-chinese-sounded-alarm-coronavirus-outbreak-december-2020-3> [<https://perma.cc/A8F9-HYSP>].

³⁶ See Chris Buckley, *Chinese Doctor, Silenced After Warning of Outbreak, Dies from Coronavirus*, N.Y. TIMES (Feb. 6, 2020), <https://www.nytimes.com/2020/02/06/world/asia/chinese-doctor-Li-Wenliang-coronavirus.html> [<https://perma.cc/3AUJ-PE62>]; Chao Deng & Josh Chin, *Chinese Doctor Who Issued Early Warning on Virus Dies*, WALL ST. J. (Feb. 7, 2020), <https://www.wsj.com/articles/chinese-doctor-who-issued-early-warning-on-virus-dies-11581019816> [<https://perma.cc/9D4S-2HB9>].

³⁷ See Associated Press, *China Delayed Releasing Coronavirus Info, Frustrating WHO*, AP NEWS (June 2, 2020), <https://apnews.com/3c061794970661042b18d5aeaed9fae> [<https://perma.cc/SV8J-5D3Z>]; Nick Wadhams & Jennifer Jacobs, *China Concealed Extent of Virus Outbreak, U.S. Intelligence Says*, BLOOMBERG (Apr. 1, 2020), <https://www.bloomberg.com/news/articles/2020-04-01/china-concealed-extent-of-virus-outbreak-u-s-intelligence-says> [<https://perma.cc/S5MT-NZT4>].

³⁸ See Wadhams & Jacobs, *supra* note 37.

³⁹ See Emily Rauhala, *World Health Organization: China Not Sharing Data on Coronavirus Infections Among Health-Care Workers*, WASH. POST (Feb. 26, 2020), https://www.washingtonpost.com/world/asia_pacific/world-health-organization-china-not-sharing-data-on-health-care-worker-coronavirus-infections/2020/02/26/28064fda-54e4-11ea-80ce-37a8d4266c09_story.html [<https://perma.cc/TJ5D-3CQV>].

⁴⁰ Gan, *supra* note 1.

early access to vital data, had been subject to political vetting before being submitted for publication.⁴¹

Fourth, the PRC hindered external research by withholding scientific data and resources, which were crucial for the development of testing and treatment methods, from scientists around the world, and by rejecting offers for research cooperation and assistance. It did not share the genome sequence of the new coronavirus until January 11, 2020, although it had arguably sequenced most of the virus by December 27, 2019.⁴² It also refused to provide live samples of the virus to international scientists who were working on a vaccine, despite repeated pleas.⁴³ In late January 2020, it rejected offers of research assistance from the WHO and the U.S. Centers for Disease Control and Prevention (“CDC”).⁴⁴

International law obliges countries to provide information about health hazards to the WHO which, in turn, processes and shares it. Under the International Health Regulations (“Regulations”),⁴⁵ a state party must notify the WHO within twenty-four hours of all events that “may constitute a public health emergency of international concern” within its territory.⁴⁶ An event of such nature occurs and requires notification when at least two of the following four criteria are met: (1) the public health impact of the event is serious; (2) the event is unusual or unexpected; (3) there is a significant risk of international spread; and (4) there is a significant risk of international travel or trade restrictions.⁴⁷ Following notification, the state party must communicate “timely, accurate and sufficiently detailed public health information” about the notified event, including case definitions, laboratory results, source and type of the risk, number of cases and deaths, conditions affecting the spread of the disease, and health measures employed. The state party must also report “the difficulties faced and support needed in responding to the potential public health emergency of international concern.”⁴⁸

By its alleged action and inaction, the PRC seems to have violated its international obligations as it failed to submit information that the WHO and other countries fighting the pandemic needed and expected in a timely fashion.⁴⁹ However, the Regulations have no enforcement or monitoring mechanisms on the international level.⁵⁰ Additionally, they do not generate private

⁴¹ *See id.*

⁴² *See* Yu et al., *supra* note 31.

⁴³ *See* Markson, *supra* note 29.

⁴⁴ *See* Donald G. McNeil & Zolan Kanno-Youngs, *C.D.C. and W.H.O. Offers to Help China Have Been Ignored for Weeks*, N.Y. TIMES (Feb. 7, 2020), <https://www.nytimes.com/2020/02/07/health/cdc-coronavirus-china.html> [<https://perma.cc/F9AY-DBTW>].

⁴⁵ International Health Regulations, May 23, 2005, 2509 U.N.T.S. 79; *see also* WORLD HEALTH ORG. [WHO], INTERNATIONAL HEALTH REGULATIONS (2005) (3rd ed. 2016).

⁴⁶ *See* International Health Regulations, *supra* note 45, arts. 6(1), 7.

⁴⁷ *See id.* annex 2.

⁴⁸ *Id.* art. 6(2).

⁴⁹ *See* Rauhala, *supra* note 39.

⁵⁰ Gian Luca Burci, *The Outbreak of COVID-19 Coronavirus: Are the International Health Regulations Fit for Purpose?*, EJIL:TALK! (Feb. 27, 2020), <https://www.ejiltalk.org/the->

causes of action under domestic law. The theory that infringement of binding international law rules may constitute negligence per se is not in itself far-fetched, but the Regulations are unsuitable for its testing. The United States clearly expressed its position in the signing statement that “the provisions of the Regulations do not create judicially enforceable private rights.”⁵¹ Thus, any cause of action against the PRC must derive from domestic law.

3. *Prevention and Containment Measures*

The second line of argument leveled against the PRC focuses on its alleged failure to take the necessary measures to prevent and contain the outbreak. Prevention measures could have reduced the likelihood of initial human infection, whereas containment measures could have dramatically limited the extent of the spread following human infection. As regards prevention, the PRC was allegedly at fault in mishandling known sources of zoonotic disease. As American virologist Heinz Feldmann pointed out, “[w]ith approximately one quarter of the world’s population and a vast diversity of wild and domestic animals living in close proximity to humans, it is likely that China has the greatest potential for the emergence or reemergence of infectious diseases worldwide.”⁵² The use of wild animals for food and medicine in the PRC generates a considerable risk,⁵³ and Chinese animal markets are unique settings for the transmission of pathogens from animals to humans.⁵⁴ The SARS outbreak in 2002 originated in wet markets, and although the PRC attempted to phase out these venues, they nonetheless remained active across the country.⁵⁵ The PRC also seems to incentivize exports of wild animals.⁵⁶ Turning a blind eye to a considerable risk, one which had already hit the world at the turn of the millennium, seems negligent. The PRC should have strictly regulated consumption of and trade in wild animals, particularly through wet markets.⁵⁷

According to more controversial and politically sensitive theories, SARS-CoV-2 might have accidentally escaped one of two research institutes

outbreak-of-covid-19-coronavirus-are-the-international-health-regulations-fit-for-purpose/ [https://perma.cc/PE4D-FV8S].

⁵¹ See WORLD HEALTH ORG., *supra* note 45, at 61.

⁵² Heinz Feldmann, *Truly Emerging—A New Disease Caused by a Novel Virus*, 365 NEW ENG. J. MED. 1561, 1562 (2011).

⁵³ See *id.*

⁵⁴ See *id.*

⁵⁵ See *id.*

⁵⁶ See Kate O’Keeffe & Eva Xiao, *Amid Coronavirus Pandemic, China Bans Domestic Trade of Wild Animals, but Offers Tax Breaks for Exports*, WALL ST. J. (Apr. 12, 2020), <https://www.wsj.com/articles/amid-coronavirus-pandemic-china-bans-domestic-trade-of-wildanimals-but-offers-tax-breaks-for-exports-11586683800> [https://perma.cc/A7BL-JG2A].

⁵⁷ In fact, the PRC has taken such steps following the COVID-19 outbreak. See Aylin Woodward, *China Just Banned the Trade and Consumption of Wild Animals. Experts Think the Coronavirus Jumped from Live Animals to People at a Market*, BUS. INSIDER (Feb. 25, 2020), <https://www.businessinsider.com/china-bans-wildlife-trade-consumption-coronavirus-2020-2> [https://perma.cc/5T8J-UHUT].

in the Wuhan area: the Wuhan Institute of Virology, which operates a BSL-4 research laboratory, and the Wuhan branch of the Chinese Center for Disease Control and Prevention, which operates a BSL-2 laboratory in the vicinity of the Huanan Seafood Market in Wuhan.⁵⁸ Both study and conduct experiments on coronaviruses. While the argument that the novel virus was generated at a research laboratory is scientifically suspect,⁵⁹ the theory that the virus escaped one of these institutes due to negligence or even a faultless accident is supported by some scientists and advocated by politicians.⁶⁰ Indeed, U.S. embassy officials in Beijing visited the Wuhan Institute of Virology two years before the outbreak and sent two cables to Washington warning about safety and management weaknesses at the Institute's laboratory.⁶¹ They noted that the Institute's work on bat coronaviruses and their potential human transmission represented a risk of a new SARS-like pandemic.⁶²

Note that if any such theory proves right, the PRC may be liable for harms proximately caused by the outbreak not only under fault-based liability rules but also under the doctrine of abnormally dangerous activities. An actor who carries out an abnormally dangerous activity is strictly liable for the resulting physical harm.⁶³ An abnormally dangerous activity is one creating a foreseeable and highly significant risk of physical harm even when reasonable care is exercised.⁶⁴ As previously observed in *United States v. Stevens*,⁶⁵ a laboratory working with ultra-hazardous substances, including pathogens, is engaged in an abnormally dangerous activity, and liable for resulting physical harm irrespective of fault.⁶⁶ Such an allegation underlies some of the lawsuits against the PRC in the COVID-19 context.⁶⁷

Once the virus was detected in humans, the PRC should have taken immediate measures to contain its spread. A well-known study reviewed the

⁵⁸ See Bill Gertz, *Chinese Researchers Isolated Deadly Bat Coronaviruses near Wuhan Animal Market*, WASH. TIMES (Mar. 30, 2020), <https://www.washingtontimes.com/news/2020/mar/30/china-researchers-isolated-bat-coronaviruses-near/> [<https://perma.cc/VC98-TXRV>].

⁵⁹ This argument was made in *Buzz Photos v. People's Republic of China*, Complaint, Buzz Photos v. People's Republic of China, No. 3:20-cv-00656 (N.D. Tex. Mar. 17, 2020).

⁶⁰ See David Ignatius, *How Did COVID-19 Begin? Its Initial Origin Story Is Shaky*, WASH. POST (Apr. 2, 2020), https://www.washingtonpost.com/opinions/global-opinions/how-did-covid-19-begin-its-initial-origin-story-is-shaky/2020/04/02/1475d488-7521-11ea-87da-77a8136c1a6d_story.html [<https://perma.cc/PMN2-T9NF>].

⁶¹ See Josh Rogin, *State Department Cables Warned of Safety Issues at Wuhan Lab Studying Bat Coronaviruses*, WASH. POST (Apr. 14, 2020), <https://www.washingtonpost.com/opinions/2020/04/14/state-department-cables-warned-safety-issues-wuhan-lab-studying-bat-coronaviruses/> [<https://perma.cc/HR2R-34GG>].

⁶² See *id.*

⁶³ See RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL AND EMOTIONAL HARM § 20(a) (AM. L. INST. 2010); RESTATEMENT (SECOND) OF TORTS § 519 (AM. L. INST. 1977).

⁶⁴ RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL AND EMOTIONAL HARM § 20(b) (AM. L. INST. 2010).

⁶⁵ 994 So. 2d 1062, 1064 (Fla. 2008).

⁶⁶ See *id.* at 1071 (Wells, J., dissenting).

⁶⁷ See, e.g., Complaint, Missouri *ex rel.* Schmitt v. People's Republic of China, No. 1:20-cv-00099 (E.D. Mo. Apr. 21, 2020).

effects of containment strategies based on “non-pharmaceutical interventions”—such as detection and isolation, quarantines, lockdowns, travel restrictions, and social distancing.⁶⁸ It concluded, *inter alia*, that identifying cases of infection and quickly implementing restrictions on human contact dramatically slows the spread.⁶⁹ However, the PRC took vigorous steps only in late January 2020. The study suggested that if non-pharmaceutical interventions had been implemented one, two, or three weeks earlier, the number of infections could have been reduced by 66%, 86%, and 95%, respectively.⁷⁰ The delayed response, which may or may not have been related to an effort to conceal the nature and magnitude of the outbreak, resulted in a faster and harsher spread.

B. *Legal Obstacles*

1. *Foreign State Immunity*

Foreign states have been immune from liability under customary international law for centuries.⁷¹ Initially, the United States adhered to the classical theory of foreign sovereign immunity, whereby foreign governments are entitled to virtually absolute immunity as a matter of international grace and comity.⁷² In 1952, the State Department announced that it would adopt the restrictive theory of foreign sovereign immunity,⁷³ which grants foreign governments immunity only with respect to their sovereign acts, as opposed to commercial acts.⁷⁴ The restrictive theory was subsequently codified in the Foreign Sovereign Immunities Act of 1976 (“FSIA”).⁷⁵ The Act provides that a foreign state shall be immune from the jurisdiction of both federal and state courts unless a statutory exception applies.⁷⁶ A foreign state does not even need to enter an appearance to assert its immunity,⁷⁷ and courts cannot hear claims against it without first determining that the immunity is unavailable.⁷⁸

⁶⁸ See Shengjie Lai et al., *Effect of Non-Pharmaceutical Interventions for Containing the COVID-19 Outbreak in China*, 585 NATURE 410, 410–13 (May 4, 2020), <https://www.nature.com/articles/s41586-020-2293-x> [<https://perma.cc/5GXH-TSR5>] (discussing non-pharmaceutical interventions).

⁶⁹ *See id.*

⁷⁰ *See id.*

⁷¹ *See, e.g.*, *The Schooner Exch. v. McFaddon*, 11 U.S. 116, 136–37, 145–47 (1812) (holding that every state can waive its jurisdiction by consent, that under customary international law jurisdiction is presumed to be waived in some cases, and that “national ships of war, entering the port of a friendly power open for their reception, are to be considered as exempted by the consent of that power from its jurisdiction”).

⁷² *See* *Jam v. Int’l Fin. Corp.*, 139 S. Ct. 759, 766 (2019).

⁷³ *See id.*

⁷⁴ *See id.*

⁷⁵ *See* 28 U.S.C. §§ 1602–11.

⁷⁶ *See id.* § 1604.

⁷⁷ *See* *Verlinden B.V. v. Cent. Bank of Nigeria*, 461 U.S. 480, 493–94, 493 n.20 (1983).

⁷⁸ *See id.* at 493 n.20.

The immunity applies not only to foreign states as such but also to any of their political subdivisions, agencies, or instrumentalities, including corporations whose majority stocks are held by foreign states or their subdivisions.⁷⁹ The Supreme Court held in *Samantar v. Yousuf*⁸⁰ that statutory immunity does not apply to individuals acting in their official capacity on behalf of foreign states.⁸¹ The Court found no support in the text or the legislative history for the inclusion of individual officials in the statutory term “foreign state.” However, such officials may still be immune under the common law.⁸²

The exceptions to FSIA immunity include cases in which (1) the foreign state waived the immunity;⁸³ (2) the action is based upon a commercial activity⁸⁴ carried out by the foreign state in the United States or upon acts connected to commercial activity and performed in or with direct effect in the United States;⁸⁵ (3) damages are sought for personal injury or property damage caused in the United States by the foreign state or its agents;⁸⁶ (4) damages are sought for personal injuries caused by certain acts of terror, or the “provision of material support or resource” for such acts, by a foreign state designated by the Secretary of State as a state sponsor of terrorism,⁸⁷ or its agents;⁸⁸ or (5) damages are sought for physical injury to person or property occurring in the United States by an act of international terrorism and a

⁷⁹ See 28 U.S.C. § 1603(b). In the case of corporations, the foreign state must hold the majority of shares directly. See *Dole Food Co. v. Patrickson*, 538 U.S. 468, 474 (2003).

⁸⁰ See 560 U.S. 305 (2010).

⁸¹ See *id.* at 319 (“Reading the FSIA as a whole, there is nothing to suggest we should read ‘foreign state’ in § 1603(a) to include an official acting on behalf of the foreign state, and much to indicate that this meaning was not what Congress enacted.”).

⁸² See *id.* at 324.

⁸³ See 28 U.S.C. § 1605(a)(1); see also *World Wide Mins., Ltd. v. Republic of Kazakhstan*, 296 F.3d 1154, 1162 (D.C. Cir. 2002) (“A foreign sovereign will not be found to have waived its immunity unless it has clearly and unambiguously done so.”). Implied waivers are very rarely recognized. In *re* *Republic of the Philippines*, 309 F.3d 1143, 1151 (9th Cir. 2002).

⁸⁴ See *Republic of Argentina v. Weltover, Inc.*, 504 U.S. 607, 614 (1992) (“When a foreign government acts, not as regulator of a market, but in the manner of a private player within it, the foreign sovereign’s actions are ‘commercial’ [Its actions must be] the type of actions by which a private party engages in ‘trade and traffic or commerce.’” (citation omitted)); see also *Jam v. Int’l Fin. Corp.*, 139 S. Ct. 759, 772 (2019) (citing *Weltover*, 504 U.S. at 614); *Saudi Arabia v. Nelson*, 507 U.S. 349, 360–61 (1993) (same).

⁸⁵ See 28 U.S.C. § 1605(a)(2).

⁸⁶ See *id.* § 1605(a)(5).

⁸⁷ Four countries are currently designated as state sponsors of terrorism: Cuba, Iran, North Korea, and Syria. See *State Sponsors of Terrorism*, U.S. DEP’T OF STATE, <https://www.state.gov/state-sponsors-of-terrorism/> [https://perma.cc/FY3T-T62N]. Cuba was added to the list on January 12, 2021, whereas Sudan was removed from it on December 14, 2020. See *id.*; *U.S. Relations with Sudan*, U.S. DEP’T OF STATE, <https://www.state.gov/u-s-relationships-with-sudan/> [https://perma.cc/AK5C-AHSB].

⁸⁸ See 28 U.S.C. § 1605A. This exception was recently applied in *Rubin v. Islamic Republic of Iran*. 138 S. Ct. 816, 820 (2018) (discussing the execution of a judgment entered against Iran pursuant to § 1605A).

tortious act of the foreign state (even if the act occurred outside the United States).⁸⁹

Although some of the actions already brought against the PRC assert that U.S. district courts have jurisdiction under the “commercial activity” exception,⁹⁰ this theory has no legal merit.⁹¹ The only exception that appears relevant in the current context is that of non-commercial torts causing harm in the United States.⁹² Yet this exception may be inapplicable to COVID-19 claims for several reasons. First, according to its plain language, it applies only to physical harm (“personal injury or death, or damage to or loss of property”⁹³), whereas most of the outbreak victims incurred indirect economic losses.⁹⁴ As explained below, the nature of the loss might curtail liability regardless, due to the intricacies of the common law of torts.⁹⁵ But when an action is brought against a foreign state, the FSIA—by qualifying the exception—seems to set an absolute bar.

Second, the exception does not apply where the claims are “based upon the exercise or performance or the failure to exercise or perform a discretionary function.”⁹⁶ This rule replicates the discretionary function exception to government liability under the Federal Tort Claims Act,⁹⁷ which will be discussed in Part IV, and was designed to place foreign states in the same position as the United States when sued in tort.⁹⁸ In applying this proviso, courts consider the extent to which the particular decisions of foreign officials have involved an exercise of discretion and were grounded in considerations of social, economic, and political policy.⁹⁹ It may be argued that handling the outbreak in the country of origin was essentially an exercise of discretionary functions.¹⁰⁰ Measures taken to contain, delay, and mitigate a viral outbreak are naturally discretion based and policy oriented. However, it

⁸⁹ 28 U.S.C. § 1605B. This exception was introduced through the Justice Against Sponsors of Terrorism Act. Pub. L. No. 114–222, 130 Stat. 852 (2016).

⁹⁰ See, e.g., *Alters v. People’s Republic of China*, No. 1:20-cv-21108 (S.D. Fla. Mar. 12, 2020).

⁹¹ See Stephen L. Carter, *No, China Can’t Be Sued over Coronavirus*, BLOOMBERG (Mar. 24, 2020), <https://www.bloomberg.com/opinion/articles/2020-03-24/can-china-be-sued-over-the-coronavirus> [<https://perma.cc/59EC-MS2U>].

⁹² It is unlikely that any act or omission enabling the outbreak will be deemed an act of international terrorism.

⁹³ 28 U.S.C. § 1605(a)(5).

⁹⁴ Cf. Foreign States Immunities Act 1985 (Cth), § 13 (Austl.) (recognizing a tort exception to foreign state immunity only with respect to bodily injury or tangible property damage); State Immunity Act, R.S.C. 1985, c. S-18, § 6 (Can.) (same); Foreign States Immunity Act, 2008 S.H. 76, § 5 (Isr.) (same); State Immunity Act 1978, c. 33, § 5 (UK) (same).

⁹⁵ See *infra* Section IV.B.3.

⁹⁶ 28 U.S.C. § 1605(a)(5)(A); see RESTATEMENT (FOURTH) OF THE FOREIGN RELATIONS LAW OF THE U.S. § 457 cmt. d (AM. L. INST. 2019).

⁹⁷ See *In re Terrorist Attacks on September 11, 2001*, 349 F. Supp. 2d 765, 794 (S.D.N.Y. 2005).

⁹⁸ See RESTATEMENT (FOURTH) OF THE FOREIGN RELATIONS LAW OF THE U.S. § 457 reporter’s note 4 (AM. L. INST. 2019).

⁹⁹ See *id.*

¹⁰⁰ See Carter, *supra* note 91 (“It’s hard to find a way around this restriction.”).

has been held in at least one case that a foreign state's failure to warn potential victims of a known danger cannot be regarded as an exercise of a discretionary function.¹⁰¹

Third, the exception does not apply to claims arising from misrepresentation or deceit, even if they occurred in the United States.¹⁰² This qualification covers all cases of misrepresentation, even if the complaint is cast in terms of other particular torts, such as negligence or IIED.¹⁰³ The Second Circuit held further that the FSIA "is not an enforcement mechanism for global freedom of information."¹⁰⁴ To the extent that harms caused by the outbreak are attributed to the country of origin's informational misconduct, the non-commercial torts exception does not override the immunity, irrespective of the specific cause of action used by the plaintiffs.

Fourth, and most importantly, according to the prevailing view in all circuits which have addressed this matter, both the injury and the tortious act or omission must occur in the United States.¹⁰⁵ In other words, a foreign state may be liable only when its "tortious conduct in the forum state causes death or injury to private persons or damage to property in the forum state."¹⁰⁶ Torts committed outside U.S. territory do not fall within this exception, even if they may have produced effects within the United States.¹⁰⁷ Although COVID-19 injuries have undoubtedly been sustained in the United States, the alleged wrongful conduct was performed elsewhere.

Finally, even if the PRC does not formally enjoy immunity under the FSIA, it may be impossible to subject it to U.S. jurisdiction. The PRC does not currently accept the restrictive theory of foreign sovereign immunity and has previously invoked absolute immunity when sued in U.S. courts.¹⁰⁸ In

¹⁰¹ See *Doe v. Holy See*, 434 F. Supp. 2d 925, 955 (D. Or. 2006), *aff'd in part, rev'd in part*, 557 F.3d 1066 (9th Cir. 2009).

¹⁰² See 28 U.S.C. § 1605(a)(5)(B).

¹⁰³ See *Cabiri v. Gov't of the Republic of Ghana*, 165 F.3d 193, 200 (2d Cir. 1999).

¹⁰⁴ *Id.*

¹⁰⁵ See, e.g., *Argentine Republic v. Amerada Hess Ship. Corp.*, 488 U.S. 428, 441 (1989) ("[T]he exception in § 1605(a)(5) covers only torts occurring within the territorial jurisdiction of the United States."); *Doe v. Federal Democratic Republic of Ethiopia*, 851 F.3d 7, 10 (D.C. Cir. 2017) (holding that the entire tort, not only the injury, must occur in the United States); *Jerez v. Republic of Cuba*, 775 F.3d 419, 424 (D.C. Cir. 2014) (same); *In re Terrorist Attacks on September 11, 2001*, 714 F.3d 109 (2d Cir. 2013) (same); *Cabiri*, 165 F.3d at 200 n.3 (same); *Jones v. Petty-Ray Geophysical, Geosource, Inc.*, 954 F.2d 1061, 1065 (5th Cir. 1992) (same); *O'Bryan v. Holy See*, 556 F.3d 361, 382 (6th Cir. 2009) (same); *Frolova v. Union of Soviet Socialist Republics*, 761 F.2d 370, 379 (7th Cir. 1985) (same); *Doe v. State of Israel*, 400 F. Supp. 2d 86, 108 (D.D.C. 2005) (same).

¹⁰⁶ RESTATEMENT (FOURTH) OF THE FOREIGN RELATIONS LAW OF THE U.S. § 457 cmt. a (AM. L. INST. 2019).

¹⁰⁷ See *Amerada Hess Ship. Corp.*, 488 U.S. at 439–40. A similar qualification exists in other jurisdictions. See, e.g., Foreign States Immunities Act 1985, § 13 (Austl.) ("[C]aused by an act or omission done or omitted to be done in Australia."); Foreign States Immunity Act, 2008 S.H. 76, § 5 (Isr.) (providing that the exception only applies if the entire tort was committed in Israel); State Immunity Act 1978, c. 33, § 5 (UK).

¹⁰⁸ See, e.g., *Walters v. Indus. & Commer. Bank of China*, 651 F.3d 280, 283 (2d Cir. 2011) ("China returned the documents, claiming sovereign immunity, and thereafter entered no appearance in the Missouri action."); *Jackson v. People's Republic of China*, 794 F.2d

fact, instead of asserting absolute immunity, it may simply reject the service. Upon ratification of the Hague Service Convention (“HSC”),¹⁰⁹ the PRC notified the Hague Conference on Private International Law that it objects to service through postal channels.¹¹⁰ Additionally, the PRC can refuse service through diplomatic channels, arguing in accordance with Article 13 that compliance with the terms of the HSC regarding service in the current matter “would infringe its sovereignty or security.”¹¹¹ As the PRC considers any allegations about its misconduct unfounded, any attempt to bring it to court might result in an unprecedented diplomatic crisis.

One important caveat is due. An amendment to the FSIA is not inconceivable. More than a decade after the September 11 terrorist attacks, Congress enacted the Justice Against Sponsors of Terrorism Act (“JASTA”),¹¹² which amended the FSIA to enable victims’ families to sue Saudi Arabia for its alleged role in the attacks.¹¹³ Before the amendment, victims of terror could only sue foreign states designated by the State Department as state sponsors of terrorism.¹¹⁴ JASTA permits lawsuits against state sponsors of terrorism without specific designation, although it limits such claims to injuries incurred in the United States by an act of international terrorism.¹¹⁵ In April 2020, Missouri Senator Josh Hawley introduced a bill to strip the PRC of its FSIA immunity.¹¹⁶ The Justice for Victims of Coronavirus Act was intended to preclude foreign state immunity where damages are sought for harms “occurring in the United States following any reckless action or omission . . . of a foreign state [or its agents] . . . that caused or substantially aggravated the COVID-19 global pandemic in the United States.”¹¹⁷ This proposed exception to the FSIA immunity was designed to circumvent the qualifications of the non-commercial torts exception. It applies not only to physical injuries but also to economic losses. It does not immunize discretionary functions, although it sets a higher threshold for U.S. jurisdiction (recklessness rather than mere negligence). It covers any “conscious disre-

1490, 1494 (11th Cir. 1986) (“[China’s] position is that under principles of international law it is immune from any suit in a domestic court of any other nation unless it consents.”).

¹⁰⁹ Convention on the Service Abroad of Judicial and Extrajudicial Documents in Civil or Commercial Matters, Nov. 15, 1965, 658 U.N.T.S. 163.

¹¹⁰ See *id.* art. 10(a); see also Hague Conference on Private International Law [HCCH], Declaration of People’s Republic of China, <https://www.hcch.net/en/instruments/conventions/status-table/notifications/?csid=393&disp=resdn> [<https://perma.cc/2HHY-C5Z3>].

¹¹¹ See Convention on the Service Abroad of Judicial and Extrajudicial Documents in Civil or Commercial Matters, *supra* note 109, art. 13.

¹¹² Pub. L. No. 114-222, 130 Stat. 852 (2016).

¹¹³ See Patricia Zengerle, *Senate Passes Bill Allowing 9/11 Victims to Sue Saudi Arabia*, REUTERS (May 17, 2016), <https://www.reuters.com/article/us-saudi-usa-congress-idUSKCN0Y8239> [<https://perma.cc/K64Z-5TGK>].

¹¹⁴ See *supra* notes 87–88 and accompanying text.

¹¹⁵ See *supra* note 89 and accompanying text.

¹¹⁶ See Press Release, Senator Josh Hawley, Senator Hawley Announces Bill to Hold Chinese Communist Party Responsible (Apr. 14, 2020), <https://www.hawley.senate.gov/senator-hawley-announces-bill-hold-chinese-communist-party-responsible-covid-19-pandemic> [<https://perma.cc/EY8Q-HMEJ>].

¹¹⁷ Justice for Victims of Coronavirus Act, S. 3588, 116th Cong. § 1605C (2020).

gard of the need to report information promptly or deliberately hiding relevant information,” and applies even if the acts and omissions occurred outside the United States.¹¹⁸ The Senate Judiciary Committee held a hearing on the bill and a consolidated version was placed on the Senate legislative calendar in July 2020.¹¹⁹ Its prospects are probably dim given the lack of bipartisan support and recent changes in the Senate. It may also be hindered by the potential threat of countermeasures by the PRC.¹²⁰

2. *Fault and Causation*

Apart from the seemingly insurmountable barrier of foreign state immunity, establishing the elements of relevant torts, particularly fault and causation, will undoubtedly be a challenge for plaintiffs. Recall that one of the main arguments against the PRC is that it failed to take the necessary measures to prevent and contain the outbreak. Regarding *ex ante* prevention measures, the evidentiary difficulties seem quite acute. An accidental escape of the virus from a research institute cannot be established without evidence that only the PRC may have and is unlikely to disclose. Negligent or reckless handling of wet markets cannot be easily proved either, because the exact steps taken by the PRC against wild animal trade are unknown. It can always argue that the activity leading to the outbreak (e.g., pangolin trade) was illegal, underground, and beyond its effective control.

Containment measures taken by the PRC are more overt but can hardly be deemed negligent. A person acts negligently if he or she “does not exercise reasonable care under all the circumstances.”¹²¹ The primary factors considered in ascertaining whether a person’s conduct is reasonable are “the foreseeable likelihood that the person’s conduct will result in harm, the foreseeable severity of any harm that may ensue, and the burden of precautions to eliminate or reduce the risk of harm.”¹²² In other words, reasonableness is based on a cost-benefit test, where the cost is that of the precautions and the benefit is the reduction in risk those precautions would achieve.¹²³ Conduct

¹¹⁸ *Id.*

¹¹⁹ See Civil Justice for Victims of COVID Act, S. 4212, 116th Cong. (2020).

¹²⁰ See Roddel, *supra* note 11.

¹²¹ RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL AND EMOTIONAL HARM § 3 (AM. L. INST. 2010); see also Alan D. Miller & Ronen Perry, *The Reasonable Person*, 87 N.Y.U. L. REV. 323, 325 (2012) (“Negligence arises from doing an act that a reasonable person would not do under the circumstances, or from failing to do an act that a reasonable person would do.”).

¹²² RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL AND EMOTIONAL HARM § 3 (AM. L. INST. 2010). These are the three variables in the famous Hand formula. See Miller & Perry, *supra* note 121, at 328–30 (explaining that § 3 adopted the Learned Hand formula); Ronen Perry, *Re-torts*, 59 ALA. L. REV. 987, 988–94 (2008) (same) [hereinafter Perry, *Re-torts*]; Stephen R. Perry, *Cost-Benefit Analysis and the Negligence Standard*, 54 VAND. L. REV. 893, 893–94 (2001) (same); Kenneth W. Simons, *The Hand Formula in the Draft Restatement (Third) of Torts*, 54 VAND. L. REV. 901, 902 (2001) (same).

¹²³ See RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL AND EMOTIONAL HARM § 3 cmt. e. (AM. L. INST. 2010).

is negligent “if its disadvantages outweigh its advantages, while [it] is not negligent if its advantages outweigh its disadvantages.”¹²⁴

SARS-CoV-2 is a novel virus. Knowledge about its structure, function, survivability, transmissibility, and virulence, and about the possible impact of different containment and mitigation measures, has been gradually accumulated by scientists. The exact risks were simply unknown in late 2019. Because the required level of care depends on the foreseeable level of risk and on the possible impact of different precautions on that risk, it is difficult to determine and establish what levels of care were required of the PRC at the early stages of the outbreak. Again, precautions must fit the foreseeable risk, but very little was foreseeable when the criticized decisions were made. One cannot judge the reasonableness of past conduct in hindsight, based on subsequent accumulation of scientific knowledge.

Furthermore, even if the required level of care was very high, the PRC seems to have exercised it by taking very quick and aggressive measures to contain the outbreak. It took the first measures immediately after the first case was identified in December 2019, before January 8, 2020, when the virus was identified¹²⁵ and the first case outside of the PRC was detected.¹²⁶ According to a WHO news release from January 5, the market suspected as the origin of the outbreak was closed for sanitation and disinfection, patients were isolated and treated, contacts were identified and put under medical observation, and the authorities carried out active case-finding and retrospective investigations.¹²⁷ Once the virus was identified, and before sufficient information about its spreading and impact had been gathered, the PRC took vigorous measures to contain the risk. It put Wuhan, a city of eleven million people, under strict lockdown on January 23.¹²⁸ The WHO representative in the country said that the lockdown was “unprecedented in public health history” and “certainly not a recommendation the WHO has made.”¹²⁹ The lockdown was extended to other cities in the Hubei province shortly thereafter.¹³⁰ In light of the huge uncertainties, this extreme response

¹²⁴ *Id.*

¹²⁵ See Natasha Khan, *New Virus Discovered by Chinese Scientists Investigating Pneumonia Outbreak*, WALL ST. J. (Jan. 8, 2020), <https://www.wsj.com/articles/new-virus-discovered-by-chinese-scientists-investigating-pneumonia-outbreak-11578485668> [<https://perma.cc/8SE6-KB2C>].

¹²⁶ See *Statement on Novel Coronavirus in Thailand*, WORLD HEALTH ORG. [WHO] (Jan. 13, 2020), <https://www.who.int/news-room/detail/13-01-2020-who-statement-on-novel-coronavirus-in-thailand> [<https://perma.cc/YZ7U-ERGS>].

¹²⁷ See *Pneumonia of Unknown Cause—China*, WORLD HEALTH ORG. [WHO] (Jan. 5, 2020), <https://www.who.int/csr/don/05-january-2020-pneumonia-of-unknown-cause-china/en/> [<https://perma.cc/3V7C-WQT8>].

¹²⁸ See Wuhan Lockdown ‘Unprecedented’, Shows Commitment to Contain Virus: WHO Representative in China, REUTERS (Jan. 23, 2020), <https://www.reuters.com/article/us-china-health-who-idUSKBN1ZM1G9> [<https://perma.cc/A5VL-4MD8>].

¹²⁹ *Id.*

¹³⁰ See Emma Graham-Harrison & Lily Kuo, *China’s Coronavirus Lockdown Strategy*, GUARDIAN (Mar. 19, 2020), <https://www.theguardian.com/world/2020/mar/19/chinas-coronavirus-lockdown-strategy-brutal-but-effective> [<https://perma.cc/3V58-3QHM>].

makes it difficult to argue that the PRC did not meet the required standard of care.

Arguments concerning negligent or intentional misrepresentation may be countered by the consistent praise that the WHO publicly lavished on the PRC for its speedy response and cooperation with the organization and the international community.¹³¹ It is believed that the WHO may have lauded the PRC to coax valuable information in the face of obstructionism, in order to effectively assess the risks and provide recommendations.¹³² Yet the public statements can be used to exonerate the PRC, and it is unlikely that the WHO will publicly retract these statements given the continuous need to interact with the world power.

Any action against the PRC will also raise questions of causation. Liability can be imposed only if the defendant's wrongful conduct is the factual cause of the plaintiff's harm,¹³³ and this condition is met if the harm would not have occurred but for the conduct.¹³⁴ Causation must be proved by a preponderance of the evidence, so the plaintiff should prove that it is more likely than not that, but for the defendant's wrongful conduct, the plaintiff's harm would not have occurred.¹³⁵ Can end-victims prove that their harms would not have occurred but for the wrongful conduct of the PRC? Close scrutiny of the arguments made against the PRC reveals that the lion's share of the alleged wrongdoing—failing to take measures to prevent and contain the outbreak and to disclose valuable information to the international community—occurred by January 20, 2020. By this time, the PRC had already shared the novel virus's genetic sequence and confirmed its human-to-human transmissibility, and the entire world was clearly on alert.¹³⁶ The United States reported its first confirmed case on January 20, 2020¹³⁷ and the first domestic person-to-person transmission on January 30,¹³⁸ evacuated its citizens from Wuhan on January 29,¹³⁹ and banned travel from the PRC on Janu-

¹³¹ See Associated Press, *supra* note 37.

¹³² See *id.*

¹³³ See RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL AND EMOTIONAL HARM § 26 (AM. L. INST. 2010).

¹³⁴ See *id.* § 26 cmt. b.

¹³⁵ See *id.* §§ 26 cmt. 1, 28 cmt. a.

¹³⁶ See Yasmeen Abutaleb et al., *The U.S. Was Beset by Denial and Dysfunction as the Coronavirus Raged*, WASH. POST (Apr. 4, 2020), <https://www.washingtonpost.com/national-security/2020/04/04/coronavirus-government-dysfunction/> [<https://perma.cc/9YZM-UDBA>].

¹³⁷ See Michelle L. Holshue et al., *First Case of 2019 Novel Coronavirus in the United States*, 382 NEW ENG. J. MED. 929, 930 (2020).

¹³⁸ See Isaac Ghinai et al., *First Known Person-to-Person Transmission of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) in the USA*, 395 LANCET 1137, 1137 (2020).

¹³⁹ See Eric Beech & Steve Gorman, *Two More U.S. Evacuation Planes Leave Coronavirus Epicenter Wuhan*, REUTERS (Feb. 7, 2020), <https://www.reuters.com/article/two-planes-left-wuhan-china-en-route-to-us-state-department-idUSKBN20105M> [<https://perma.cc/KCB9-UAVM>].

ary 31.¹⁴⁰ It had only sixty-two confirmed cases on February 29.¹⁴¹ Arguably, it is more likely that subsequent spread was not caused by any alleged wrongdoing of the PRC but, rather, by decisions made and actions taken within the United States. This conjecture is reinforced by the fact that other countries, which reported their first cases earlier than the United States but responded differently, have not been as severely affected. Notable examples are Australia, Hong Kong, New Zealand, Singapore, South Korea, and Taiwan.¹⁴²

C. Practical Obstacles

Pandemic victims who choose to sue the country of origin face two interrelated practical problems, even without any legal hurdles. The first is the defendant's limited financial capacity relative to the aggregate harm. In addition to the loss of human lives and impairment of health, the COVID-19 outbreak is expected to shave trillions of dollars from the global economy.¹⁴³ The PRC does not have the financial capacity to bear all these costs. Perhaps even more importantly, when considering existing legal regimes, one must bear in mind that, in future events, the country of origin may be a much smaller economy, with an even more limited ability to pay damages.

This problem has two complementary aspects. From a compensation perspective, when the aggregate loss considerably exceeds the defendant's financial capacity, each victim might end up with compensation for a very small fraction of his or her loss, rendering the costly and wearisome process futile. From a deterrence perspective, the defendant might be under-deterred by being judgment-proof. If a potential wrongdoer is unable to fully bear the externalized costs of the wrongful conduct *ex post*, it will not internalize them *ex ante*. Its expected expense may be lower than the expected social harm, so the incentive for taking cost-effective precautions is impaired.¹⁴⁴ Assume, for example, that there is a two percent chance that Jack's conduct will cause a \$1,000,000 loss to Jill. Jack can reduce the probability to one

¹⁴⁰ See Alex Leary & Brianna Abbott, *U.S. Imposes Entry Restrictions over Coronavirus*, WALL ST. J. (Jan. 31, 2020), <https://www.wsj.com/articles/u-k-reports-first-coronavirus-cases-as-china-allies-limit-ties-11580467046> [https://perma.cc/J2MM-833V].

¹⁴¹ See *Coronavirus Disease 2019 (COVID-19) Situation Report—40*, WORLD HEALTH ORG. [WHO] (Feb. 29, 2020), <https://www.who.int/docs/default-source/coronavirus/situation-reports/20200229-sitrep-40-covid-19.pdf> [https://perma.cc/L3N4-7PVW].

¹⁴² See, e.g., C. Jason Wang et al., *Response to COVID-19 in Taiwan*, 323 JAMA 1341, 1341–42 (2020) (discussing the response in Taiwan); Benjamin J. Cowling & Wey Wen Lim, *They've Contained the Coronavirus. Here's How.*, N.Y. TIMES (Mar. 13, 2020), <https://www.nytimes.com/2020/03/13/opinion/coronavirus-best-response.html> [https://perma.cc/25Y7-4XGE].

¹⁴³ See Cochrane, *supra* note 3.

¹⁴⁴ See Ronen Perry, *Civil Liability for Cyberbullying*, 10 U.C. IRVINE L. REV. 1219, 1249–50 (2020) (noting that the existence of judgment-proof defendants undermines the deterrence objective of tort law); see also Ronen Perry, *Crowdfunding Civil Justice*, 59 B.C. L. REV. 1357, 1391 (2018); Steven Shavell, *The Judgment Proof Problem*, 6 INT'L REV. L. & ECON. 45, 45 (1986).

percent by taking certain precautions that cost \$8,000. The cost of care (\$8,000) is lower than the resulting reduction in expected harm (\$10,000), so failure to take precautions is negligent. Suppose further that the value of Jack's assets is \$300,000. Even if liability for negligence was certain, it would not provide an adequate incentive. Jack's expected sanction for failing to take precautions would be $2\% \times \$300,000 = \$6,000$, whereas the cost of care is \$8,000. This analysis applies to state liability with an important caveat: state liability does not impose a financial burden on state officials and might have a limited effect on their conduct anyway.

The second problem concerns the enforcement of judgments. Enforcement against foreign entities is a thorny topic, even in the simpler cases of individual or corporate defendants. Enforcement within the forum country is constrained by the defendant's available resources in the same country. Enforcement in a foreign jurisdiction, particularly the foreign defendant's "home jurisdiction," entails recognition of the judgment in that jurisdiction. Under Article 281 of the PRC's Civil Procedure Law,¹⁴⁵ a people's court can recognize and enforce foreign judgments only (1) in accordance with treaties and conventions to which the PRC and the country of judgment are parties, or (2) pursuant to the principle of reciprocity. At the moment, there is neither a bilateral treaty between the PRC and the United States nor a multilateral convention joined by both concerning the enforcement of foreign judgments.¹⁴⁶ The only path for recognizing U.S. judgments, therefore, is the principle of reciprocity, which is rarely and cautiously used: only two U.S. judgments have been recognized by PRC courts so far.¹⁴⁷ Moreover, no foreign judgment can be enforced if it contradicts the basic legal principles or violates the sovereignty, security, or social and public interests of the PRC.¹⁴⁸ Presumably, PRC courts will not easily find that COVID-19 judgments against the PRC satisfy this condition.

¹⁴⁵ See Civ. Proc. L. § 281 (promulgated by the President of the People's Republic of China, promulgated April 9, 1991, effective April 9, 1991), P.R.C. LAWS, *translated in Civil Procedure Law of the People's Republic of China (Revised in 2017)*, CHINA INT'L COM. CT., <http://cicc.court.gov.cn/html/1/219/199/200/644.html> [https://perma.cc/WS7G-G4T3].

¹⁴⁶ See Qing Di & Karen King, *Trending Toward Reciprocity: Enforcement of US Judgments in China*, CHINA BUS. REV. (Sept. 6, 2019), <https://www.chinabusinessreview.com/trending-toward-reciprocity-enforcement-of-us-judgments-in-china/> [https://perma.cc/S5JP-GB4M].

¹⁴⁷ See *id.*

¹⁴⁸ See Civ. Proc. L. § 282 (China).

III. INTERNATIONAL ORGANIZATIONS

A. Possible Claims

The first lawsuit against the WHO for harms caused by the COVID-19 outbreak was filed in a U.S. district court in New York on April 20, 2020.¹⁴⁹ The plaintiffs were residents of Westchester County, who sought damages for personal losses on behalf of the County's 756,000 adult residents.¹⁵⁰ The relevant causes of action are similar to those outlined above: negligence, intentional (and, in some jurisdictions, also negligent) infliction of emotional distress, and wrongful death. The first step in any action against the WHO is, once again, proof of fault. Several allegations of the organization's negligence have been made, most notably by the Trump administration.¹⁵¹

First, it is argued that the WHO over-relied on the PRC as a source of information and failed to obtain fuller and more accurate data, especially at the early stages of the outbreak.¹⁵² For instance, the WHO did not investigate credible information about human-to-human transmission back in December 2019.¹⁵³ The WHO is also blamed for publicly praising the PRC for its transparency despite knowing that it withheld crucial information, thereby misleading the international community.¹⁵⁴ The New York plaintiffs make the provocative argument that the WHO colluded with the PRC to mislead the international community about the risks of SARS-CoV-2.¹⁵⁵ This extreme version seems to lack an evidentiary basis.

Second, the WHO declared a Public Health Emergency of International Concern ("PHEIC") only on January 30, 2020, arguably leading to loss of valuable preparation time across the world.¹⁵⁶ A PHEIC is defined in the International Health Regulations as "an extraordinary event which is determined . . . to constitute a public health risk to other States through the international spread of disease and to potentially require a coordinated international response."¹⁵⁷ A prompt declaration could spawn WHO recom-

¹⁴⁹ See Jonathan Stempel & Jan Wolfe, *Suburban NYC County Residents Sue WHO over Coronavirus Pandemic Response*, REUTERS (Apr. 20, 2020), <https://www.reuters.com/article/suburban-nyc-county-residents-sue-who-over-coronavirus-pandemic-response-idUSKBN2222P1> [<https://perma.cc/JS75-68G5>].

¹⁵⁰ See *id.*

¹⁵¹ See Kai Kupferschmidt & Jon Cohen, 'Short-Sighted.' Health Experts Decry Trump's Freeze on U.S. Funding for WHO as World Fights Pandemic, SCIENCE (Apr. 14, 2020), <https://www.sciencemag.org/news/2020/04/trump-freezes-us-funding-who-world-fights-pandemic> [<https://perma.cc/F3HF-K4UQ>].

¹⁵² See Chris Buckley & Steven Lee Myers, *As New Coronavirus Spread, China's Old Habits Delayed Fight*, N.Y. TIMES (Feb. 1, 2020), <https://www.nytimes.com/2020/02/01/world/asia/china-coronavirus.html> [<https://perma.cc/8KPJ-D8SU>] ("The World Health Organization's statements during this period echoed the reassuring words of Chinese officials.")

¹⁵³ See Kupferschmidt & Cohen, *supra* note 151.

¹⁵⁴ See Associated Press, *supra* note 37.

¹⁵⁵ See Stempel & Wolfe, *supra* note 149.

¹⁵⁶ See Kupferschmidt & Cohen, *supra* note 151.

¹⁵⁷ International Health Regulations art. 1, May 23, 2005, 2509 U.N.T.S. 79.

mentations, alert other countries of the risks, and induce immediate preparation and response.¹⁵⁸ Experts agree that a PHEIC should have been declared earlier, although countries usually do not await such a declaration to take precautionary measures.¹⁵⁹

Third, even after the PHEIC was declared, the WHO explicitly opposed travel restrictions.¹⁶⁰ This was one of the steps most harshly criticized by the United States, as it probably contributed to the global spread of SARS-CoV-2 and its devastating impact.¹⁶¹ The former Director-General of the WHO, while lamenting the United States' decision to withdraw from the organization, admitted that policies concerning travel restrictions should be reconsidered.¹⁶²

The United States has been a member of the WHO since its establishment in 1948. Based on the allegations that the organization mishandled the COVID-19 pandemic, President Trump suspended funding to the WHO on April 14, 2020¹⁶³ and later notified the Secretary-General of the United Nations (the depositary of the Constitution of the WHO) that the United States would withdraw on July 6, 2021.¹⁶⁴ However, this decision was retracted by President Biden immediately after his inauguration in January 2021.¹⁶⁵

B. *Legal Obstacles*

1. *The International Organizations Immunities Act*

The International Organizations Immunities Act of 1945 (“IOIA”)¹⁶⁶ provides that international organizations, their property, and their assets,

¹⁵⁸ See *id.* arts. 12, 13(6), 15–16.

¹⁵⁹ See Kupferschmidt & Cohen, *supra* note 151.

¹⁶⁰ See Stephanie Nebehay, *WHO Should Change Rules that Led It to Oppose Travel Restrictions, Ex-Head Says*, REUTERS (June 19, 2020), <https://www.reuters.com/article/who-should-change-rules-that-led-it-to-oppose-travel-restrictions-ex-head-says-idUSKBN23Q2EY> [<https://perma.cc/DF2B-3KLA>]; Antonio Regalado, *WHO Calls China Coronavirus an International Emergency, but Opposes Travel Bans*, MIT TECH. REV. (Jan. 30, 2020), <https://www.technologyreview.com/2020/01/30/275959/the-china-coronavirus-is-officially-an-international-emergency/> [<https://perma.cc/GUG4-A5UF>].

¹⁶¹ See Kupferschmidt & Cohen, *supra* note 151.

¹⁶² See Nebehay, *supra* note 160.

¹⁶³ See Kupferschmidt & Cohen, *supra* note 151.

¹⁶⁴ See Katie Rogers & Apoorva Mandavilli, *Trump Administration Signals Formal Withdrawal from W.H.O.*, N.Y. TIMES (July 7, 2020), <https://www.nytimes.com/2020/07/07/us/politics/coronavirus-trump-who.html> [<https://perma.cc/2M7G-CX8L>]. This decision attracted harsh criticism from public health, law, and international relations leaders. See Lawrence O. Gostin et al., *Letter to Congress on WHO Withdrawal from Public Health, Law and International Relations Leaders*, O'NEILL INST. (June 30, 2020), <https://oneill.law.georgetown.edu/letter-to-congress-on-who-withdrawal-from-public-health-law-and-international-relations-leaders/> [<https://perma.cc/U92A-4SVR>].

¹⁶⁵ See Christina Morales, *Biden Restores Ties with the World Health Organization that Were Cut by Trump*, N.Y. TIMES (Jan. 20, 2021, 11:33 PM), <https://www.nytimes.com/2021/01/20/world/biden-restores-who-ties.html> [<https://perma.cc/6U5Y-BRYQ>].

¹⁶⁶ See 22 U.S.C. §§ 288–288I.

“shall enjoy the same immunity from suit and every form of judicial process as is enjoyed by foreign governments.”¹⁶⁷ The Act covers only international organizations in which the United States participates and which have been designated by the President through executive orders as being entitled to immunities and privileges under the Act.¹⁶⁸ The WHO satisfies these requirements. The United States is a member state, and the organization was designated as entitled to immunities under the IOIA by President Truman in 1948.¹⁶⁹

At the time of the IOIA’s enactment in 1945, foreign states enjoyed almost absolute immunity under the common law.¹⁷⁰ Nowadays, foreign states are entitled to a more limited immunity under the FSIA. The question is whether, by referencing foreign state immunity, the IOIA conferred on international organizations (a) the broad common law immunity that foreign states enjoyed when it was enacted in 1945 or (b) the more limited FSIA immunity that they have today.¹⁷¹

In *Jam v. International Finance Corp.*, the Supreme Court held that IOIA’s “same immunity” is the latter—the more limited FSIA immunity foreign governments enjoy today.¹⁷² As a result, international organization immunity is subject to the exceptions enumerated in the FSIA.¹⁷³ In *Jam*, the subsequent questions left for the lower courts were (1) whether the defendant engaged in “commercial activity” and (2) whether such activity had a sufficient nexus to the United States.¹⁷⁴ Of course, the non-commercial tort exception may be relevant with respect to the WHO, with all qualifications outlined above.¹⁷⁵

The IOIA has put the United States at odds with most of the international community, even before *Jam*. Only one other country (Italy) equates the immunity of international organizations with that of foreign states.¹⁷⁶ According to customary international law, the scope of international organiza-

¹⁶⁷ *Id.* § 288a(b).

¹⁶⁸ *See id.* § 288.

¹⁶⁹ *See* Exec. Order No. 10025, 13 Fed. Reg. 9361 (Dec. 30, 1948); *see also* *Jam v. Int’l Fin. Corp.*, 139 S. Ct. 759, 764 (2019) (mentioning the WHO as an international organization subject to 22 U.S.C. § 288a).

¹⁷⁰ *See Jam*, 139 S. Ct. at 766.

¹⁷¹ Chanaka Wickremasinghe, *International Organizations or Institutions, Immunities Before National Courts*, in MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW ¶¶ 20–21 (2009).

¹⁷² 139 S. Ct. 759.

¹⁷³ *See id.* at 772.

¹⁷⁴ The Court implied that both preconditions might not be satisfied in the case at bar. *See id.* (“[I]t is not clear that the lending activity of all development banks qualifies as commercial activity [T]he commercial activity must have a sufficient nexus to the United States. . . . [And] a lawsuit must be ‘based upon’ . . . the commercial activity [T]he Government stated that it has ‘serious doubts’ whether [the] suit . . . would satisfy the ‘based upon’ requirement.”).

¹⁷⁵ *See supra* notes 92–108 and accompanying text.

¹⁷⁶ *See* Wickremasinghe, *supra* note 171, ¶¶ 17–19.

tions' immunity must enable the effective functioning of the organization.¹⁷⁷ Most jurisdictions (apart from the United States) align with this principle. For example, in the United Kingdom, the General Policy of Her Majesty's Government on Privileges and Immunities of International Organizations provides that the extent of immunities should be based on "functional need," with some weight given to the independence of each organization and the equality of its member states.¹⁷⁸

Even if the United States withdrew from the WHO (in accordance with President Trump's decision, which was retracted by President Biden), its withdrawal should not have a retroactive effect on the organization's immunity with respect to decisions made and actions taken prior to the withdrawal date. However, the IOIA empowers the President to withhold, withdraw, condition, or limit the privileges and immunities granted to an international organization, its officers, and its employees.¹⁷⁹ In theory, the President can exercise this power to strip the WHO of its IOIA immunity even with respect to earlier decisions and actions, although this seems to be a diplomatic faux pas.

2. Treaty-Based Immunity

Chief Justice Roberts emphasized in *Jam* that the IOIA immunities are "only default rules," and that if an international organization cannot fulfill its goals with a restrictive immunity, its charter can always specify a different level of immunity.¹⁸⁰ Put differently, while the IOIA affords standard-yet-limited immunity to all international organizations, treaties establishing or applying to such organizations may confer immunities of differing extents, which may be broader than the IOIA yardstick. This is rather important because most international organizations are established by treaties, which also define their immunities.¹⁸¹

The analysis of treaty-based immunity entails, in addition to judicial interpretation of the relevant treaty provisions, discussion of the interrelation between the treaty and domestic law. To begin, courts in the United States must determine whether the specific treaty is self-executing—i.e., enforceable upon ratification—or non-self-executing—i.e., enforceable only following legislative implementation.¹⁸² The notion that some treaties are not self-

¹⁷⁷ See *id.* ¶¶ 1, 22.

¹⁷⁸ See Chanaka Wickremasinghe, *The Immunity of International Organizations in the United Kingdom*, 10 INT'L ORG. L. REV. 434, 435 & n.1 (2013).

¹⁷⁹ See 22 U.S.C. § 288.

¹⁸⁰ See *Jam v. Int'l Fin. Corp.*, 139 S. Ct. 759, 771 (2019).

¹⁸¹ See Wickremasinghe, *supra* note 178, at 437.

¹⁸² See Carlos Manuel Vázquez, *The Four Doctrines of Self-Executing Treaties*, 89 AM. J. INT'L L. 695, 695 (1995). This rule may be traced back to *Foster v. Neilson*, 27 U.S. 253 (1829), in which the Court held that a treaty is "regarded in courts of justice as equivalent to an act of the legislature, whenever it operates of itself without the aid of any legislative provision," *id.* at 314.

executing has attracted criticism,¹⁸³ as it seems inconsistent with the plain language of the Supremacy Clause.¹⁸⁴ Yet from a comparative perspective, the American approach seems to take the middle ground between dualist jurisdictions, such as the United Kingdom,¹⁸⁵ in which treaties are not enforceable in domestic courts without legislative endorsement, and monist jurisdictions, such as France,¹⁸⁶ where treaties automatically become part of national law upon ratification.¹⁸⁷ Notably, in many dualist jurisdictions, including the United Kingdom, the legislature authorized endorsement of international organization privileges and immunities through secondary legislation (such as Orders in Council or regulations).¹⁸⁸

In addition, under the last-in-time rule, a treaty cannot override subsequent conflicting legislation.¹⁸⁹ Consequently, Congress controls even the enforceability of self-executing treaties.¹⁹⁰ Finally, even if the treaty precedes applicable legislation, the latter must be interpreted in light of *Murray v. The Schooner Charming Betsy*,¹⁹¹ whereby national statutes should not be construed in a way that violates international law if another interpretation is possible.¹⁹² A similar principle has been recognized in other countries.¹⁹³

¹⁸³ See, e.g., Jordan J. Paust, *Self-Executing Treaties*, 82 AM. J. INT'L L. 760 *passim* (1988).

¹⁸⁴ U.S. CONST. art. VI, cl. 2 (“This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land.”).

¹⁸⁵ See, e.g., *J.H. Rayner Ltd. v. Dept. of Trade and Indus.* [1990] 2 AC 418 (HL) (appeal taken from Eng.) (“Treaties . . . are not self-executing. . . . [A] treaty is not part of English law unless and until it has been incorporated into the law by legislation.”); Vázquez, *supra* note 182, at 697–98 (“[U]nder the fundamental law of Great Britain, all treaties are ‘non-self-executing.’ All treaties . . . require legislative implementation before they may be enforced by domestic law-applying officials.”); Wickremasinghe, *supra* note 178, at 436–37 (“[B]efore treaty obligations can become part of UK law, they must be incorporated into UK law by domestic legislation.”).

¹⁸⁶ See 1958 CONST. art 55 (Fr.); CONST. art. 15(4) (Rus.); see also Susan Rose-Ackerman & Thomas Perroud, *Policymaking and Public Law in France*, 19 COLUM. J. EUR. L. 225, 237 n.39 (2013) (discussing the status of international law in France).

¹⁸⁷ See Wickremasinghe, *supra* note 171, ¶ 5 (explaining the distinction between dualist and monist jurisdictions).

¹⁸⁸ See International Organisations Act 1968, c. 48, § 1(2) (UK); see also International Organisations (Privileges and Immunities) Act 1963, § 6 (Austl.) (authorizing recognition of privileges and immunities through regulations); Foreign Missions and International Organizations Act, S.C. 1991, c. 41, § 5(1) (Can.); §2, Immunities and Rights (International Organizations and Special Missions) Law, 5743-1983, LSI 37 144 (1982–83) (Isr.); Wickremasinghe, *supra* note 178, at 437–38 (discussing endorsement through secondary legislation in the United Kingdom).

¹⁸⁹ See *Whitney v. Robertson*, 124 U.S. 190, 194 (1888) (“[I]f the two are inconsistent, the one last in date will control the other, provided, always, the stipulation of the treaty on the subject is self-executing.”); *The Cherokee Tobacco*, 78 U.S. (11 Wall.) 616, 621 (1870) (“A treaty may supersede a prior act of Congress, and an act of Congress may supersede a prior treaty.”).

¹⁹⁰ See Vázquez, *supra* note 182, at 696.

¹⁹¹ 6 U.S. (2 Cranch) 64 (1804).

¹⁹² See *id.* at 118.

¹⁹³ See *Inland Revenue Comm’rs v. Collco Dealings Ltd.* [1962] AC 1 (HL) (appeal taken from Eng.).

Many international organizations—including the International Finance Corporation discussed in *Jam*¹⁹⁴ and the European Space Agency¹⁹⁵—have only limited treaty-based immunities, and therefore cannot benefit from a treaty on top of their IOIA protection, even if the treaty is self-executing and not inconsistent with subsequent legislation. Yet several international organizations enjoy very broad treaty-based immunities. For example, the Convention on the Privileges and Immunities of the United Nations (“UN”), which is self-executing,¹⁹⁶ provides that the UN “shall enjoy immunity from every form of legal process except insofar as in any particular case it has expressly waived its immunity.”¹⁹⁷ The Articles of Agreement of the International Monetary Fund (“IMF”) similarly provide that the IMF enjoys “immunity from every form of judicial process except to the extent that it expressly waives its immunity.”¹⁹⁸ The two organizations thus have an almost absolute immunity, subject only to explicit waiver.¹⁹⁹

The WHO and its agents were granted a broad UN- or IMF-type immunity. The Constitution of the World Health Organization, which came into force in 1948, provides that the WHO, as well as its officials and personnel, shall enjoy “such privileges and immunities as may be necessary for the fulfillment of its objective and for the exercise of its functions” within member states.²⁰⁰ It adds that these privileges and immunities would be defined in a separate agreement. This separate agreement is the Convention on the Privileges and Immunities of the Specialized Agencies, which applies to different UN agencies, including the WHO.²⁰¹ Section 4 provides that these agencies, their property, and their assets “shall enjoy immunity from every form of legal process” unless they explicitly waived the immunity.²⁰² This immunity is extended to representatives of member states (when exercising their functions),²⁰³ officials,²⁰⁴ and experts working for the WHO,²⁰⁵ and applies to “words spoken or written” and acts done by them in their official

¹⁹⁴ See *Jam v. Int’l Fin. Corp.*, 139 S. Ct. 759, 772 (2019) (“Notably, the IFC’s own charter does not state that the IFC is absolutely immune from suit.”).

¹⁹⁵ See Wickremasinghe, *supra* note 171, ¶¶ 2, 34.

¹⁹⁶ See *Brzak v. United Nations*, 597 F.3d 107, 112 (2d Cir. 2010) (holding that the Convention on the Privileges and Immunities of the United Nations is self-executing).

¹⁹⁷ Convention on the Privileges and Immunities of the United Nations art. II, § 2, Feb. 13, 1946, 21.2 U.S.T. 1418, 1 U.N.T.S. 15.

¹⁹⁸ See Articles of Agreement of the IMF art. IX, § 3, Dec. 27, 1945, 60 Stat. 1413, 2 U.N.T.S. 74.

¹⁹⁹ See *LaVenture v. United Nations*, 279 F. Supp. 3d 394, 398–400 (E.D.N.Y. 2017), *aff’d*, 746 F. App’x. 80, 81 (2d Cir. 2018), *cert. denied*, 140 S. Ct. 108 (2019), *reh’g denied*, 140 S. Ct. 572 (2019).

²⁰⁰ See Constitution of the World Health Organization art. 67, July 22, 1946, T.I.A.S. No. 1808, 14 U.N.T.S. 201.

²⁰¹ See Convention on the Privileges and Immunities of the Specialized Agencies art. I, § 1(ii)(g), Nov. 21, 1947, 33 U.N.T.S. 261.

²⁰² See *id.* art. III, § 4.

²⁰³ See *id.* art. V, § 13(a).

²⁰⁴ See *id.* art. VI, § 19(a).

²⁰⁵ See *id.* annex. VII, § 2(i)(b).

capacity.²⁰⁶ The WHO can therefore argue that its immunity remains nearly absolute irrespective of *Jam*.

A possible retort is that any immunity granted under the 1940s treaties was cut down by the subsequent enactment of the FSIA, which reformed international organization immunity in accordance with *Jam*. Furthermore, the now-canceled U.S. withdrawal from the WHO²⁰⁷ could have deprived the WHO of its treaty-based immunity in the U.S. courts, although it is unclear if this change would have had an effect on pre-withdrawal claims and claims arising from pre-withdrawal decisions and actions.

3. *Fault and Causation*

The WHO is most likely immune from liability for decisions made and actions taken with respect to the COVID-19 pandemic. But even if this obstacle can somehow be overcome, plaintiffs would face steep legal hurdles. Above all, establishing fault and causation would once again be quite challenging.

The main arguments against the WHO focus on its failure to independently obtain and quickly share critical information. The legal question is whether it should have acted differently, and the honest answer is that it probably could not have. In obtaining information, the WHO is dependent on the cooperation of member states. It cannot operate within states without their approval and has no legal power to force governments to divulge medical information or grant access to medical facilities such as hospitals and laboratories.²⁰⁸ If states are reluctant to cooperate, the WHO can try to persuade using meek carrots, such as international praise, and unreliable sticks, such as peer pressure from other countries and the threat of sharing information from other sources (reserved for exceptional cases of utter stonewalling).²⁰⁹ The WHO made a considerable effort to obtain information, but could not be reasonably expected to do much more; it was arguably kept in the dark.²¹⁰ Thus, even if the PRC is responsible for an obstruction of the information flow, the WHO cannot be regarded as an accomplice to the alleged cover-up.

The specific allegation that the WHO failed to investigate and publish information about human-to-human transmission is based primarily on a WHO tweet from January 14, 2020, which stated that “[p]reliminary investigations conducted by the Chinese authorities have found no clear evidence

²⁰⁶ See *id.* arts. V, § 13(a), VI, § 19(a), annex. VII, § 2(i)(b).

²⁰⁷ See *supra* note 165.

²⁰⁸ See Dan De Luce et al., *The Pandemic Shows WHO Lacks Authority to Force Governments to Divulge Information, Experts Say*, NBC NEWS (May 9, 2020), <https://www.nbcnews.com/health/health-news/pandemic-shows-who-lacks-authority-force-governments-divulge-information-experts-n1203046> [<https://perma.cc/83SC-PNG3>].

²⁰⁹ See *id.*

²¹⁰ See Associated Press, *supra* note 37; Rauhala, *supra* note 39; De Luce et al., *supra* note 208.

of human-to-human transmission of the novel #coronavirus (2019-nCoV) identified in #Wuhan, #China.”²¹¹ However, this tweet only reports a preliminary PRC finding. Perhaps the WHO should have emphasized that it was unable to independently verify this statement,²¹² but the absence of such a caveat is unlikely to constitute negligence. This is all the more so because an American WHO official said at a press briefing in Geneva on the very same day that there was limited human-to-human transmission of the virus and warned of the risk of a wider spread.²¹³ Only six days later, the PRC itself officially confirmed human-to-human transmission, arguably after additional data was collected.²¹⁴ Even if negligent, reporting the earlier PRC statements cannot be regarded as the cause of any subsequent harm because governments and scientists surely understood the subtle difference between reporting statements and endorsing them.

Recent evidence also shows that the WHO commended the PRC for its response and transparency partly because it was impressed by the strict measures the PRC took in Hubei²¹⁵ and by the quick sequencing and sharing of the viral genome, and partly because the organization endeavored to maintain a good working relationship with the government of the PRC to secure the continuous flow of information.²¹⁶ Perhaps the WHO could have pressed the PRC more, but it was walking on very thin ice. Confronting the PRC was not a viable option due to political sensitivity and urgent scientific need.

Regarding the allegedly belated declaration of a PHEIC, the WHO was once again constrained by the International Health Regulations. According to these Regulations, the Director-General of the WHO must consult with the state in which the event in question occurs, and a decision regarding declaration must normally be made by a consensus.²¹⁷ If there is no agreement, the Director-General establishes an ad hoc Emergency Committee and ensures that at least one of its members is an expert nominated by the state concerned.²¹⁸ The Committee must enable the relevant state to present its views following a sufficient advance notice, and the Committee’s conclusions are forwarded to the Director-General, who then makes the final determination.²¹⁹ This is a burdensome process, which entails some level of cooperation between the WHO and the state concerned. It is hard to contend that the WHO mishandled it. Moreover, even if a PHEIC should have been declared earlier, as some experts believe,²²⁰ causation between the delay and

²¹¹ See World Health Org. (@WHO), TWITTER (Jan. 14, 2020, 6:18 AM), <https://twitter.com/WHO/status/1217043229427761152?s=20> [<https://perma.cc/842M-UC5Z>].

²¹² See De Luce et al., *supra* note 208.

²¹³ See *id.*

²¹⁴ See Markson, *supra* note 29; Yu et al., *supra* note 31; Kuo, *supra* note 32.

²¹⁵ See *supra* notes 128–130 and accompanying text.

²¹⁶ See Associated Press, *supra* note 37.

²¹⁷ See International Health Regulations art. 12(2)–(3), May 23, 2005, 2509 U.N.T.S. 79.

²¹⁸ See *id.* art. 48.

²¹⁹ See *id.* art. 49.

²²⁰ See Kupferschmidt & Cohen, *supra* note 151.

subsequent harms will be extremely difficult to establish because developed countries usually take precautions upon learning about new risks without waiting for the WHO's formal decisions.²²¹

Travel restrictions are a somewhat controversial matter. Some experts argue that they are only effective in the short term and must be accompanied by additional measures to have a durable impact.²²² At the same time, travel restrictions might have considerable economic and social repercussions. They might hinder the global fight against pandemics—for example, by discouraging transparency or disrupting medical supply chains as well as food trade. Still, as mentioned earlier, some experts believe that the WHO's opposition to the use of travel restrictions as a precaution must be reevaluated.²²³

Putting aside the question of fault, it is almost impossible to establish a causal link between the recommendation to avoid travel restrictions and victims' illness or economic loss. Countries do not need to comply with WHO recommendations and may pursue their own response strategies based on local scientific advice and policy considerations. And many did. At least six polities had already imposed travel restrictions before the declaration of a PHEIC on January 30, 2020.²²⁴ Seventeen countries imposed travel restrictions within twenty-four hours of the declaration, irrespective of the WHO's position.²²⁵ The United States started health screening passengers on flights from Wuhan on January 17, and on January 31 announced travel restrictions effective from February 2.²²⁶ If the WHO's travel recommendation did not change U.S. decisions and actions, it is not responsible for any harm in the U.S. In any event, it appears that acts and omissions of federal, state, and local governments—such as failures to acquire sufficient medical equipment, expand diagnostic testing capacity, and implement social distancing and contact tracing measures—had a much greater impact on domestic spread and resulting harms.²²⁷

C. Practical Obstacles

COVID-19 victims suing the WHO also face a serious practical problem. International organizations do not normally generate income and therefore rely on member-state contributions. Because international organizations' budgets are so limited, bringing mass tort claims against them, even if legally possible, might be futile. The WHO's biennial budget for base pro-

²²¹ See *id.*

²²² See De Luce et al., *supra* note 208.

²²³ See Nebehay, *supra* note 162 and accompanying text.

²²⁴ See Glenn Kessler, *Trump's Claim that He Imposed the First 'China Ban,'* WASH. POST (Apr. 7, 2020, 3:00 AM), <https://www.washingtonpost.com/politics/2020/04/07/trumps-claim-that-he-imposed-first-china-ban/> [<https://perma.cc/E5US-W7M8>].

²²⁵ See *id.*

²²⁶ See *id.*

²²⁷ See De Luce et al., *supra* note 208.

grams is lower than \$4 billion.²²⁸ As explained above, two difficulties follow from the potential defendant's limited financial capacity. First, the costly lawsuits will not compensate victims. Even if the WHO's entire budget were allocated to potential liability for COVID-19 harms, it would only cover a small fraction of the aggregate loss. Second, a defendant who cannot cover expected liability is judgment proof, and hence under-deterred. In the current context, liability may have another adverse effect: a potentially staggering liability would undermine the international organization's ability to carry out its basic functions and achieve its important goals.

In theory, the WHO can seek special contributions from member states to cover victims' losses. In 2010, UN peacekeepers unintentionally caused a cholera epidemic in Haiti.²²⁹ Though the UN was immune from liability for these unfortunate events,²³⁰ it decided to establish a \$400 million fund for *ex gratia* payments to affected Haitians.²³¹ Noble as this was, \$400 million could not cover the losses; and, even more importantly, member states have only donated around \$10 million to date.²³² The COVID-19 pandemic has caused much greater harm, far beyond the WHO's fundraising ability and members' willingness to contribute. Further, whereas the causal responsibility of UN personnel for the Haiti incident was quite clear, the shaky legal basis of the recent claims against the WHO render a similar fund unlikely.

Finally, bringing lawsuits against the WHO for COVID-19 harms seems inefficient and unjust from another angle. A rough correlation exists between the size of each country's economy and two variables: (1) the economic impact of the pandemic on that country and (2) its annual contribution to the WHO. If judgments against the WHO were executed around the world, and the aggregate losses were greater than the organization's funds, residents of each country would essentially recuperate their own contributions. Instead of paying their dues to the WHO, indirectly compensating victims following a costly process, member states could aid local victims directly. If all countries share the cost, many innocent parties would also ultimately shoulder some of the burden imposed on a negligent or reckless injurer.

²²⁸ See WORLD HEALTH ORG. [WHO], PROGRAMME BUDGET 2020–2021, at 19–20, 22, 24 (2019).

²²⁹ See *LaVenture v. United Nations*, 279 F. Supp. 3d 394, 395 (E.D.N.Y. 2017), *aff'd*, 746 F. App'x. 80 (2d Cir. 2018).

²³⁰ See *LaVenture*, 279 F. Supp. at 398–400.

²³¹ See Rick Gladstone, *After Bringing Cholera to Haiti, U.N. Can't Raise Money to Fight It*, N.Y. TIMES (Mar. 19, 2017), <https://www.nytimes.com/2017/03/19/world/americas/cholera-haiti-united-nations.html> [<https://perma.cc/6HFR-DYXT>]; Anastasia Moloney, *U.N. Criticized for Failing on Promise to Help Haiti Cholera Victims*, REUTERS (Apr. 29, 2018, 11:22 PM), <https://www.reuters.com/article/un-criticized-for-failing-on-promise-to-help-haiti-cholera-victims-idUSKBN1I105G> [<https://perma.cc/ZG4L-XZM9>].

²³² See UNITED NATIONS DEV. PROGRAMME MULTI-PARTNER TRUST FUND OFFICE, U.N. HAITI CHOLERA RESPONSE MULTI-PARTNER TRUST FUND, <http://mptf.undp.org/factsheet/fund/CLH00> [<https://perma.cc/M6K3-ZUXC>].

IV. NATIONAL AND SUBNATIONAL GOVERNMENTS

A. Possible Claims

Governments around the world—national and subnational—have taken a wide array of steps to prepare for and respond to the COVID-19 pandemic. First and foremost, many have implemented public health measures, such as advising against interpersonal contact and requiring physical distance between people in public venues (including businesses); encouraging or ordering the use of face masks; closing schools, workplaces, and businesses; halting or limiting public transportation; banning gatherings; imposing travel restrictions; and enforcing isolations, quarantines, and lockdowns. Second, governments have provided hygiene guidelines, encouraging or mandating hand washing, surface sanitation, air filtration and like practices. Third, they have developed and implemented monitoring and control mechanisms, including diagnostic testing, contact tracing, and surveillance. Fourth, they have acquired and developed medical equipment and supplies, such as intensive care unit beds, ventilators, personal protective equipment for health care providers, and drugs, and employed different treatment methods. Fifth, they have invested in research.

In an action against any government for COVID-19 harms, the most relevant causes of action are negligence and wrongful death, although intentional or negligent infliction of emotional distress may also be applicable in some cases. Governments can be blamed for negligence or recklessness if they (1) failed to take or invest in particular measures; (2) used excessive or insufficient levels thereof; (3) took the necessary measures belatedly or relaxed them prematurely; or (4) improperly implemented or enforced decisions and policies.²³³

In ordinary cases, increasing the level of care *ex ante* reduces the risk to potential victims and the likelihood of a finding of negligence.²³⁴ The complicating factor is that every change in the stringency or timing of a specific measure simultaneously reduces the risk to many potential victims and increases the risk to many others. For example, travel restrictions may slow down the spread of a disease and save lives but cause considerable harm to the tourism and hospitality sectors. Similarly, lockdowns reduce infection and death rates but they also impose losses on businesses. The stricter and

²³³ Such claims were brought against the governments in France and Italy after this Article had been accepted for publication. See Angela Giuffrida, *Relatives of Italian Covid Victims to File Lawsuit Against Leading Politicians*, GUARDIAN (Dec. 22, 2020), <https://www.theguardian.com/world/2020/dec/22/relatives-of-italian-covid-victims-to-file-lawsuit-against-leading-politicians> [<https://perma.cc/Y3T4-LUXZ>]; Angela Charlton, *French Prime Minister Targeted by Lawsuit over Virus Policy*, AP NEWS (Sept. 17, 2020), <https://apnews.com/article/virus-outbreak-paris-lawsuits-archive-france-163d88bb1fdb36d3dbc29eb8f0865e64> [<https://perma.cc/L56M-N27P>].

²³⁴ See STEVEN SHAVELL, *ECONOMIC ANALYSIS OF ACCIDENT LAW* 5–9 (1987).

longer the restrictions, the greater the impact. Those who lost their jobs or incurred business losses may argue that the measures taken were too stringent or that they were introduced too early or lifted too late. In contrast, those who suffered illness or lost their loved ones may argue that these measures were overly lenient or that they were introduced too late or lifted too early. Presumably, the two groups, when suing governments, would present conflicting approaches to the question of reasonableness. Courts would have to take into account the legitimate interests of both and determine which combinations of measures constitute a reasonable balance. In other words, the question of reasonableness entails uniquely complex, delicate, and dynamic analyses of the benefits and costs of each decision.

Some polities like Hong Kong, Singapore, and Taiwan quickly implemented strict measures, such as travel restrictions or traveler health screening, quarantines, intensive testing and contact tracing, bans on large gatherings and events, and heightened public hygiene.²³⁵ The result was a relatively limited death toll and moderate economic disruption.²³⁶ The losses incurred cannot be attributed to negligence. In contrast, Sweden avoided lockdowns, business closures, and other social distancing measures implemented by most countries.²³⁷ This led to a very high death toll without avoiding economic impact and, at first glance, seems negligent.²³⁸ Other countries adopted middle ground schemes.

In the United States, substantial variation exists among federal, state, and local governments' response strategies.²³⁹ Yet it is fair to observe that social distancing measures were imposed relatively late, lifted rather early, or both, resulting in high infection and death rates, and possibly a serious economic impact.²⁴⁰ Questions remain regarding the federal government's efforts to prepare for emerging needs. For example, the Defense Production Act of 1950²⁴¹ was underutilized in the process of procuring tests, protective personal equipment, and ventilators.²⁴² Some allege that the CDC and the Food and Drug Administration ("FDA") hindered the development of suffi-

²³⁵ See Cowling & Lim, *supra* note 142.

²³⁶ See *id.*

²³⁷ See Peter S. Goodman, *Sweden Has Become the World's Cautionary Tale*, N.Y. TIMES (July 7, 2020), <https://www.nytimes.com/2020/07/07/business/sweden-economy-coronavirus.html> [<https://perma.cc/L3K9-YVGL>].

²³⁸ See *id.*

²³⁹ See, e.g., Henriques et al., *supra* note 25.

²⁴⁰ See, e.g., Britta L. Jewell & Nicholas P. Jewell, *The Huge Cost of Waiting to Contain the Pandemic*, N.Y. TIMES (Apr. 14, 2020), <https://www.nytimes.com/2020/04/14/opinion/covid-social-distancing.html> [<https://perma.cc/WR69-XEU2>] (arguing that social distancing measures were taken too late); Ivana Kottasová & Natalie Croker, *The US, Brazil and Others Lifted Lockdowns Early. These Charts Show Just How Deadly that Decision Was*, CNN (July 3, 2020), <https://edition.cnn.com/2020/07/03/health/coronavirus-lockdown-lifting-deadly-charts-intl/> [<https://perma.cc/2ZMS-4AN6>] (arguing that social distancing measures were lifted too early).

²⁴¹ 50 U.S.C. §§ 4501–68.

²⁴² See, e.g., Zolan Kanno-Youngs & Ana Swanson, *Wartime Production Law Has Been Used Routinely, but Not with Coronavirus*, N.Y. TIMES (Mar. 31, 2020), <https://>

cient testing capacity.²⁴³ Nonetheless, it may still be too early to determine whether the benefits of the measures taken by federal, state, and local governments outweighed the costs.

B. Legal Obstacles

1. Sovereign and Official Immunities

In *Cohens v. Virginia*,²⁴⁴ the Supreme Court held that the United States cannot be sued without its consent, and that consent can be given either in a particular case or through a general law.²⁴⁵ The Federal Tort Claims Act of 1946 (“FTCA”)²⁴⁶ provided such general, though limited, consent. The Act provides that the district courts will have jurisdiction over civil actions against the United States “for injury or loss of property, or personal injury or death caused by the negligent or wrongful act or omission of any employee of the Government while acting within the scope of his office or employment.”²⁴⁷ The liability attaches to the United States where, if it were “a private person, [it] would be liable in accordance with the law of the place where the act or omission occurred.”²⁴⁸

This general rule is subject to several exceptions.²⁴⁹ The most notable and relevant in the current context is the discretionary function doctrine. According to the FTCA, the federal government is not liable for “the exercise or performance or the failure to exercise or perform a discretionary function or duty on the part of a federal agency or an employee of the Government,” even if the discretion was abused.²⁵⁰ The discretionary function doctrine is designed to prevent “judicial ‘second-guessing’ of legislative and administrative decisions grounded in social, economic, and political policy.”²⁵¹ The exception applies if two conditions are met. First, the act must involve judgment or choice of the acting official or employee.²⁵² Second, the judgment must be “of the kind that the discretionary function exception was

www.nytimes.com/2020/03/31/us/politics/coronavirus-defense-production-act.html [<https://perma.cc/MNP3-8SXT>].

²⁴³ See Bob Ortega et al., *How the Government Delayed Coronavirus Testing*, CNN (Apr. 10, 2020), <https://www.cnn.com/2020/04/09/politics/coronavirus-testing-cdc-fda-red-tape-invs/> [<https://perma.cc/D4S3-BQHT>].

²⁴⁴ 19 U.S. 264 (1821).

²⁴⁵ See *id.* at 380, 411–12.

²⁴⁶ 28 U.S.C. § 1346.

²⁴⁷ *Id.* § 1346(b)(1).

²⁴⁸ *Id.*

²⁴⁹ See *id.* § 2680.

²⁵⁰ *Id.* § 2680(a).

²⁵¹ *United States v. S.A. Empresa De Viacao Aerea Rio Grandense (Varig Airlines)*, 467 U.S. 797, 814 (1984); see also *Fisher Bros. Sales v. United States*, 46 F.3d 279, 284 (3d Cir. 1995), *cert. denied*, 516 U.S. 806 (1995) (“[The exception is] designed to protect policy making by the politically accountable branches of government from interference in the form of ‘second-guessing’ by the judiciary.”).

²⁵² See *Berkovitz v. United States*, 486 U.S. 531, 536 (1988).

designed to shield”—that is, based on considerations of social, economic, or political public policy.²⁵³ The immunity extends to all administrative bodies of the federal government as long as they perform the functions of the government itself.²⁵⁴

The discretionary function exception seems highly pertinent to pandemic response strategies. Policy decisions concerning public health are undoubtedly protected under the doctrine. Thus, for example, when the FDA Commissioner issued an order refusing the entry of Chilean fruit into the United States because of suspected cyanide poisoning, the Third Circuit held that the challenged decisions could not give rise to liability.²⁵⁵ The FDA Commissioner’s decisions were “matters of choice” because he had the discretion to test incoming fruit, to determine whether it was adulterated, and to refuse entry into the United States.²⁵⁶ In addition, his decisions involved questions of “social, economic, and political policy.”²⁵⁷ The two conditions—judgment, which was grounded in policy—were met.²⁵⁸ This analysis is applicable *a fortiori* to the federal response to the COVID-19 pandemic. But the government’s discretion in the current context is much broader, and considerations of public policy are weighed and balanced on a much larger scale—as any decision may have a direct impact on the lives and livelihoods of millions of people.

Most states and local governmental entities enjoy like immunity from liability for “the exercise of an administrative function involving the determination of fundamental governmental policy.”²⁵⁹ As with the federal government immunity, a discretionary function²⁶⁰ immunity applied to states and local governments assures that courts do not “pass judgment on policy decisions in the province of coordinate branches of government,”²⁶¹ and thereby vindicates the separation-of-powers doctrine. State and local government immunity, like the FTCA immunity, extends to all subordinate bodies of the

²⁵³ *Id.* at 536–37.

²⁵⁴ See RESTATEMENT (SECOND) OF TORTS § 895A cmt. c (AM. L. INST. 1979).

²⁵⁵ See *Fisher Bros. Sales*, 46 F.3d at 287.

²⁵⁶ *Id.* at 285.

²⁵⁷ *Id.* at 284–85.

²⁵⁸ See *id.* at 285.

²⁵⁹ RESTATEMENT (SECOND) OF TORTS §§ 895B(3)(b), 895C(2)(b) (AM. L. INST. 1979); see also, e.g., ALASKA STAT. § 09.50.250(1) (2019) (“[A]n action may not be brought [in tort if it is] based upon the exercise or performance or the failure to exercise or perform a discretionary function or duty on the part of a state agency or an employee of the state.”); ARIZ. REV. STAT. ANN. § 26-314(A) (2019) (“This state and its departments, agencies, boards and commissions and all political subdivisions are not liable for any claim based on the exercise or performance, or the failure to exercise or perform, a discretionary function.”). Some states still have broader governmental immunities. See, e.g., COLO. REV. STAT. §§ 24-10-102–106 (2020) (adopting a general immunity with specific exceptions).

²⁶⁰ See RESTATEMENT (SECOND) OF TORTS §§ 895B cmt. d, 895C cmt. g (AM. L. INST. 1979).

²⁶¹ *Johnson v. State of California*, 447 P.2d 352, 361 (Cal. 1968); see also RESTATEMENT (SECOND) OF TORTS §§ 895B cmt. d, 895C cmt. g (AM. L. INST. 1979).

respective government, as long as these entities perform government functions.²⁶²

Public officers are also exempt from liability for administrative acts and omissions if they “engaged in the exercise of a discretionary function.”²⁶³ This immunity is not confined to high-level executive officials; it extends to lower administrative officers when they “engage in making a decision by weighing the policies for and against it.”²⁶⁴ Policy decisions made by public officers in preparation for or in response to the COVID-19 outbreak are undoubtedly covered, particularly given the gravity and urgency of the matters at hand.²⁶⁵ For example, public officers’ decisions about school and business closures, investment in certain treatment methods, and social distancing enforcement reflect an exercise of judgment based on broad policy considerations. Public officers thus cannot be held liable for ensuing losses, be they physical, emotional, or economic.

2. *Duty, Fault, and Causation*

As with other potential defendants, establishing the elements of a cause of action in tort will undoubtedly pose a challenge for those bringing suits against national or subnational governments. The first element of negligence is a duty of care.²⁶⁶ Some governmental agencies and their employees can invoke the common law public duty doctrine. Under this rule, a governmental entity and its employees cannot be held liable for breach of a duty owed to the public at large, as opposed to a duty owed to a particular individual.²⁶⁷ Absent a “special relationship” between the entity and the individual victim, the law affords the former an effective defense.²⁶⁸ For instance, because the duty to provide police protection is owed to the entire citizenry, a municipality or a state cannot be liable for a police department’s failure to provide adequate protection to an individual.²⁶⁹ More importantly, under the public

²⁶² See RESTATEMENT (SECOND) OF TORTS § 895B cmt. g. (AM. L. INST. 1979).

²⁶³ *Id.* § 895D(3)(a).

²⁶⁴ *Id.* § 895D cmt. d.

²⁶⁵ The *Restatement (Second) of Torts* enumerates several factors that courts must consider in determining whether the public officer exercised a discretionary function and should be protected from liability, including the nature and importance of the function, the extent to which assessing the officer’s decision amounts to “passing judgment by the court on the conduct of a coordinate branch of government,” and the extent to which liability would impair the free exercise of the officer’s discretion. *Id.* § 895D cmt. f.

²⁶⁶ See *supra* note 15 and accompanying text.

²⁶⁷ See John Cameron McMillan, Jr., Note, *Government Liability and the Public Duty Doctrine*, 32 VILL. L. REV. 505, 506, 509 (1987); Carl Rizzi, Note, *A Duty to Protect: Why Gun-Free Zones Create a Special Relationship Between the Government and Victims of School Shootings*, 25 CORNELL J.L. & PUB. POL’Y 499, 501–04 (2015). The rule originated in *South v. Maryland ex rel. Pottle*, 59 U.S. 396, 402–03 (1855).

²⁶⁸ See McMillan, *supra* note 267, at 506; Rizzi, *supra* note 267, at 502. A special relationship exists where the government entity singles out an individual and affords him or her special treatment.

²⁶⁹ See, e.g., *Shore v. Town of Stonington*, 444 A.2d 1379 (Conn. 1982) (denying liability for alleged police negligence on the basis of the public duty doctrine); *Stevenson v. City of*

duty doctrine, agencies responsible for maintaining public health or safety cannot be held liable for personal harm caused by their failure to carry out such duties.²⁷⁰ While the doctrine has been abolished in some jurisdictions,²⁷¹ it is still in force in others.²⁷²

Establishing a government's negligence in the COVID-19 context is a difficult task. First, as explained above, the impact of SARS-CoV-2 and the possible effect of different measures on its spread and virulence were unknown at the early stages of the outbreak and are not yet fully understood. The reasonable level of care depends on the foreseeable level of risk and on the possible impact of different precautions on that risk.²⁷³ As these variables were almost impossible to accurately assess, it is hard to determine which levels of care were reasonable when critical decisions were made. Second, the fact that every change in strictness or timing of a specific measure simultaneously reduces the risk to some and increases the risk to others exacerbates the impracticability of determining the required standard of care. Third, although in theory each measure can be assessed separately, the reasonableness of a governmental preparedness and response scheme hinges on the aggregation of various steps taken at different times. The complexity of such a scheme, and the amounts of information that underlie it, make the judicial evaluation of its reasonableness unmanageable.

Global experience provides the most compelling evidence for the impracticability of determining the standard of care. The considerable variance in preparedness and response strategies among different countries, states, and even localities demonstrates either that no generally reasonable government response strategy could be identified or that there are numerous reasonable options. Either way, it will be difficult to find a specific government negligent. In addition, the fact that governments gradually fine-tune response measures in accordance with new data shows that decisions have been made under severe uncertainty.

Doraville, 726 S.E.2d 726, 728–29 (Ga. Ct. App. 2012) (same); *White v. Beasley*, 552 N.W.2d 1, 3 (Mich. 1996) (same); *Wood v. Guilford Cnty.*, 558 S.E.2d 490, 494–97 (N.C. 2002) (same).

²⁷⁰ See, e.g., *Fryman v. JMK/Skewer, Inc.*, 484 N.E.2d 909, 911–13 (Ill. App. Ct. 1985) (finding that patrons who suffered food poisoning at a restaurant that the county's health department knew was serving contaminated food could not sue the county because of the public duty rule); *Cox v. Dep't of Nat. Res.*, 699 S.W.2d 443, 449 (Mo. Ct. App. 1985) (finding a state agency not liable for injuries sustained by the plaintiff in a swimming area the agency was under duty to maintain).

²⁷¹ See, e.g., *Adams v. State*, 555 P.2d 235, 241–43 (Alaska 1976) (rejecting the public duty doctrine); *Leake v. Cain*, 720 P.2d 152, 158–60 (Colo. 1986) (same); *Com. Carrier Corp. v. Indian River Cnty.*, 371 So. 2d 1010, 1015 (Fla. 1979) (same); *Schear v. Bd. of Cnty. Comm'rs of Bernalillo Cnty.*, 687 P.2d 728, 731 (N.M. 1984) (same); *Brennen v. City of Eugene*, 591 P.2d 719, 725 (Or. 1979) (same); *Coffey v. City of Milwaukee*, 247 N.W.2d 132, 139 (Wis. 1976) (same); *DeWald v. State*, 719 P.2d 643, 653 (Wyo. 1986) (same).

²⁷² See *supra* notes 269–270 and accompanying text; see also *Rizzi*, *supra* note 267, at 502.

²⁷³ See *supra* notes 122–124 and accompanying text.

Lastly, even if failure to take a certain measure is negligent, the causation requirement might impede many claims. Assume, for example, that family members of a COVID-19 victim sue the state for refusing to promulgate stricter social distancing guidelines. The pandemic has resulted in excess mortality in almost all Western countries, irrespective of their response strategies, and it is not yet clear which factors had the most significant effect on mortality rates.²⁷⁴ Consequently, proving by a preponderance of the evidence that but for the alleged negligence the death would not have occurred is a long shot. Similarly, assume that retailers and restaurateurs sue the local government for economic losses resulting from an extended lockdown. Even without the lockdown, these businesses could have lost revenue due to the outbreak's impact on customers' purchasing power or psychological readiness to shop and dine outdoors. Again, causation becomes a stumbling block.

3. *Economic Losses*

Social distancing, travel restrictions, lockdowns, and consumer sentiment have had a considerable impact on numerous businesses in many sectors, including heavy industries (particularly automobile and aircraft manufacturing),²⁷⁵ retail (except for online shopping),²⁷⁶ hospitality (hotels, resorts, restaurants, and bars),²⁷⁷ tourism (particularly airlines and cruise lines),²⁷⁸ sports,²⁷⁹ and entertainment (theatre, cinema, and concerts).²⁸⁰ Many businesses collapsed, many shut down temporarily, and countless others experienced a decline in sales. Millions of employees were furloughed or laid

²⁷⁴ See generally Lasse S. Vestergaard et al., *Excess All-Cause Mortality During the COVID-19 Pandemic in Europe*, 25 *EUROSURVEILLANCE* 1 (2020) (discussing excess mortality in Europe).

²⁷⁵ See, e.g., Michael Wayland, *Worst Yet to Come as Coronavirus Takes Its Toll on Auto Sales*, CNBC (Apr. 1, 2020), <https://www.cnbc.com/2020/04/01/worst-yet-to-come-as-coronavirus-takes-its-toll-on-auto-sales.html> [<https://perma.cc/W7ZK-2BVW>].

²⁷⁶ See, e.g., Lauren Thomas, *The Coronavirus Pandemic Will Likely Leave a Lasting Legacy on Retail*, CNBC (Apr. 19, 2020), <https://www.cnbc.com/2020/04/19/a-lasting-legacy-of-the-coronavirus-pandemic-fewer-department-stores.html> [<https://perma.cc/9FLW-HEZX>].

²⁷⁷ See, e.g., Eduardo Porter, *The Service Economy Meltdown*, N.Y. TIMES (Sept. 4, 2020), <https://www.nytimes.com/2020/09/04/business/economy/service-economy-workers.html> [<https://perma.cc/2CKE-6BVB>].

²⁷⁸ See, e.g., *The Coronavirus May Sink the Cruise-Ship Business*, ECONOMIST (Mar. 31, 2020), <https://www.economist.com/business/2020/03/31/the-coronavirus-may-sink-the-cruise-ship-business> [<https://perma.cc/XS2X-DA43>].

²⁷⁹ See, e.g., *Coronavirus Wipes out Most of World's Major Sports Events on an Unprecedented Day*, BBC (Mar. 14, 2020), <https://www.bbc.co.uk/sport/51880582> [<https://perma.cc/NU75-AWL6>].

²⁸⁰ See, e.g., Taylor Romine et al., *Broadway Theaters to Suspend All Performances Because of Coronavirus*, CNN (Mar. 12, 2020), <https://edition.cnn.com/2020/03/12/health/broadway-coronavirus-update/index.html> [<https://perma.cc/RV59-VK2C>].

off,²⁸¹ triggering a further decline in consumption. Stock markets around the world crashed, although U.S. indexes have recovered.²⁸²

These economic losses may be classified as “relational.” A relational economic loss is “a loss of profits or an expense that stems from physical injury to the person or property of a third party or to an ownerless resource.”²⁸³ The concept may be extended to economic losses resulting from the handling of risk to the person or property of others, as in the case of the COVID-19 outbreak. In the United States, this legal phenomenon is often framed in terms of negligent interference with contract or prospective contractual relations.²⁸⁴ Starting with *Anthony v. Slaid*,²⁸⁵ courts have generally denied recovery for this kind of loss.²⁸⁶ The leading authority is *Robins Dry Dock & Repair Co. v. Flint*,²⁸⁷ in which the Supreme Court held that “a tort to the person or property of one man does not make the tortfeasor liable to another merely because the injured person was under a contract with that other, unknown to the doer of the wrong.”²⁸⁸ Despite the explicit references to a contractual relationship between the plaintiff and the immediate victim and to the defendant’s unawareness of such relationship, the case was broadly interpreted to exclude liability for *any* relational economic loss, whether the relationship between the two victims was contractual or non-contractual²⁸⁹ and whether the relationship was known or unknown to the defendant.²⁹⁰ Moreover, courts refused to limit the rule to lost profits, as

²⁸¹ See, e.g., Delphine Strauss, *Loss of Working Hours to Equal 195m Full-Time Jobs*, *UN Agency Warns*, FIN. TIMES (Apr. 7, 2020), <https://www.ft.com/content/d78b8183-ade7-49c2-a8b5-c40fb031b801> [<https://perma.cc/4VKQ-PD6M>].

²⁸² See, e.g., Devik Jain & Shreyashi Sanyal, *Wall Street Retreats After Rallying on Recovery Optimism*, REUTERS (June 4, 2020), <https://uk.reuters.com/article/us-stocks-wall-street-re-treats-after-rallying-on-recovery-optimism-idUKL4N2DH3L1> [<https://perma.cc/YWF2-W84Z>].

²⁸³ Ronen Perry, *The Deepwater Horizon Oil Spill and the Limits of Civil Liability*, 86 WASH. L. REV. 1, 10 (2011); see also Ronen Perry, *The Economic Bias in Tort Law*, 2008 U. ILL. L. REV. 1573, 1574 [hereinafter Perry, *Economic Bias*]; Ronen Perry, *Economic Loss, Punitive Damages, and the Exxon Valdez Litigation*, 45 GA. L. REV. 409, 416 (2010); Perry, *supra* note 16, at 712.

²⁸⁴ See RESTATEMENT (SECOND) OF TORTS § 766C (AM. L. INST. 1979).

²⁸⁵ 52 Mass. (11 Met.) 290 (1846).

²⁸⁶ See *id.* at 291 (finding that an expense incurred following a personal injury to a third party was too remote); see also *Ins. Co. v. Brame*, 95 U.S. 754, 758–59 (1877) (holding that an expense resulting from the intentional killing of a third party was too remote); *Conn. Mut. Life Ins. Co. v. N.Y. & New Haven R.R. Co.*, 25 Conn. 265, 274, 276–77 (1856) (same).

²⁸⁷ 275 U.S. 303 (1927).

²⁸⁸ *Id.* at 309.

²⁸⁹ See, e.g., *Ballard Shipping Co. v. Beach Shellfish*, 32 F.3d 623, 625 (1st Cir. 1994); *Barber Lines A/S v. M/V Donau Maru*, 764 F.2d 50, 51 (1st Cir. 1985); *Louisiana ex rel. Guste v. M/V Testbank*, 752 F.2d 1019, 1021, 1023–24 (5th Cir. 1985).

²⁹⁰ See, e.g., *Steele v. J & S Metals, Inc.*, 335 A.2d 629, 630 (Conn. Super. Ct. 1974); *PPG Indus., Inc. v. Bean Dredging*, 447 So. 2d 1058, 1060–61 (La. 1984); *Ferguson v. Green Island Contracting Corp.*, 355 N.Y.S.2d 196, 197–99 (N.Y. App. Div. 1974).

opposed to outlays;²⁹¹ to the tort of negligence, as opposed to other causes of action;²⁹² or to maritime law, as opposed to the common law.²⁹³

With very few narrow exceptions, which are irrelevant in the current context,²⁹⁴ federal and state courts have accepted the broad interpretation of *Robins Dry Dock* and applied it to the great majority of relational economic loss cases.²⁹⁵ A few state courts have replaced the exclusionary rule with a somewhat more liberal approach. The Supreme Courts of Alaska and New Jersey, for example, held that one owes a duty of care to take reasonable measures to avoid the risk of causing pure economic loss to particular individuals or individuals comprising an identifiable class with respect to whom one knows or has reason to know are likely to suffer such loss from one's conduct.²⁹⁶ Theoretically, this formula can be used by members of identifiable classes directly affected by specific COVID-19 restrictions, such as restaurants or theatres. Still, most victims will be left out.

To understand why courts will probably adhere to the exclusionary rule in cases of economic loss caused by governmental decisions and actions concerning COVID-19, one must be acquainted with the rule's justifications. Many of those turn on the fear of open-endedness. In *Ultramares Corp. v. Touche*,²⁹⁷ then-Judge Cardozo opined that allowing claims for pure economic loss might expose the wrongdoer to "liability in an indeterminate amount for an indeterminate time to an indeterminate class."²⁹⁸ *Ultramares* was not a relational loss case, but the same rationale has been invoked in numerous cases as the primary reason for the exclusion of liability for rela-

²⁹¹ See, e.g., *Barber Lines*, 764 F.2d at 51–52.

²⁹² See, e.g., *id.* at 56–57; *Testbank*, 752 F.2d at 1030–31; *Dick Meyers Towing Serv. v. United States*, 577 F.2d 1023, 1025 n.4 (5th Cir. 1978); *Rickards v. Sun Oil Co.*, 41 A.2d 267, 269 (N.J. 1945).

²⁹³ See, e.g., *Ballard Shipping*, 32 F.3d at 627–28.

²⁹⁴ See Perry, *Economic Bias*, *supra* note 283, at 1613–17.

²⁹⁵ See, e.g., *Barber Lines*, 764 F.2d at 51–52; *Getty Refining & Mktg. Co. v. MT FADI B*, 766 F.2d 829, 832–33 (3d Cir. 1985); *Marine Navigation Sulphur Carriers v. Lone Star Indus., Inc.*, 638 F.2d 700, 702 (4th Cir. 1981); *Taira Lynn Marine Ltd. No. 5 v. Jays Seafood, Inc.*, 444 F.3d 371, 377–81 (5th Cir. 2006); *Testbank*, 752 F.2d at 1021–28; *Akron Corp. v. M/T Cantigny*, 706 F.2d 151, 152–53 (5th Cir. 1983); *Cargill, Inc. v. Offshore Logistics, Inc.*, 615 F.2d 212, 213–14 (5th Cir. 1980); *Louisville & Nashville R.R. Co. v. M/V Bayou La-Combe*, 597 F.2d 469, 472–74 (5th Cir. 1979); *Dick Meyers Towing Serv.*, 577 F.2d at 1024–25; *Kaiser Aluminum & Chem. Corp. v. Marshland Dredging Co.*, 455 F.2d 957, 958 (5th Cir. 1972); *Hercules Carriers, Inc. v. Florida*, 720 F.2d 1201, 1202 (11th Cir. 1983); *Kingston Shipping Co. v. Roberts*, 667 F.2d 34, 35 (11th Cir. 1982); *Conn. Mut. Life Ins. Co. v. N.Y. & New Haven R.R. Co.*, 25 Conn. 265, 275 (Conn. 1856); *Koskela v. Martin*, 414 N.E.2d 1148, 1151 (Ill. App. Ct. 1980); *Gosch v. Juelfs*, 701 N.W.2d 90, 91 (Iowa 2005); *532 Madison Ave. Gourmet Foods, Inc. v. Finlandia Ctr., Inc.*, 750 N.E.2d 1097, 1103 (N.Y. 2001); *Aikens v. Balt. & Ohio R.R.*, 501 A.2d 277, 278–79 (Pa. Super. Ct. 1985); *RESTATEMENT (SECOND) OF TORTS § 766C (AM. L. INST. 1979)* ("One is not liable to another for pecuniary harm not deriving from physical harm to the other.").

²⁹⁶ See *Mattingly v. Sheldon Jackson Coll.*, 743 P.2d 356, 359–61 (Alaska 1987); *People Express Airlines v. Consol. Rail Corp.*, 495 A.2d 107, 116 (N.J. 1985).

²⁹⁷ 174 N.E. 441 (N.Y. 1931).

²⁹⁸ See *id.* at 444.

tional economic losses.²⁹⁹ The validity of this argument rests on two assumptions: a real likelihood of open-endedness and its undesirability.

The soundness of the first assumption, open-endedness, seems self-evident. Infliction of personal injury or death may cause economic loss to the victim's relatives, customers, creditors, suppliers, employers, and partners; the loss of each of those may economically affect others, and so on. Similarly, injuring a factory may cause economic loss to its suppliers, distributors, consumers, business partners, and employees; owners of businesses regularly frequented by the factory's employees may lose profits, and so forth. The potential number of relational victims is vast and indeterminate,³⁰⁰ and potential liability is accordingly large and uncertain. Indeed, in some fact situations the number of potential economic victims is limited and reasonably foreseeable,³⁰¹ and even where it is not, a multiplicity of victims does not necessarily result in multiple actions or extensive liability, because not all victims choose to sue³⁰² and not all claimants succeed.³⁰³ However, these reservations do not apply to catastrophic events, such as the COVID-19 outbreak, where the number of economic victims is not only uncertain *ex ante* but potentially enormous; procedural tools, such as class actions, reduce per capita cost of litigation, thereby inducing victims to sue; and defendants seem to be deep-pocketed (inducing litigation even further).

Regarding the second assumption, undesirability, three aspects of open-endedness may be distinguished: (1) the number of victims; (2) the extent of liability; and (3) uncertainty about both. The potential number of victims (the first aspect) may in itself have some normative significance. For example, denial of liability in cases of multiple victims may be an efficient way to secure *ex post* loss spreading.³⁰⁴ Furthermore, allowing numerous relational victims to recover may open the door to a mass of litigation that might overwhelm the courts,³⁰⁵ although this problem may sometimes be ameliorated

²⁹⁹ See, e.g., *Barber Lines*, 764 F.2d at 54; *Byrd v. English*, 43 S.E. 419, 420 (Ga. 1903); Jane Stapleton, *Comparative Economic Loss*, 50 UCLA L. REV. 531, 536 (2002) (arguing that this is one of the three main rationales for the exclusionary rule).

³⁰⁰ See, e.g., Jane Stapleton, *Duty of Care and Economic Loss*, 107 L.Q. REV. 249, 266, 285 (1991).

³⁰¹ See Fleming James, Jr., *Limitations on Liability for Economic Loss Caused by Negligence*, 25 VAND. L. REV. 43, 55–57 (1972); Perry, *Economic Bias*, *supra* note 283, at 1600–01.

³⁰² See Comment, *The Case of the Disappearing Defendant*, 132 U. PA. L. REV. 145, 145, 150 (1983) (discussing cases where the victim chooses not to sue the injurer).

³⁰³ See Henry D. Gabriel, *Testbank: The Fifth Circuit Reaffirms the Bright Line Rule of Robins Dry Dock and Fails to Devise a Test to Allow Recovery for Pure Economic Damages*, 31 LOY. L. REV. 265, 266, 283 (1985) (explaining that the ordinary principles of tort liability serve as screening devices).

³⁰⁴ See Robert Hayes, *The Duty of Care and Liability for Purely Economic Loss*, 12 MELB. U. L. REV. 79, 114 (1979); Perry, *supra* note 16, at 761–63; Richard A. Posner, *Common-Law Economic Torts*, 48 ARIZ. L. REV. 735, 738 (2006).

³⁰⁵ See *Dundee Cement Co. v. Chem. Lab'ys, Inc.*, 712 F.2d 1166, 1172–73 (7th Cir. 1983); *Stevenson v. E. Ohio Gas Co.*, 73 N.E.2d 200, 203 (Ohio Ct. App. 1946); John G. Rich, *Negligent Interference with Prospective Economic Advantage*, 1980 UTAH L. REV. 431, 434; Ann O'Brien, Note, *Limited Recovery Rule as a Dam*, 31 ARIZ. L. REV. 959, 966 (1989).

through procedural tools such as consolidation of actions or class actions.³⁰⁶ The relevance of the potential number of claimants largely depends on the correlation between the number of claims and the extent of tort liability (the second aspect of open-endedness).

The likelihood of extensive liability is normatively relevant for several reasons. First, from a retributive justice perspective, allowing extensive recovery for economic losses may give rise to an extreme disproportion between the severity of the sanction and the gravity of the wrong,³⁰⁷ especially if the allegation of negligence is dubious. Second, from an *ex ante* perspective, the deterrent effect of liability might be skewed. On the one hand, the marginal deterrent effect may diminish to zero, either because at a certain point no further precautions are available or because the expected payment is limited by the defendant's financial capacity.³⁰⁸ Allowing recovery where the marginal deterrence benefit is smaller than the administrative cost involved is economically undesirable. On the other hand, the fear of unconstrained liability might unduly restrict potential defendants' freedom of action and hinder socially beneficial initiatives and activities.³⁰⁹ Third, from an *ex post* perspective, unconstrained liability might be "crushing," crippling generally beneficial activities.³¹⁰ Fourth, as the extent of potential liability grows, insurance companies may refuse to cover liability, demand an unreasonable premium, or set an upper limit for the cover, thwarting loss spreading.³¹¹ Fifth, if potential liability is truly very large, potential injurers' motivation to purchase liability insurance (where available) shrivels and losses are not spread.³¹² Sixth, from an interest-hierarchy distributive perspective, assuming that any defendant has a limited pool of assets that all successful claim-

³⁰⁶ See Christopher V. Panoff, Note, *In re the Exxon Valdez, Alaska Native Class v. Exxon Corp.: Cultural Resources, Subsistence Living, and the Special Injury Rule*, 28 ENV'T. L. 701, 711–12 (1998).

³⁰⁷ See, e.g., *Phx. Pro. Hockey Club, Inc. v. Hirmer*, 502 P.2d 164, 165 (Ariz. 1972); *Aikens v. Balt. & Ohio R.R. Co.*, 501 A.2d 277, 279 (Pa. Super. Ct. 1985); RESTATEMENT (SECOND) OF TORTS § 766C cmt. a (AM. L. INST. 1979); Ronen Perry, *The Role of Retributive Justice in the Common Law of Torts*, 73 TENN. L. REV. 177, 195–97 (2006) (explaining that the fear of extreme disproportion between the severity of the sanction and the gravity of the wrong is one of the justifications for the exclusionary rule); Robert L. Rabin, *Tort Recovery for Negligently Inflicted Economic Loss*, 37 STAN. L. REV. 1513, 1534, 1538 (1985) (same). *But cf.* Mark Geistfeld, *The Analytics of Duty: Medical Monitoring and Related Forms of Economic Loss*, 88 VA. L. REV. 1921, 1931–32 (2002) (criticizing this type of argument).

³⁰⁸ See, e.g., *Louisiana ex rel. Guste v. M/V Testbank*, 752 F.2d 1019, 1029 (5th Cir. 1985); Donald Harris & Cento Veljanovski, *Liability for Economic Loss in Tort*, in *THE LAW OF TORT* 45, 53 (Michael Furmston ed., 1986).

³⁰⁹ See, e.g., *Hirmer*, 502 P.2d at 165; *Aikens*, 501 A.2d at 279; Andrew W. McThenia & Joseph E. Ulrich, *A Return to Principles of Corrective Justice in Deciding Economic Loss Cases*, 69 VA. L. REV. 1517, 1520 n.17 (1983); O'Brien, *supra* note 305, at 967–68; Rich, *supra* note 305, at 435.

³¹⁰ See, e.g., *Dundee Cement*, 712 F.2d at 1171; *Leadfree Enters., Inc. v. U.S. Steel Corp.*, 711 F.2d 805, 808 (7th Cir. 1983).

³¹¹ See Perry, *Economic Bias*, *supra* note 283, at 1599.

³¹² See SHAVELL, *supra* note 234, at 240 (showing that potential injurers may under-insure if they are judgment-proof); Harris & Veljanovski, *supra* note 308, at 53 (same).

ants ultimately need to share, denial of liability for economic losses may be required to guarantee full compensation for injuries to physical interests which are more deserving of legal protection.³¹³ Seventh, from a compensation perspective, when defendants have limited funds, each victim may obtain compensation for a small fraction of the loss, making the costly process futile.³¹⁴

The third aspect of open-endedness is that the extent of potential liability—the number of potential victims and the features of individual harms—is uncertain, leaving potential injurers incapable of preparing for contingencies.³¹⁵ Furthermore, as explained below, first-party insurance is a more efficient means of spreading losses than liability insurance associated with fault-based liability,³¹⁶ and the uncertainty of expected liability enhances its advantage.³¹⁷

Other justifications for the exclusionary rule, which focus on the proper level of deterrence regardless of the fear of open-endedness, are less convincing in COVID-19 settings. The conventional economic justification for the exclusionary rule is that many financial losses are not true social costs.³¹⁸ According to economic theory, efficient deterrence requires internalization of the social cost of every inefficient act by the actor.³¹⁹ Private losses that generate corresponding gains to other parties cannot be regarded as social costs.³²⁰ While the gains do not mitigate the victims' private losses, they cancel them out in the calculation of the externalized social cost.³²¹ Internalization of private losses irrespective of such gains may lead to over-deterrence. Arguably, many economic losses correspond to resulting economic gains. For example, if the competitors of an interrupted business can easily increase their production during the interruption at no cost beyond normal production costs, their gain will offset the unfortunate business's loss. Moreover, consumers and producers can use inventories to meet demand during the interruption, so that profits are postponed or shifted with no significant social cost. To conclude, exclusion of liability for economic losses prevents inter-

³¹³ See Mark Geistfeld, *Reconciling Cost-Benefit Analysis with the Principle that Safety Matters More than Money*, 76 N.Y.U. L. REV. 114, 125 (2001) (observing that physical injury is more disruptive to the pursuit of one's life plan than a loss of money); see also Geistfeld, *supra* note 307, at 1933–35, 1937–38, 1943, 1950 (applying this argument to emotional and economic losses).

³¹⁴ See *Dominion Tape of Can., Ltd. v. L.R. McDonald & Sons, Ltd.* (1971), 21 D.L.R. 3d 299, 300 (Can.) (“[A] judgment pompously engrossed which cannot be executed for want of sufficient assets on the part of the judgment debtor [turns the trial] into a futile exercise.”).

³¹⁵ See Stapleton, *supra* note 299, at 543–44.

³¹⁶ See *infra* notes 327–28 and accompanying text.

³¹⁷ See Posner, *supra* note 304, at 737–38.

³¹⁸ See William Bishop, *Economic Loss in Tort*, 2 OXFORD J. LEGAL STUD. 1, 1 (1982).

³¹⁹ See, e.g., Robert D. Cooter, *Three Effects of Social Norms on Law: Expression, Deterrence, and Internalization*, 79 OR. L. REV. 1, 16 (2000).

³²⁰ See Bishop, *supra* note 318, at 4–7; Perry, *supra* note 16, at 733.

³²¹ See Bishop, *supra* note 318, at 4; Perry, *supra* note 16, at 733.

nalization of private losses that do not reflect a true social cost.³²² This line of argument applies to the economic repercussions of the COVID-19 outbreak only to a limited extent, because the losses of some businesses, such as retailers, restaurants, and entertainment venues, have been partly canceled out by increased gains of others, such as online shops, supermarkets, and streaming service providers, respectively. Still, in many sectors, most or all businesses were affected, and none gained from its competitors' losses.

Where economic losses result from a physical injury to another person, the injurer's liability for the physical injury already provides some deterrence. The marginal deterrent effect of liability for the economic losses may be nil whenever the cost of taking optimal care is lower than the ensuing reduction in expected liability for physical injuries.³²³ Alternatively, the marginal deterrent effect of liability for economic losses may be lower than the administrative cost involved in imposing the additional liability.³²⁴ Either way, imposing liability might not be cost-justified even if the economic losses are true social costs. These arguments are inapplicable to most COVID-19 economic losses, which do not arise from negligent infliction of physical injuries to other people but from government restrictions imposed to protect public health.

Some justifications for the exclusionary rule focus on plaintiffs' ability to protect themselves. Traditionally, courts viewed contract law as the appropriate venue for economic loss claims.³²⁵ Many judges and scholars have argued that the typical relational economic victim could protect his or her interest through a contract with the primary victim and that, by failing to do so, the former assumed the risk (and was compensated for it through the contractual price).³²⁶ However, this line of argument is not generally applicable in the COVID-19 context because in most cases no contractual link or preexisting relationship exists between harmed businesses and the people whose actual or dreaded illness or death stimulated the restrictions which caused the business losses.

A related justification for the exclusionary rule derives from the notion of loss spreading. The underlying assumption is that first-party insurance is a more efficient means of spreading relational economic losses than liability insurance associated with tort liability.³²⁷ The cost of information required

³²² See Bishop, *supra* note 318, at 4; see also WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF TORT LAW* 251 (1987); SHAVELL, *supra* note 234, at 138–39; Victor P. Goldberg, *Recovery for Economic Loss Following the Exxon Valdez Oil Spill*, 23 J. LEGAL STUD. 1, 19–22, 31–32, 36–37 (1994); McThenia & Ulrich, *supra* note 309, at 1531; Posner, *supra* note 304, at 736–37; Stapleton, *supra* note 300, at 536–37.

³²³ See Harris & Veljanovski, *supra* note 308, at 52–53.

³²⁴ See Posner, *supra* note 304, at 740.

³²⁵ See Stapleton, *supra* note 313, at 536, 551.

³²⁶ See, e.g., *Barber Lines A/S v. M/V Donau Maru*, 764 F.2d 50, 54 (1st Cir. 1985); John G. Fleming, *Tort in a Contractual Matrix*, 33 OSGOODE HALL L.J. 661, 667–68 (1995).

³²⁷ See, e.g., *Barber Lines*, 764 F.2d at 54; *Louisiana ex rel. Guste v. M/V Testbank*, 752 F.2d 1019, 1029 (5th Cir. 1985); James, *supra* note 301, at 52–53; Michael MacGrath, *The Recovery of Pure Economic Loss in Negligence*, 5 OXFORD J. LEGAL STUD. 350, 375 (1985).

for evaluating the risk is usually lower in the case of first-party insurance, as there is no need to assess third parties' expected losses. The costs of establishing the right to compensation are also lower because first-party insurance does not hinge on tort litigation or negotiation. Excluding liability induces potential victims to insure themselves against prospective losses and induces potential injurers not to insure themselves against liability for these losses. It thereby guarantees efficient loss spreading while preventing double insurance.³²⁸ This argument is also inapplicable to government liability for COVID-19 losses because, on the one hand, most governments are self-insurers and, on the other hand, first-party business interruption insurance might not cover such risks.³²⁹

Another self-protection argument is that excluding liability for relational economic losses gives potential victims an incentive to take precautions to prevent harm³³⁰ and gives actual victims an incentive to mitigate damages by diverting means of production used in the interrupted activity to other uses.³³¹ For example, to avoid loss in cases of accidental power failure, businesses can install standby systems or try to make up for the loss by doing more work when the interruption ends.³³² Similarly, when a factory is damaged and closed for repairs, workers will not incur loss if they obtain alternative employment.³³³ A possible response is that the defenses of comparative negligence and mitigation of damages provide the necessary incentives.³³⁴ They do so at a somewhat higher administrative cost than excluding liability³³⁵ but in a less arbitrary manner. The self-protection argument weakens even further in the context of COVID-19. Many victims can employ loss-mitigation strategies, such as shifting to working from home or making deliveries. However, these measures are only available to some and cannot completely mitigate the losses due to the unusual duration of the interruption, the nature of government restrictions, and the limited flexibility of business models.

Lastly, the exclusionary rule is said to provide a certain and easily applicable limitation on tort liability.³³⁶ As a bright-line rule, it enables poten-

³²⁸ See James, *supra* note 301, at 54–55.

³²⁹ See Christopher C. French, *COVID-19 Business Interruption Insurance Losses*, 27 CONN. INS. L.J. 1, 4 (2020) (reporting that insurers “announced that COVID-19 business interruption losses are not covered by their policies and that pandemic losses are simply uninsurable”).

³³⁰ See, e.g., *Barber Lines*, 764 F.2d at 55.

³³¹ See Hayes, *supra* note 304, at 114.

³³² See *Spartan Steel & Alloys, Ltd. v. Martin & Co.*, [1972] 3 All E.R. 557, 563–64 (C.A.) (Eng.).

³³³ See Bishop, *supra* note 318, at 17–18.

³³⁴ See SHAVELL, *supra* note 312, at 144–46.

³³⁵ See Goldberg, *supra* note 322, at 17.

³³⁶ See, e.g., *Candlewood Nav. Corp. v. Mitsui OSK Lines, Ltd.*, [1985] 2 All E.R. 935 (P.C.) 945 (appeal taken from N.S.W.) (“[The rule draws] a definite and readily ascertainable line.”); *Leigh & Silavan, Ltd. v. Aliakmon Shipping Co.*, [1986] 2 All E.R. 145 (H.L.) 153–54 (appeal taken from Eng.).

tial injurers and victims to better prepare for contingencies;³³⁷ impels victims to avoid fruitless litigation, thereby saving costs; and makes judicial administration of tort actions easier and less costly.³³⁸ A possible response is that justice is more important than certainty.³³⁹ Certainty should always be balanced against other relevant factors. A less certain set of rules would be warranted if it yielded fairer or more efficient outcomes. It is thus highly doubtful that certainty can justify a blanket exclusion of recovery for all economic losses.

V. PROFESSIONALS AND BUSINESSES

A. *Businesses*

Businesses operating or reopening during the pandemic might be sued by customers, suppliers, and employees who contract the virus on their premises.³⁴⁰ Liability would normally be based on the tort of negligence.³⁴¹ According to the *Restatement (Second) of Torts*, a possessor of land is “subject to liability to his invitees for physical harm caused to them by his failure to carry on his activities with reasonable care for their safety.”³⁴² A “possessor of land” includes a business that owns or leases its premises, and an “invitee” includes a business visitor, such as a customer or an employee.³⁴³ Liability arises when the possessor “should expect that [invitees] will not discover or realize the danger, or will fail to protect themselves against it.”³⁴⁴ The *Restatement (Third) of Torts* imposes an even broader duty to “all entrants to land except for flagrant trespassers.”³⁴⁵

Breach of duty can take many forms. Businesses could be found negligent if they do not maintain sufficient distance between invitees; fail to meet hygiene standards (including frequently disinfecting surfaces and providing PPE and air filtration); do not screen incoming employees or customers for COVID-19 symptoms; or fail to disclose information about on-site infections. Such failures may be negligent either because they breach the general standard of care, defined by comparing the level of risk and the cost of precautions,³⁴⁶ or—under the negligence per se doctrine—because they vio-

³³⁷ See O’Brien, *supra* note 305, at 967.

³³⁸ See Louisiana *ex rel.* Guste v. M/V Testbank, 752 F.2d 1019, 1028–29 (5th Cir. 1985) (“[The rule] operates as a rule of law and allows a court to adjudicate rather than manage.”).

³³⁹ See Gabriel, *supra* note 303, at 278, 284.

³⁴⁰ See Henriques et al., *supra* note 239.

³⁴¹ Theoretically, people exposed to the risk of infection can sue for NIED, but such actions would probably be denied absent infection or symptoms. See, e.g., Weissberger v. Princess Cruise Lines, Ltd., No. 20-cv-02267, 2020 U.S. Dist. LEXIS 123743 (C.D. Cal. July 14, 2020).

³⁴² RESTATEMENT (SECOND) OF TORTS § 341A (AM. L. INST. 1965).

³⁴³ See *id.* §§ 328E, 332 cmts. a, e, j.

³⁴⁴ *Id.* § 341A.

³⁴⁵ See RESTATEMENT (THIRD) OF TORTS §§ 51–52 (AM. L. INST. 2010).

³⁴⁶ See *supra* notes 121–122 and accompanying text.

late official health and safety regulations of federal, state, and local authorities (such as the Centers for Disease Control and Prevention and the Occupational Safety and Health Administration).³⁴⁷

Proving the defendant's unreasonable conduct might not be easy. Although the doctrine of negligence per se may help plaintiffs, noncompliance with health and safety regulations is not always readily observable. For instance, a patron can easily notice that a waiter does not wear a mask but cannot tell if the restaurant owner took the waiter's temperature. Moreover, if the business complies with health and safety regulations, it would be hard to establish negligence under the general standard, because such compliance constitutes evidence of non-negligence, though inconclusive.³⁴⁸ The U.S. Chamber of Commerce advocated adopting a general regulatory compliance defense to protect compliant businesses from liability for COVID-19 harm.³⁴⁹

Causation also presents a challenge. To the extent that COVID-19 is a widespread pandemic, a person can contract the virus practically anywhere, and it is therefore difficult to prove by a preponderance of the evidence that the infection occurred in a specific place rather than elsewhere. Note further that, under workers' compensation schemes, employers need to provide no-fault insurance to their employees for work-related injuries and illnesses, and employees cannot sue their employers in tort for such injuries.³⁵⁰ For an employee, then, proof of a causal link between the employment and the illness would often be the main obstacle.³⁵¹ Several states adopted or considered adopting a presumption whereby an employee tested positive for SARS-CoV-2 within fourteen days of performing services for an employer contracted the illness on the job.³⁵² This, of course, would only help employees, not other invitees, and only in some states.

³⁴⁷ See RESTATEMENT (THIRD) OF TORTS § 14 (AM. L. INST. 2010) (restating the negligence per se doctrine).

³⁴⁸ See *id.* § 16 cmt. a (explaining that compliance with regulations is evidence of non-negligence).

³⁴⁹ See Erica Werner & Tom Hamburger, *White House and Congress Clash over Liability Protections for Businesses as Firms Cautiously Weigh Virus Reopening Plans*, WASH. POST (May 3, 2020), <https://www.washingtonpost.com/us-policy/2020/05/03/congress-coronavirus-legal-liability> [<https://perma.cc/WB3G-GWTZ>] ("The U.S. Chamber of Commerce is seeking . . . a 'safe harbor' against customer lawsuits for businesses that have followed public health guidelines.").

³⁵⁰ See Emily A. Spieler, *(Re)assessing the Grand Bargain: Compensation for Work Injuries in the United States, 1900–2017*, 69 RUTGERS U. L. REV. 891, 892–93 (2017).

³⁵¹ In some states, however, workers' compensation schemes do not cover diseases to which the general public is equally exposed. See, e.g., ARK. CODE ANN. § 11-9-601(e)(3) (2021); GA. CODE ANN. § 34-9-281(b)(1) (2021); S.C. CODE ANN. § 42-11-10(B)(3) (2019). To the extent that COVID-19 is regarded as a general hazard in those jurisdictions, infected employees may need to file tort actions against their employers.

³⁵² See, e.g., Cal. Exec. Order No. N-62-20 (May 6, 2020), <https://www.gov.ca.gov/wp-content/uploads/2020/05/5.6.20-EO-N-62-20-text.pdf> [<https://perma.cc/2AEK-PST4>]; see also Josh Cunningham, *COVID-19: Workers' Compensation*, NAT'L CONF. STATE LEGISLATURES (May 13, 2020), <https://www.ncsl.org/research/labor-and-employment/covid-19-workers-compensation.aspx> [<https://perma.cc/3N9N-YQ45>]

Lastly, several state legislatures enacted, and others are considering, statutes relieving businesses from liability for infections occurring on their premises unless the business caused the infection recklessly or intentionally.³⁵³ The desirability of such blanket immunity is controversial. On the one hand, the prospect of liability may induce businesses to take precautions to prevent infections, thereby assisting national and local containment and mitigation efforts. On the other hand, the prospect of liability might induce businesses to withhold information from customers and employees, thereby curtailing containment and mitigation efforts.³⁵⁴ A possible solution would be to immunize businesses only if they promptly inform customers and employees of potential exposure.³⁵⁵ An alternative solution would be to impose liability for failure to inform when that failure results in additional infections and to address under-detection of failure to inform through punitive damages, in accordance with economic theory.³⁵⁶

B. Healthcare Professionals

Healthcare professionals are serving on the front lines of the battle against COVID-19. Their tremendous efforts have saved countless lives, and many of them have paid the ultimate price.³⁵⁷ Yet the intensive and incessant interaction with patients also puts them at risk of another kind. Decisions made and actions taken by medical staff might result in personal injuries and death (not necessarily of COVID-19 patients). Everyday choices of healthcare providers during the pandemic may include prioritizing COVID-19 patients over people with other medical conditions, or certain COVID-19 patients over others; selecting and implementing treatment methods, including experimental equipment, drugs, or processes; or rationing medical supplies, equipment, and services. To the extent that these decisions result in slower or less complete recovery, permanent disability, or death, the people making them are exposed to tort actions.³⁵⁸

³⁵³ See, e.g., UTAH CODE ANN. § 78B-4-517 (LexisNexis 2020); Tyler Cowen & Trace Mitchell, *Legal Liability and COVID-19 Recovery*, MERCATUS CTR. POL'Y BRIEF (May 8, 2020), <https://www.mercatus.org/system/files/cowen-covid-liability-mercatus-v1.pdf> [https://perma.cc/G2SP-J69D] (proposing liability only for recklessness).

³⁵⁴ See Daniel J. Hemel & Daniel B. Rodriguez, *A Public Health Framework for COVID-19 Business Liability* 1, 2, 8–9 (May 20, 2020) (unpublished manuscript), <https://ssrn.com/abstract=3606396> [https://perma.cc/7P8A-Y686].

³⁵⁵ See *id.* at 2, 10–12.

³⁵⁶ See Ronen Perry & Elena Kantorowicz-Reznichenko, *Income-Dependent Punitive Damages*, 95 WASH. U. L. REV. 835, 846–47 (2018) (discussing the economic rationale for punitive damages).

³⁵⁷ See Linda McCauley & Rose Hayes, *Taking Responsibility for Front-Line Health-Care Workers*, LANCET PUB. HEALTH (July 31, 2020), [https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(20\)30179-1/fulltext](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(20)30179-1/fulltext) [https://perma.cc/AA5G-EMP4] (reporting that thousands of healthcare providers have died from COVID-19).

³⁵⁸ See, e.g., I. Glenn Cohen et al., *Potential Legal Liability for Withdrawing or Withholding Ventilators During COVID-19*, 323 JAMA 1901, 1901–02 (2020) (discussing the risk of liability for reallocating ventilators).

Healthcare providers may enjoy immunity in some circumstances. General discretionary function immunities, discussed in Part IV.B, are inapplicable to state medical institutions and their staffs because they do not make social, economic, or political policy decisions. They only exercise professional medical judgment.³⁵⁹ However, more specific immunities can protect at least some of them from liability.

First, on March 17, 2020, the Secretary of Health and Human Services issued an emergency declaration that triggered broad immunities contained in the Public Readiness and Emergency Preparedness Act (“PREPA”).³⁶⁰ This Act immunizes healthcare professionals who administer or use “covered countermeasures” during declared public health emergencies from liability under federal or state law.³⁶¹ Covered countermeasures include drugs, biological products, and medical devices authorized for emergency use.³⁶² The Act also immunizes the manufacturers and distributors of such countermeasures. Several states have also granted healthcare professionals immunity for prescribing experimental (unapproved) drugs, such as hydroxychloroquine.³⁶³

Second, on March 27, 2020, the President signed the Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”) into law.³⁶⁴ The Act essentially provides an economic stimulus package but also immunizes volunteer healthcare professionals from tort liability under federal or state law for harms caused by their acts or omissions in the provision of health care services during the public health emergency declared with respect to COVID-19.³⁶⁵ States afford immunity to volunteer healthcare providers through general “Good Samaritan” legislation.³⁶⁶ Parenthetically, the CARES Act also extended PREPA immunity to manufacturers, distributors, and administrators of respiratory protective devices, such as face masks.³⁶⁷

Third, several states granted general immunity to paid healthcare providers, some before the outbreak and others in response thereto. For example, a 2002 Maryland statute immunizes healthcare providers from liability when acting in good faith and “in accordance with a catastrophic health emer-

³⁵⁹ See *Lather v. Beadle*, 879 F.2d 365, 368 (8th Cir. 1989) (“Where only professional, nongovernmental discretion is at issue, the discretionary function exception does not apply.”).

³⁶⁰ 42 U.S.C. § 247d-6d.

³⁶¹ See *id.* § 247d-6d(a)(1).

³⁶² See *id.* § 247d-6d(i)(1).

³⁶³ See, e.g., UTAH CODE ANN. §§ 15-13-2.7, 58-85-106 (West 2020).

³⁶⁴ CARES Act, 116 Pub. L. No. 136, 134 Stat. 281 (2020).

³⁶⁵ See CARES Act § 3215 (exempting volunteer healthcare professionals from liability under federal or state law for any harm caused by acts or omissions in the provision of healthcare during the COVID-19 public health emergency unless the harm was caused by willful or criminal misconduct, gross negligence, reckless misconduct, conscious flagrant indifference, or under the influence of alcohol or intoxicating drugs).

³⁶⁶ See JOHN C.P. GOLDBERG & BENJAMIN C. ZIPURSKY, *RECOGNIZING WRONGS* 323–24 (2020) (discussing Good Samaritan legislation).

³⁶⁷ See 42 U.S.C. § 247d-6d(i)(1)(D).

gency disease surveillance and response program.”³⁶⁸ In other words, the immunity is granted for carrying out the state’s plan.³⁶⁹ In New Jersey and New York, healthcare professionals are immune from civil liability for injury or death allegedly sustained as a result of acts or omissions in the course of providing medical services “in support of the State’s response” to the COVID-19 outbreak.³⁷⁰ As opposed to the Maryland statute, the New Jersey and New York immunities are granted for supporting (rather than carrying out) the state’s plan.³⁷¹ A few states granted healthcare providers immunity from liability for ordinary negligence in treating COVID-19 patients irrespective of concrete state response plans.³⁷² Some commentators have advocated statutory immunity for paid healthcare providers who comply with state, professional, or institutional COVID-19 policies in good faith.³⁷³

Lawsuits against healthcare providers will also need to overcome the twin obstacles of proving fault and causation. To begin with, the standard of reasonable care for professionals is determined by professional customs and practices.³⁷⁴ Thus, as long as healthcare providers comply with the common practice, they cannot be found negligent. Adherence to clinical guidelines and protocols, which embody or shape professional practice, may be tantamount to compliance with such practice.³⁷⁵ In addition, if healthcare providers comply with health and safety regulations in providing services, such compliance constitutes evidence of non-negligence.³⁷⁶ Even without the implications of compliance with common practice and regulations, establishing negligence might not be easy given the intensity and complexity of cost-benefit analyses underlying medical decisions and actions in emergency conditions.

³⁶⁸ See MD. CODE ANN., HEALTH-GEN. § 18-907(d) (West 2021).

³⁶⁹ A few other states also protected healthcare providers from liability for operations and activities related to emergencies and disasters even before the COVID-19 pandemic. See, e.g., DEL. CODE ANN. tit. 20, § 3129 (2021); IOWA CODE § 135.147 (2021).

³⁷⁰ See 2020 N.J. Laws ch. 18; N.Y. Exec. Order No. 202.10 (Mar. 23, 2020), <https://www.governor.ny.gov/news/no-20210-continuing-temporary-suspension-and-modification-laws-relating-disaster-emergency> [<https://perma.cc/5ZZH-UDDQJ>].

³⁷¹ See also 2020 Mass. Acts ch. 64, § 2(a) (granting immunity to healthcare providers who provide health care services “pursuant to a COVID-19 emergency rule”).

³⁷² See, e.g., 2020 Ky. Acts ch. 73, § 1(5)(b); 63 OKLA. STAT. ANN. § 6406(C) (2021).

³⁷³ See Teneille R. Brown, *When the Wrong People Are Immune*, 7 J.L. & BIOSCIENCES 1, 12–13, 15 (2020).

³⁷⁴ See RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL AND EMOTIONAL HARM § 13 cmt. b (AM. L. INST. 2010); Maxwell J. Mehlman, *Professional Power and the Standard of Care in Medicine*, 44 ARIZ. ST. L.J. 1165, 1182–87 (2012) (describing the conventional professional standard of care); Philip G. Peters, Jr., *The Quiet Demise of Deference to Custom*, 57 WASH. & LEE L. REV. 163, 164–70 (2000).

³⁷⁵ See Cohen et al., *supra* note 358, at 1901.

³⁷⁶ See RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL AND EMOTIONAL HARM § 16 & cmt. a (AM. L. INST. 2010) (explaining that compliance with regulations is evidence of non-negligence); cf. Helaine I. Fingold & Ashley A. Creech, *Legal Liability of Healthcare Providers for Care Provided During COVID-19 Pandemic*, 10 NAT’L L. REV., Apr. 3, 2020, at 1, 2.

Finally, given the virulence of SARS-CoV-2, professional intervention can only reduce the risk to patients to a limited extent. Consequently, it will always be difficult to prove that, but for a certain professional failure, the specific victim could have recovered further or faster. Plaintiffs can sometimes circumvent this kind of uncertainty by resorting to the loss of chance doctrine, which recognizes the lost opportunity “for cure of a medical condition” as an independent compensable harm.³⁷⁷ Then again, this doctrine provides only partial compensation and is not available in all jurisdictions.³⁷⁸

VI. THE PROPOSED FRAMEWORK

A. *The Underlying Goals*

The preceding analysis reveals the weaknesses of the existing tort-based framework. Most tort actions against those who contributed to the occurrence of harm will probably fail. In actions against the PRC and the WHO, claimants will face legal obstacles, such as broad immunities and the requirements of fault and causation, as well as practical challenges when seeking to enforce ensuing judgments. Lawsuits against federal, state, and local governments and officials will fail primarily due to discretionary function immunities, but also because of the obvious difficulties in establishing duty, fault, and causation, and the common law’s reluctance to impose liability for pure economic losses. Legislatures are also aiming to reduce the legal risks to businesses and healthcare professionals. Even without legislative intervention, fault and causation will be hard to prove. At any rate, the possible liability of businesses and professionals cannot solve the problem on the macro level because victims of their negligence constitute a small part of the victim pool. Thus, in the most optimistic scenario, most victims will remain uncompensated.

Under-compensation is not the only problem. According to classic economic theory, efficient deterrence requires the wrongdoer to internalize his or her wrongful conduct’s social cost. Only if the expected liability is equivalent to the expected externalized cost will the potential injurer internalize that cost and take cost-effective precautions. If wrongdoers can evade liability for harms caused by their wrongful conduct or if damages are not set according to the social cost of the wrongful conduct, under-deterrence

³⁷⁷ See RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL AND EMOTIONAL HARM § 26 cmt. n (AM. L. INST. 2010) (presenting the loss of chance doctrine); David A. Fischer, *Tort Recovery for Loss of a Chance*, 36 WAKE FOREST L. REV. 605, 606–07 (2001) (explaining the loss of chance doctrine); Joseph H. King, Jr., *Causation, Valuation, and Chance in Personal Injury Torts Involving Preexisting Conditions and Future Consequences*, 90 YALE L.J. 1353 *passim* (1981) (proposing recognition of lost chance as compensable harm).

³⁷⁸ See Jed Kurzban et al., *It Is Time for Florida Courts to Revisit Gooding*, 91 FLA. BAR J. 9, 9 n.8 (2017) (reporting that twenty-six states have adopted the loss of chance doctrine in medical malpractice actions).

ensues.³⁷⁹ The legal and practical barriers to liability for pandemic-caused harms undoubtedly lead to under-deterrence of almost all parties involved.

In the COVID-19 context, the classical tort framework raises a third problem. Assigning fault to governments and organizations and initiating transnational adversarial processes may trigger or aggravate isolationism, international confrontation, and diplomatic clash. Undesirable in normal times, this would be disastrous amid a global battle against a pandemic, when international cooperation, coordination, and mutual aid are crucial. Any solution to the problem of COVID-19 harms must endeavor to promote, rather than inhibit, international cooperation.

Ideally, the legal framework for handling pandemic-related losses should serve the three goals of fair compensation, acceptable levels of deterrence, and promotion of international cooperation. To design such a model, one should consider alternative liability and compensation schemes that have already been implemented in comparable contexts. Section B discusses the international framework for the compensation of victims of nuclear incidents and the national September 11th fund, and Section C then provides an outline for a hybrid outbreak compensation scheme.

B. Sources of Inspiration

1. Nuclear Incidents

In some respects, the COVID-19 outbreak resembles an incident that horrified the world more than three decades ago: the Chernobyl nuclear disaster. The notorious accident originated in the Soviet Union. It was covered up for a while, but the contamination quickly spread to neighboring countries, harming many people across Europe.³⁸⁰ International negotiations in the aftermath of the incident, which highlighted the magnitude and transboundary nature of the risk,³⁸¹ led to fundamental reform in the pre-existing international nuclear liability scheme.³⁸² The original framework was set forth in the 1960s, with the adoption of the Paris Convention on Third Party Liability in the Field of Nuclear Energy³⁸³ and the more inclusive Vienna Convention on Civil Liability for Nuclear Damage (“Vienna Conven-

³⁷⁹ See Perry & Kantorowicz-Reznichenko, *supra* note 356, at 846–48 (explaining when an under-deterrence problem might exist).

³⁸⁰ See generally SERHII PLOKHY, *CHERNOBYL: HISTORY OF A TRAGEDY* (2018).

³⁸¹ Int’l Atomic Energy Agency [IAEA], *The 1997 Vienna Convention on Civil Liability for Nuclear Damage and the 1997 Convention on Supplementary Compensation for Nuclear Damage—Explanatory Texts* 1, 16 IAEA Int’l L. Series No. 3 (Rev. 2) (2017).

³⁸² See *id.* at 59–60.

³⁸³ Convention on Third Party Liability in the Field of Nuclear Energy, July 29, 1960, 956 U.N.T.S. 251; Additional Protocol, Jan. 28, 1964, 956 U.N.T.S. 251; Protocol to Amend the Convention on Third Party Liability in the Field of Nuclear Energy, Nov. 16, 1982, 1519 U.N.T.S. 329.

tion”).³⁸⁴ The latter was amended and enhanced in 1997 by the Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage (“1997 Protocol”)³⁸⁵ and the Convention on Supplementary Compensation for Nuclear Damage (“CSC”).³⁸⁶

The international regime is based on four basic principles.³⁸⁷ First, liability is exclusively imposed on the operator of the nuclear installation where the incident occurred, or—if the accident occurred during shipment—on the operator of the installation from which the shipment originated.³⁸⁸ Channeling all injuries to one defendant prevents complex and costly litigation against numerous potential defendants,³⁸⁹ or among various defendants concerning fault and causation, and obviates double-insurance.³⁹⁰ Liability under the international regime is also exclusive in the sense that it precludes liability under any other regime.³⁹¹ Second, the operator’s liability is strict.³⁹² It is not only independent of the defendant’s fault but also unaffected by force majeure or intervening acts of third parties. Very limited defenses apply where the incident is a direct outcome of armed conflicts, hostilities, and the like, or when the damage results from the plaintiff’s grossly negligent or intentional conduct.³⁹³ Third, the liability is limited in amount to secure insurability and availability of compensation funds and to prevent devastation of the then-nascent industry.³⁹⁴ The operator must have financial security to cover potential liability, usually liability insurance (unless the operator is a state).³⁹⁵ Fourth, liability is limited in time, again to prevent a prohibitive burden on the industry and to secure insurability.³⁹⁶ Actions must be brought within ten years of the incident,³⁹⁷ and the law of the competent court may impose an additional limit of not less than three years from the time the plaintiff had knowledge or should have had knowledge of the harm.³⁹⁸

³⁸⁴ Vienna Convention on Civil Liability for Nuclear Damage, May 21, 1963, 1063 U.N.T.S. 265 [hereinafter Vienna Convention].

³⁸⁵ Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage, Sept. 12, 1997, 2241 U.N.T.S. 302 [hereinafter 1997 Protocol].

³⁸⁶ Convention on Supplementary Compensation for Nuclear Damage, Sept. 12, 1997, 36 I.L.M. 1473 [hereinafter CSC].

³⁸⁷ See IAEA, *supra* note 381, at 1–2, 62.

³⁸⁸ See Vienna Convention, *supra* note 384, art. II.1; IAEA, *supra* note 381, at 1, 10–11.

³⁸⁹ See IAEA, *supra* note 381, at 10.

³⁹⁰ See *id.* at 1, 11.

³⁹¹ See *id.* at 10.

³⁹² See Vienna Convention, *supra* note 384, arts. II, IV; IAEA, *supra* note 381, at 1, 9–10.

³⁹³ See Vienna Convention, *supra* note 384, art. IV.2–3; IAEA, *supra* note 381, at 45–46. The 1997 Protocol abolished the natural disaster defense because nuclear installations are expected to withstand such disasters. IAEA, *supra* note 381, at 45.

³⁹⁴ See Vienna Convention, *supra* note 384, art. V; IAEA, *supra* note 381, at 2, 12–13, 58.

³⁹⁵ See Vienna Convention, *supra* note 384, art. VII.

³⁹⁶ See IAEA, *supra* note 381, at 2, 14.

³⁹⁷ See Vienna Convention, *supra* note 384, art. VI.1.

³⁹⁸ See *id.* art. VI.3. Under the Vienna Convention, a single designated court in the member state where the incident occurred has exclusive jurisdiction over the claims, in order to secure equitable allocation of available compensation funds. *Id.* art. XI.1; IAEA, *supra* note 381, at 1, 3, 14–16.

The Vienna Convention had only one compensation tier. It allowed states to limit the operator's liability to no less than \$5 million per incident.³⁹⁹ Although it did not lay down an upper limit, most member states did not set a higher limit than the required minimum.⁴⁰⁰ The 1997 Protocol increased the operator's minimum liability-cap and added a second compensation tier funded by the incident's state of origin.⁴⁰¹ While the Vienna Convention covered only personal injuries and property damage,⁴⁰² the 1997 Protocol extended coverage to economic losses, to the extent that they are recoverable under the laws of the specific jurisdictions handling the cases.⁴⁰³ However, claims for personal injuries and death have priority in the allocation of compensation funds.⁴⁰⁴ The CSC added a third—global—compensation tier.⁴⁰⁵ It established an international fund that supplements the amount available under national law.⁴⁰⁶ Ninety percent of the contributions to the fund comes from nuclear-power-generating states based on their production capacity and ten percent comes from all member states based on their UN rate of assessment.⁴⁰⁷ States do not need to set aside the required funds unless an incident occurs.⁴⁰⁸ The CSC provides that at least half of the international fund must be used to cover transboundary damage.⁴⁰⁹

From a theoretical perspective, this model has three strengths. First, it practically guarantees compensation to many victims. Where the funds available do not cover the aggregate loss, personal injuries take priority over property damages and economic losses. Second, those with the greatest control over the aggregate risk are strictly liable when the risk materializes. They internalize a considerable part of the social cost of their activity and are thereby incentivized to take precautions.⁴¹⁰ Third, the scheme is a product of continuous international cooperation, liability is strict—so there is no “blame game”—and the third tier of compensation is a cooperative global mechanism. This model facilitates and promotes international amity and cooperation.

However, it has two weaknesses. From a compensation perspective, the three tiers may be sufficient in most cases, but COVID-19 presents a crisis

³⁹⁹ See Vienna Convention, *supra* note 384, art. V.4.

⁴⁰⁰ See IAEA, *supra* note 381, at 12, 59.

⁴⁰¹ 1997 Protocol, *supra* note 385, art. VII; IAEA, *supra* note 381, at 24, 40–42.

⁴⁰² See Vienna Convention, *supra* note 384, art. I.1(k)(i); IAEA, *supra* note 381, at 2, 39–40.

⁴⁰³ See 1997 Protocol, *supra* note 385, art. II.2 (amending Vienna Convention art. I.1(k)); IAEA, *supra* note 381, at 2, 35–36.

⁴⁰⁴ See 1997 Protocol, *supra* note 385, art. X (amending Vienna Convention art. VIII); IAEA, *supra* note 381, at 48.

⁴⁰⁵ See IAEA, *supra* note 381, at 59–60.

⁴⁰⁶ See CSC, *supra* note 386, art. IV; IAEA, *supra* note 381, at 75–76.

⁴⁰⁷ See IAEA, *supra* note 381, at 2, 73–74.

⁴⁰⁸ See *id.* at 78–79.

⁴⁰⁹ See *id.* at 2.

⁴¹⁰ Liability insurance partly undercuts the incentive. See Perry, *Re-torts*, *supra* note 122, at 1007–08.

of unprecedented scale. Any scheme that the international community can devise and endorse will cover only a portion of the aggregate loss in cases of this magnitude. From a deterrence perspective, limiting the defendant's liability may prevent full internalization. When the cost of precautions (B) is lower than the expected harm that they can prevent ($P \times L$) but higher than the expected liability under the cap ($P \times C$), the defendant will not take cost-effective precautions despite the threat of liability ($P \times C < B < P \times L$). Additionally, the nuclear liability scheme sets a uniform cap for liability. Yet the cost of precautions that a country can take to reduce the expected loss may correlate with the size of its economy. For instance, informing the WHO of a new virus and its human-to-human transmission may immediately affect the country of origin's trade and travel, and the extent of this impact roughly correlates with the size of that country's economy. Simply put, larger economies have more to lose from publicizing a new biological risk. To incentivize transparency, the law must take into account this variance in the cost of precautions and set different liability caps for different countries.

2. September 11th Fund

Immediately after the September 11 attacks, Congress enacted the Air Transportation Safety and System Stabilization Act,⁴¹¹ which established the September 11th Victim Compensation Fund ("VCF").⁴¹² The fund provides a fairly quick and generous remedy for personal injuries and deaths directly caused by the attacks.⁴¹³ It does not cover emotional harm, property damage, or pure economic loss.⁴¹⁴ The Attorney General, through a Special Master he appointed, was authorized to administer the fund and promulgate the substantive and procedural rules by which it operates.⁴¹⁵ Victims who applied for compensation from the VCF had to waive the right to file civil actions for damages sustained as a result of the attacks,⁴¹⁶ a requirement that was primarily intended to protect airlines.⁴¹⁷ The VCF was the first large-scale use of a no-fault, no-liability fund approach to resolving massive tort claims

⁴¹¹ Air Transportation Safety and System Stabilization Act, Pub. L. No. 107-42, 115 Stat. 230 (2001) (codified at 49 U.S.C. § 40101 note).

⁴¹² See *id.* §§ 401-09.

⁴¹³ See Saul Levmore & Kyle D. Logue, *Insuring Against Terrorism—and Crime*, 102 MICH. L. REV. 268, 274 (2003) ("Under this unprecedented program, the families of individuals who suffered physical injury or death in the 9/11 attacks can apply for fairly generous benefits.").

⁴¹⁴ See Air Transportation Safety and System Stabilization Act § 403; see also Georgene Vairo, *Remedies for Victims of Terrorism*, 35 LOY. L.A. L. REV. 1265, 1277 (2002) (discussing compensable harms).

⁴¹⁵ See Air Transportation Safety and System Stabilization Act § 404.

⁴¹⁶ See *id.* § 405(c)(3)(B); 28 C.F.R. § 104.61 (2020).

⁴¹⁷ See Levmore & Logue, *supra* note 413, at 275.

in the United States.⁴¹⁸ Following the Deepwater Horizon oil spill, BP voluntarily initiated a similarly structured (but privately financed) fund to compensate victims.⁴¹⁹

The strength of the fund model is obvious: fast and relatively fair compensation for personal injuries and death.⁴²⁰ Although the VCF was criticized for its operation and outcomes,⁴²¹ the criticism does not undermine the main advantage of the national fund model. It merely calls for improvement. The main weakness of the fund model for the purpose of the current analysis is that it gives up the deterrent effect of tort liability. Whether compensation under the fund is exclusive, not exclusive but satisfactory, or unsatisfactory where the victim cannot pursue an action in tort for other legal or practical reasons, those responsible for the harms evade liability.

C. A Hybrid Compensation Scheme

1. The International Component

Based on the weaknesses of the current tort-based model and the alternative models considered, a hybrid framework may be devised. The first component of this model is an international strict liability regime inspired by the international framework for the compensation of victims of nuclear incidents. The international community should negotiate a treaty imposing strict, limited, and exclusive liability on the country of origin of an international outbreak of infectious disease. This component has several advantages. First, it ensures that many victims would be compensated. Compensation may, of course, be partial if the aggregate compensable loss exceeds the internationally adopted liability cap, but the second component of the model addresses this problem. Second, the country of origin is usually the least-cost avoider. The costs of the measures that can be taken at the initial and local stages of an outbreak are relatively moderate, and the benefits in terms of containment and mitigation are enormous. Liability ensures internalization of at least some of the externalities of the decisions and actions of the least cost avoider. This incentivizes countries to take reasonable measures to prevent outbreaks or mitigate their effects, including regulation and supervision of

⁴¹⁸ See Linda S. Mullenix, *Mass Tort Funds and the Election of Remedies*, 31 REV. LITIG. 833, 834 (2012).

⁴¹⁹ See David F. Partlett & Russell L. Weaver, *BP Oil Spill: Compensation, Agency Costs, and Restitution*, 68 WASH. & LEE L. REV. 1341, 1349–51 (2011) (discussing the Gulf Coast Compensation Fund).

⁴²⁰ See Robert M. Ackerman, *The September 11th Victim Compensation Fund: An Effective Administrative Response to National Tragedy*, 10 HARV. NEGOT. L. REV. 135, 224–25 (2005) (praising the Victims Compensation Fund).

⁴²¹ See, e.g., Janet Cooper Alexander, *Procedural Design and Terror Victim Compensation*, 53 DEPAUL L. REV. 627, 689–91 (2003) (suggesting future fund endeavors should focus on institutional design to ensure substantive and procedural fairness); Matthew Diller, *Tort and Social Welfare Principles in the Victim Compensation Fund*, 53 DEPAUL L. REV. 719, 766–67 (2003) (questioning the use of a presumptive award schedule and procedural fairness).

private risk-generating activities. Third, this model would reduce international tension and facilitate cooperation in at least two ways. It would remove the element of fault, thereby curbing the intensity of international blame throwing. Also, it would be based on an *ex ante* internationally negotiated and agreed-upon mechanism, preventing any *ex post* clashes regarding responsibility for injuries.

This Article does not aim to set out the details of the international component, leaving them for future negotiations. However, a few structural features bear mentioning. The first is the legal definition of a country of origin. Given the magnitude of the burden imposed on that country, identification may be a source of controversy in future cases. A clear definition based on the assessment of scientific evidence, preferably by an impartial international body, must be provided. The possibility of uncertainty also needs to be addressed—for example, by making two or more countries share the burden if it is impossible to determine with sufficient confidence which of them was the country of origin.

A second important feature is liability caps, which secure certainty and insurability. As explained above, the cost of precautions that a country can take to reduce the expected loss may correlate with the size of its economy. Thus, liability caps may be differential, at least when the WHO determines that the country of origin was not sufficiently cooperative. A possible gauge can be a certain percentage of the post-pandemic gross domestic product, as reported by the IMF or the World Bank.

A third feature is the types of loss covered. Recall that while the Vienna Convention originally covered only physical injuries, the 1997 Protocol extended coverage to economic losses. However, because liability is capped and the funds available for compensation may be insufficient to cover all losses, claims for personal injuries and death were given priority in the allocation of these funds.⁴²² Furthermore, economic losses are only covered to the extent that they are recoverable under the laws of the jurisdiction handling the cases.⁴²³ Liability for economic loss is relatively limited in many countries, including the United States,⁴²⁴ and the defendant is not exposed to liability beyond the limits set in its own jurisdiction. The international liability-for-outbreaks regime should include similar qualifications.

The third compensation tier in the nuclear-incident framework, namely an international fund, is probably unsuitable for global pandemics. The idea of an international fund presupposes a geographically contained disaster and the availability of a clear, simple-to-apply criterion for cost allocation. If the disaster is geographically contained, an international fund can play two important roles: securing compensation to more victims and redistributing the costs incurred by the few unlucky countries among all nations. If, on the

⁴²² See 1997 Protocol, *supra* note 385, art. X.

⁴²³ See *id.* art. II.2.

⁴²⁴ See *supra* Part IV.B.3.

other hand, the disaster is not geographically contained, as in the case of COVID-19, an international fund based on member-state contributions might become a wasteful mechanism. In such cases, each country can compensate its own citizens directly and in accordance with its own policies through a national compensation scheme, rather than indirectly by contributing to an international fund. Moreover, an international fund will have very limited redistributive effects. Assuming a rough correlation between the economic impact of the pandemic on each country and its contribution to the fund (if both variables correlate with the size of a country's economy), the fund will ultimately transfer money from one pocket to the other.⁴²⁵

Also, in the case of nuclear incidents, a clear and simple criterion for cost allocation is readily available: nuclear energy production capacity. Each country bears a burden that fits the risks it creates and the benefits it derives from the activity, so applying this criterion ensures efficient deterrence (through internalization of risks) and fairness (in the distributive sense). No similar criterion exists in the global-pandemic scenario. The number and biosafety levels of laboratories in each country cannot provide a reliable measure of risks or benefits. As already explained, using the size of each country's economy as the criterion for cost allocation would turn the fund into a wasteful mechanism.

2. *The National Component*

The second component of the proposed model is a national compensation fund, inspired by the VCF. Entitlement to compensation from the fund will only require proof that the claimants' harms were directly caused by the pandemic. Victims will not need to prove that the government, who is expected to bear the cost, was at fault or that its conduct caused their harm. As with the September 11 attacks, the burden of establishing the fund should be borne by the federal government, which has the best institutional and financial capacity to carry out a project of this magnitude. However, while the VCF was an ad hoc response, the outbreak compensation fund can be designed and established through general legislation.

In the hybrid scheme, the compensation fund will be a secondary mechanism, supplementing the international component when it is insufficient or slow. When the aggregate loss exceeds the country of origin's liability cap, leaving victims with partial compensation or no compensation at all,⁴²⁶ the fund will fill the gap. When an action against the country of origin is prolonged, the fund may compensate the affected victim and then exercise a

⁴²⁵ See also *supra* Part III.C.

⁴²⁶ For example, if the international component prioritizes personal injuries and death, and the aggregate of these losses exceeds the cap, people with property damage would not be compensated at all.

right of subrogation against that country.⁴²⁷ In theory, the national component can be required of signatories to the proposed international treaty, but this is neither likely nor necessary. A compensation fund can and should be established by each country voluntarily when needed. In fact, a national compensation fund may be the most practical solution even if the international initiative fails. In such a case, it would be the primary (and only) compensation mechanism.

The national compensation fund should prioritize personal injuries and death for three reasons. First, while compensation for serious illness and death resulting from a devastating pandemic may be onerous to the national treasury, compensation for economic losses would simply be prohibitive. No country can cover these losses and maintain economic stability. Second, economic losses are generally irrecoverable in tort law, and a national no-fault, no-liability compensation scheme should not normally protect interests that the tort system considers undeserving of protection. Third, the economic consequences of the pandemic must be addressed from a macroeconomic perspective. Compensating businesses and individuals for lost profits is not the best way to support and stimulate the economy. The allocation of public resources to businesses and individuals should be part of a carefully structured economic stimulus plan aimed at spurring recovery and growth, not merely a transfer of wealth from one group of taxpayers to another.

The national fund would secure fair compensation for personal injuries and death. Also, general rather than ad hoc compensation-fund legislation may incentivize governmental prudence. The expected public expense, which reflects the expected harm covered by the fund, depends on the national preparedness and response. By taking measures to prevent, contain, and mitigate an outbreak the government can reduce its expenses, and this would probably affect its decisions and actions. Indeed, the impact of a pandemic may be so colossal that a national fund would be unable to handle even claims for personal injuries and death; but, in such cases, no better alternative can be imagined.

VII. CONCLUSION

COVID-19 has had a considerable impact on all aspects of human life and has already resulted in a large volume of scientific research in all disciplines. The legal consequences of the pandemic will surely occupy legislatures, courts, and scholars for years to come. This Article focused on one of the most pressing legal questions: liability for ensuing harm. It systematically analyzed the existing framework, demonstrated its weaknesses, and proposed an alternative.

⁴²⁷ Cf. Air Transportation Safety and System Stabilization Act, Pub. L. No. 107-42, § 409, 115 Stat. 230, 241 (2001) (“The United States shall have the right of subrogation with respect to any claim paid by the United States [through the VCF].”).

Who *could* be held liable for the COVID-19 outbreak? The Article showed that, in most cases, tort law's unfortunate answer would be "no one." Lawsuits against the PRC would likely be dismissed due to foreign sovereign immunity under the FSIA or fail because of the inability to prove fault and causation. Even successful claimants would likely be unable to enforce the judgments. Lawsuits against the WHO may face even broader immunity under an international treaty, in addition to IOIA protection, which generally mirrors that of the FSIA. The need to establish fault and causation and the WHO's limited financial capacity would constitute additional obstacles. Federal, state, and local governments, as well as public officers, would most likely invoke different versions of the discretionary function doctrine. Even if, for some reason, this line of defense fails, plaintiffs would face difficulties in establishing duty, breach, and causation, and would need to overcome the economic loss rule. Businesses and healthcare providers sued in tort may benefit from existing or contemplated immunities and from difficulties in establishing negligence and causation. Even when they can establish liability, the "fortune" of the few successful plaintiffs would only emphasize the inadequacy of the framework as a whole.

The crucial question, then, is who *should* bear the loss and how? The Article provided an outline for a possible answer, acknowledging that more work is necessary to fill in the details. It aimed to achieve three goals: fair compensation (at least for physical harm and death), acceptable levels of deterrence, and promotion of international cooperation. The proposal built on the international framework for the compensation of victims of nuclear incidents and the national September 11th fund, identifying and utilizing the relative strengths of both. The first component of the proposed model is an international treaty, imposing strict, limited, and exclusive liability on the country of origin of an international outbreak of infectious disease. The second component is a national compensation fund, ideally playing a supplementary role.

The Article discussed only key legal issues. Admittedly, many concrete procedural and evidentiary difficulties may arise in future cases. For example, courts may refuse to certify class actions when preconditions for certification are not met⁴²⁸ or dismiss certain actions under the *forum non conveniens* doctrine.⁴²⁹ Such issues have not been tackled here because of the focus on the proverbial big picture. Moreover, the Article has not made any conclusive factual allegations because scientific research and any knowledge about actions and omissions and their impact are dynamic. The complex legal and factual issues promise years of litigation and abundant legal scholarship.

⁴²⁸ See Stockler, *supra* note 11.

⁴²⁹ See *Sinochem Int'l Co. v. Malay. Int'l Shipping Corp.*, 549 U.S. 422, 425 (2007) (discussing the doctrine).