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Ending the Game of Environmental Politics in the Arctic: How the Arctic States Can Achieve Dispute Resolution Using Existing Legal Frameworks

Ryan R. Migeed*

Introduction

Climate change is bringing the once-frozen Arctic to a boil. In 2019, the U.S. Department of Defense published a report on its Arctic Strategy by request of Congress, responding to increasing concerns that new waterways made accessible by melting ice will result in militarization of the Arctic.¹ Russia, whose coastline dominates half the Arctic Ocean, has been “reopening, fortifying, and building new military bases in the Arctic region” and “publicizing [its] military exercises” there.² The buildup has drawn comparisons to Russia’s seizure of Crimea, with the inference that Russia may be just as willing to seize territory in the Arctic.³

In response, U.S. intelligence agencies have assigned new analysts to monitor the Arctic full-time.⁴ In 2017, the United States deployed 300 Marines to Norway—“the first time since World War Two that foreign troops have been allowed to be stationed there.”⁵ And, just as Russia maintains bases along newly emerging coastline, so does Canada: its northernmost base,

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1. The report was an updated version of a previous 2016 strategy. OFF. OF THE UNDER SEC’Y OF DEF. FOR POL’Y, REP. TO CONG.: DEP’T OF DEF. ARCTIC STRATEGY (June 2019), <https://media.defense.gov/2019/Jun/06/2002141657/-1/-1/1/2019-DOD-ARCTIC-STRATEGY.PDF> [<https://perma.cc/UXE3-F8MV>].
2. Johnny Harris, *It’s time to draw borders on the Arctic Ocean*, VOX: BORDERS (Oct. 24, 2017), https://youtu.be/Wx_2SVm9Jgo [<https://perma.cc/4A77-GDAL>]; see Andrew Osborn, *Putin’s Russia in biggest Arctic military push since Soviet fall*, REUTERS (Jan. 30, 2017), <https://www.reuters.com/article/us-russia-arctic-insight/putins-russia-in-biggest-arctic-military-push-since-soviet-fall-idUSKBN15E0W0> [<https://perma.cc/MU3N-24NP>].
3. Osborn, *supra* note 2; see Michael R. Pompeo, U.S. Secretary of State, Looking North: Sharpening America’s Arctic Focus (Rovaniemi, Finland, May 6, 2019) (transcript available at <https://2017-2021.state.gov/looking-north-sharpening-americas-arctic-focus/index.html> [<https://perma.cc/F2TC-7TA6>] (“[W]e know Russian territorial ambitions can turn violent.”)).
4. Brian Bennett & W.J. Hennigan, *U.S. builds up Arctic spy network as Russia and China increase presence*, L.A. TIMES (Sept. 7, 2015), <https://www.latimes.com/world/europe/la-fg-arctic-spy-20150907-story.html> [<https://perma.cc/9J9H-UU8Y>].
5. Osborn, *supra* note 2.

Alert, is located closer to Moscow than to Ottawa.⁶ There has also been a rush to build new “icebreakers,” ships with fortified hulls capable of traversing icy waters that remain part solid, part liquid.⁷ Even as the Arctic ice slowly melts, floating chunks of ice can still sink a ship.⁸

Contrary to fears of conflict in the Arctic, however, this Article argues that the Arctic Council framework, together with the widely-recognized international law of the sea, make the Arctic a highly stable region with functional tools to resolve disputes. The Arctic States are those with landmass in the Arctic Circle: Canada, Denmark (which administers Greenland), Finland, Iceland, Norway, Russia, Sweden, and the United States.⁹ Five of these eight, the “coastal states,” have coastline touching the Arctic Ocean (Canada, Denmark, Norway, Russia, and the United States). Through the consensus-based structure of the Arctic Council, all of the Arctic States are collectively involved in cooperation schemes for protection of the marine environment and emergency response in the Arctic, among others. The Arctic Council is the only formal grouping of states that meets regularly for intergovernmental “consultation on Arctic issues.”¹⁰

It is not the military buildup which should alarm observers, as new bases likely have a defensive posture on newly-exposed coastline. Rather, states’ purported claims to protect the environments of their coastlines or even the ecosystem of the Arctic more broadly may be used as convenient decoys for expanding or sustaining claims to territorial access contrary to international law. These expansive claims are what can ultimately lead to intractable conflict in the Arctic.

As melting ice opens greater access to the Arctic Ocean, the region will be confronted with two major challenges. The first is a greater number of players entering the region, each with its own claim either to a share of the Arctic’s oil reserves, or to various bits of land, or to access to newly navigable waterways that will serve as cost-effective shipping routes. The U.S. Geological Survey estimates that the Arctic contains 30 percent of all the undiscovered natural gas in the world;¹¹ as these untapped reserves become more accessible, states far from the Arctic are maneuvering to ensure they can cultivate some of these resources themselves. The second major challenge to the Arctic States is that increased shipping traffic plus increased fossil fuel extraction inevitably bring greater environmental risks to their coastlines, marine life, indigenous communities, and fishing stocks. These two challenges are becoming linked by the variety of ways in which regional and external actors are jockeying for position over claims in the region.

6. James Kraska, *International Security and International Law in the Northwest Passage*, 42 VAND. J. TRANSNAT’L L. 1109, 1119 (2009).

7. Marc Lanteigne, *The Changing Shape of Arctic Security*, NATO REV. (June 28, 2019), <https://www.nato.int/docu/review/articles/2019/06/28/the-changing-shape-of-arctic-security/index.html> [<https://perma.cc/92Z3-6YE2>].

8. Dimitri Touren, *The Arctic: Low tensions in high latitudes*, LE J. INT’L (July 13, 2016), https://www.lejournalinternational.fr/The-Arctic-Low-tensions-in-high-latitudes_a3687.html [<https://perma.cc/KXD6-RDL3>].

9. This paper will refer to these states collectively as the “Arctic States,” as they are designated in the Declaration on the Establishment of the Arctic Council, discussed *infra*.

10. ARCTIC COUNCIL, DECLARATION ON THE ESTABLISHMENT OF THE ARCTIC COUNCIL, OTTAWA, CANADA, ¶ 9, Sept. 19, 1996, <https://oarchive.arctic-council.org/handle/11374/85> [<https://perma.cc/9NHU-FB5P>] [hereinafter Ottawa Declaration].

11. Harris, *supra* note 2.

I. *Dramatis Personae*: The Actors Playing Environmental Politics with Territorial Claims

The international law of the sea, codified in the United Nations Convention on the Law of the Sea (UNCLOS),¹² explains many of the Arctic States' actions, and therefore, sketching key provisions is critical to understanding them. Under Article 3 of UNCLOS, every coastal state has the right to establish a territorial sea measuring 12 nautical miles (nm) from its territorial baseline, normally measured as the low-water line along its coast.¹³ A coastal state may exercise regulatory control to "prevent infringement of its customs, fiscal, immigration or sanitary laws" up to an additional 12 nm in what is known as the contiguous zone.¹⁴ A coastal state has additional rights in its exclusive economic zone (EEZ), which stretches 200 nm from its baseline.¹⁵ Within the EEZ, a state has exclusive rights for the purpose of exploring and conserving natural resources,¹⁶ constructing or authorizing the construction of artificial islands,¹⁷ as well as the right to determine the allowable catch of living resources.¹⁸

Ships of all states are permitted "innocent passage" through another state's territorial sea.¹⁹ However, such passage is expected to be "continuous and expeditious" and without activities that threaten peace or good order, such as intelligence collection or fishing.²⁰ The coastal state may still regulate innocent passage for the safety of navigation and conservation of living resources.²¹ The coastal state also has obligations within its territorial waters, including a duty to warn of any known "danger[s] to navigation."²²

By contrast, ships of foreign states do not have the right to enter a state's internal waters.²³ However, states might have a right of innocent passage if the waters had not previously been considered internal.²⁴ Freedom of navigation through international straits, known as "transit passage" under UNCLOS, has long been recognized in customary international law—even for

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12. Although UNCLOS is a treaty, many states, including the United States, view the convention as a codification of some (if not all) of customary international law applicable to the high seas.
 13. United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 397, art. 3 [hereinafter UNCLOS].
 14. *Id.* art. 33.
 15. *Id.* art. 57.
 16. *Id.* art. 56(1)(a).
 17. *Id.* art. 60.
 18. *Id.* art. 61(1).
 19. Lori Fisler Damrosch & Sean D. Murphy, *International Law Cases and Materials* 1329 (7th ed. 2019) (quoting UNCLOS art. 17).
 20. *Id.* at 1329–30 (quoting UNCLOS arts. 18, 19).
 21. UNCLOS, *supra* note 13, art. 21(1).
 22. *Id.* art. 24(2); see DAMROSCH & MURPHY, *supra* note 19, at 1330.
 23. UNCLOS, *supra* note 13, art. 8 (defining internal waters as "waters on the landward side of the baseline of the territorial sea[.]" which includes bays and lakes); see DAMROSCH & MURPHY, *supra* note 19, at 1323.
 24. UNCLOS, *supra* note 13, art. 8.

military vessels.²⁵ International straits were defined by the International Court of Justice (ICJ) in the *Corfu Channel* case as straits “connecting two parts of the high seas” that are “used for international navigation.”²⁶ Although transit passage, like innocent passage, must be expeditious,²⁷ it “requires respect of only international law rather than the domestic laws and regulations of the states bordering the straits.”²⁸

As for resources *below* the ocean—such as natural gas—UNCLOS provides for a state’s claim to sovereignty over its continental shelf, defined as “the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory [. . .] to a distance of 200 [nm].”²⁹ A state’s rights can extend further, to an “outer” continental shelf, “if the shelf itself naturally continues beyond that point.”³⁰ The UNCLOS Commission on the Limits of the Continental Shelf (CLCS) is the body tasked with receiving applications from states and issuing non-binding recommendations on the delimitation of states’ continental shelves.³¹

Russia and Canada are the largest players in the Arctic Ocean by amount of coastline. They also exert the most control over the two main shipping routes through the Arctic Ocean, the Northern Sea Route and the Northwest Passage. However, outside actors also have claims of access to resources and navigation in parts of the Arctic Ocean. This has led some to claim that Arctic issues are “global,” not regional.

A. Russia

The Arctic has both economic and geostrategic significance for Russia.³² The natural gas which Russia can already access has produced as much as twenty percent of Russia’s GDP.³³ Russia claims an outer continental shelf, which overlaps with Canada’s and Denmark’s own continental shelf claims.³⁴

25. *See Corfu Channel, Judgment, 1949 I.C.J. 15, at 29 (Apr. 9) (finding that Albania could be justified in regulating transit passage of warships in exceptional circumstances, but could not prohibit passage or subject warships to “the requirement of special authorization.”)*

26. Henri Féron, *A New Ocean: The Legal Challenges of the Arctic Thaw*, 45 *ECOLOGY L. Q.* 83, 95 (2018).

27. UNCLOS, *supra* note 13, art. 39(1)(a).

28. Féron, *supra* note 26, at 95.

29. UNCLOS, *supra* note 13, art. 76(1).

30. Féron, *supra* note 26, at 101.

31. *Id.* at 100.

32. Russia stands to gain economically from the thawing of the Arctic region generally, which is opening a vast amount of cultivatable farmland in eastern Russia. Abraham Lustgarten, *How Russia Wins the Climate Crisis*, N.Y. TIMES MAG. (Dec. 16, 2020), <https://www.nytimes.com/interactive/2020/12/16/magazine/russia-climate-migration-crisis.html?referringSource=articleShare> [https://perma.cc/D4DP-HAXK].

33. Kraska, *supra* note 6, at 1116.

34. Juha Käpylä & Harri Mikkola, *Arctic Conflict Potential: Towards an Extra-Arctic Perspective*, THE FIN. INST. OF INT’L AFFS. BRIEFING PAPER 138, at 4–5 (Sept. 2013), <https://www.files.ethz.ch/isn/170344/bp138.pdf> [https://perma.cc/KN8S-5KC9]; *see also* UNCLOS, *supra* note 13, art. 74.

Most importantly, one of the two shipping routes through the Arctic Ocean, the Northern Sea Route (NSR), runs through Russia's EEZ and at various points also enters Russian internal waters or territorial sea.³⁵ Russia has used this as a basis to implement environmental protection regulations permitted in "ice-covered areas" under Article 234 of UNCLOS.³⁶ These include charging transiting ships a fee for "mandatory ice-breaker escort from the Russian breaker fleet."³⁷ In 2019, then-U.S. Secretary of State Michael Pompeo called additional Russian requirements—the forced boarding of transiting ships by Russian pilots and threats to use military force against ships that do not comply—"illegal."³⁸

Given that the Arctic is central to the Russian economy, its most recent Arctic strategy document sets goals for developing infrastructure like seaports.³⁹ This strategy has suffered setbacks as sanctions have prevented U.S. and European companies from financing Russian Arctic development projects.⁴⁰ As a result, economic cooperation is likely to be at the center of Russia's priorities as it takes the rotating Arctic Council Chairmanship from 2021–2023.⁴¹ For this reason, one security expert said, "[w]e can expect Moscow to keep tensions low in the High North."⁴²

Russia's quick response to the biggest oil spill in the Arctic to date—due to a Russian mining company—may have betrayed a recognition that an environmental disaster in the Arctic could threaten the state's credibility among regional actors hypersensitive to environmental dangers.⁴³

35. Käpylä & Mikkola, *supra* note 34, at 4.

36. UNCLOS, *supra* note 13, art. 234 ("Coastal States have the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas within the limits of the [EEZ], where . . . the presence of ice . . . create[s] obstructions or exceptional hazards to navigation . . . ?).

37. Käpylä & Mikkola, *supra* note 34, at 4.

38. Pompeo, *supra* note 3.

39. Hilde-Gunn Bye, *Russia's Updated Arctic Strategy: New Strategic Planning Document Approved*, HIGH NORTH NEWS (Oct. 28, 2020), <https://www.highnorthnews.com/en/russias-updated-arctic-strategy-new-strategic-planning-document-approved#:~:text=The%20Strategy%20for%20Development%20outlines,of%20the%20Northern%20Sea%20Route> [<https://perma.cc/L95U-G44Q>].

40. Féron, *supra* note 26, at 120.

41. *See* Bye, *supra* note 39.

42. Bye, *supra* note 39.

43. *See* Yuliya Fedorinova, Ilya Arhipov, & Olga Tanas, *Putin's Fury Over Norilsk Spill May Force Green Reform in Russia*, BLOOMBERG (June 11, 2020), <https://www.bloomberg.com/news/articles/2020-06-11/putin-s-fury-over-norilsk-spill-may-force-green-reform-in-russia> [<https://perma.cc/3HU6-MYBM>].

B. Canada

Despite the more recent attention Russia's activities in the Arctic have received from American observers,⁴⁴ Canada was the first Arctic state to declare controversial territorial claims over large swathes of the Arctic Ocean.⁴⁵ Although Canada is more likely to disagree with Russia over their overlapping continental shelf claims, it also has a long-running dispute with the United States over the Northwest Passage (NWP).⁴⁶

The NWP is the second of two main routes through the Arctic Ocean. Transit of goods through the NWP, connecting the Pacific to the Atlantic, could save two weeks of travel compared to current shipping routes which use the Panama and Suez Canals.⁴⁷ The route navigates through straits between the Canadian mainland and the Arctic Archipelago, a series of islands over which Canada has complete sovereignty.⁴⁸ Because of this, Canada has drawn its territorial baselines from the archipelago and claimed that the waters of the NWP are actually internal waters.⁴⁹

However, Canada's claim that the NWP is part of internal waters depends to an extent on other states having considered them internal waters. The increasing rate of international shipping transiting the NWP could undermine Canada's claim.⁵⁰ Conversely, if Canada succeeds in advancing this claim, the NWP could become a highly regulated trade route, more like a canal than a strait. As indigenous communities foment increasing political pressure at home,⁵¹ the concerns of indigenous communities—including those living in the archipelago—could gain increased salience in Canada's internal politics and Canada's position on the NWP could harden as a result.

Canada has a long history of enforcing environmental regulations within and beyond its EEZ, which other states have assailed as contrary to international law. In 1995, Canadian officials intercepted, boarded, and arrested the master of a fishing vessel flying the Spanish flag on the high seas in an area outside of Canada's EEZ.⁵² The European Community,⁵³ in a strongly-

44. See, e.g., Megan Eckstein, *New Arctic Strategy Calls for Regular Presence as a Way to Compete with Russia, China*, USNI NEWS (Jan. 5, 2021), <https://news.usni.org/2021/01/05/new-arctic-strategy-calls-for-regular-presence-as-a-way-to-compete-with-russia-china> [<https://perma.cc/K4LP-NRVK>].

45. Kraska, *supra* note 6, at 1118.

46. Former U.S. Secretary of State Pompeo suggested Canada's sovereignty claim over the NWP continues to be "illegitimate" at a 2019 meeting of the Arctic Council. Pompeo, *supra* note 3.

47. Kraska, *supra* note 6, at 1124.

48. *Id.* at 1126.

49. See *id.* at 1119, 1126–27; see also UNCLOS, *supra* note 13, art. 47.

50. Kraska, *supra* note 6, at 1119.

51. See Taylor C. Noakes, *2020 Was the Year of Indigenous Activism in Canada*, FOREIGN POL'Y (Dec. 17, 2020), <https://foreignpolicy.com/2020/12/17/2020-indigenous-activism-canada-trudeau/> [<https://perma.cc/N6CR-44K6>].

52. Fisheries Jurisdiction (Spain v. Canada), 1998 I.C.J. 443, ¶¶ 19–20 (Spain argued that, under Article 92 of UNCLOS, Spain had exclusive jurisdiction over the ship because it was on the high seas and flying its flag, and that Canada did not have jurisdiction to board a foreign vessel on the high seas) [hereinafter *Fisheries Jurisdiction Case*].

53. The European Community was a predecessor organization to the European Union. E.g., Matthew J. Gabel, *European Community*, BRITANNICA, <https://www.britannica.com/topic/European-Community-European-economic-association> [<https://perma.cc/9UZR-7M6Z>] (last visited Feb. 4, 2022).

worded diplomatic note, declared that Canada was “flagrantly violating international law [and] failing to observe normal behaviour of responsible States.”⁵⁴ For its part, Canada claimed jurisdiction for the action based on a national law, which extended the jurisdiction of its fisheries protection officers into an area “that is on the high seas” and permitted officers to board and search vessels found in that area in order to prevent the destruction of fishing stocks.⁵⁵ Although Spain brought a claim before the ICJ, the court found that it lacked jurisdiction over the dispute.⁵⁶

Prior to the conclusion of UNCLOS, in 1970, Canada enacted a similar law, the Arctic Waters Pollution Prevention Act, which “prohibited waste discharge and ordered extensive regulations within 100 miles from the northern coast of Canada.”⁵⁷ Some have posited that states have such authority based on “custodial” jurisdiction over “contiguous zones,” claiming an international interest in preserving the environment.⁵⁸ But international law does not recognize such a basis for asserting jurisdiction.⁵⁹

C. United States

U.S. insistence on free navigation through the NWP—as transit passage rather than innocent passage—is consistent with its position regarding international straits in other regions, such as the South China Sea. Indeed, U.S. policymakers have been criticized for comparing the two very different regions.⁶⁰ Some commentators have suggested that the U.S. wants to avoid an outcome in the Arctic that could set legal precedent adverse to U.S. positions elsewhere, including the South China Sea.⁶¹ Even if this bolsters the UNCLOS regime, it also has the effect of imputing extra-regional concerns into Arctic governance.

Concerns external to the Arctic also threaten to intrude on U.S.–Russia cooperation in the Arctic. Due to Alaska’s position along the Bering Strait, which is the access-point to the Arctic Ocean from the Pacific, the United States is “poised to manage all traffic” transiting the fifty-two-mile-wide chokepoint.⁶² But it will have to manage this traffic in partnership with Russia, whose coastline makes up the other side of the chokepoint. Given tensions between the two states, external events could invade U.S. decision-making on this aspect of Arctic governance. A 2014 tacit agreement among the Arctic Council members to exclude external “political and

54. *Fisheries Jurisdiction Case* at 444, ¶ 20.

55. *Id.* at 439–40, ¶ 15 (quoting provisions of Canada’s Coastal Fisheries Protection Act, R.S.C. 1985, c. C-33 (Can.)).

56. *Id.* at 467, ¶ 87. Canada had amended its consent to ICJ jurisdiction to exempt matters arising from these very conservation measures. *Id.* at 438–39, ¶¶ 14–15.

57. Barry Hart Dubner, *On the Basis for Creation of a New Method of Defining International Jurisdiction in the Arctic Ocean*, 13 MO. ENV’T L. & POL’Y REV. 1, 7 (2005).

58. *Id.* at 8.

59. *Id.*

60. Lanteigne, *supra* note 7.

61. Kämpylä & Mikkola, *supra* note 34, at 4.

62. Kraska, *supra* note 6, at 1123–24.

security concerns from the Council’s deliberations” may forestall this possibility.⁶³ But experts expect that “conflicts elsewhere will spill over” because “the Arctic is not an insulated security space.”⁶⁴

The United States also risks falling prey to “Arctic alarmism”—fears of military aggression that prompt an Arctic arms race.⁶⁵ But its submarines “consistently outclass” Russia’s submarine fleet, and NATO’s combined naval forces outnumber Russia’s Cold War-era Northern Fleet.⁶⁶ Despite disagreement with Canada, the United States has advanced joint Arctic policy with its northern ally.⁶⁷ Moreover, the two states have integrated air defense through North American Air Defense (NORAD) for decades.⁶⁸

Finally, although the United States is actively conducting the research necessary to submit a continental shelf claim extending from Alaska,⁶⁹ it is unclear whether the CLCS will accept the U.S. application or issue a recommendation to a non-party to UNCLOS.⁷⁰ The United States may also find it increasingly difficult to base its positions in disputes with Russia, Canada, or others on UNCLOS as it remains a non-party to the convention.

D. Norway, India, and the Svalbard Treaty

Like Canada, Norway has been an active environmental regulator in the Arctic. In 2020, Norway announced that it will ban the use of heavy fuel oil in the waters surrounding the Svalbard archipelago.⁷¹ As of 2015, over eighty percent of Svalbard’s marine area, including fjords, is protected nature reserves.⁷² Russia has lodged a complaint with Norway over its “artificial expansion of nature protection zones,” arguing that its regulation within the 200-mile EEZ around Svalbard is inconsistent with the shared nature of the archipelago.⁷³

63. Lanteigne, *supra* note 7.

64. Katarzyna Zysk, *Looking North: Conference on Security in the Arctic*, ATLANTIC COUNCIL (Mar. 19, 2021), <https://www.youtube.com/watch?v=IjzOKvD7WgA> [<https://perma.cc/XBC2-45L5>].

65. Robert David English & Morgan Grant Gardner, *Phantom Peril in the Arctic: Russia Doesn’t Threaten the United States in the Far North—But Climate Change Does*, FOREIGN AFF. (Sept. 29, 2020), <https://www.foreignaffairs.com/articles/united-states/2020-09-29/phantom-peril-arctic> [<https://perma.cc/BU42-DQPK>].

66. *Id.*

67. Mark P. Nevitt & Robert V. Percival, *Polar Opposites: Assessing the State of Environmental Law in the World’s Polar Regions*, 59 B.C. L. REV. 1655, 1666–67 (2018).

68. Kraska, *supra* note 6, at 1120.

69. *See U.S. Extended Continental Shelf Project*, U.S. DEP’T OF STATE, <https://www.state.gov/u-s-extended-continental-shelf-project/> [<https://perma.cc/JCT5-78SP>] (last visited Feb 2, 2022).

70. *See* Nevitt & Percival, *supra* note 67, at 1659, 1691; *see also* discussion of UNCLOS, *supra* note 13.

71. *Norway Moves to Ban Carriage of HFO in Waters Near Svalbard*, MAR. EXEC. (Nov. 9, 2020), <https://www.maritime-executive.com/article/norway-moves-to-ban-carriage-of-hfo-in-waters-near-svalbard> [<https://perma.cc/S9PW-BMFF>].

72. Øystein Overrein, *Svalbard’s Protected Areas*, NOR. POLAR INST.: CRUISE HANDBOOK FOR SVALBARD (May 2015), <http://cruise-handbook.npolar.no/en/svalbard/protected-areas.html> [<https://perma.cc/V3QR-DVYF>].

73. *Norway Clarifies Svalbard Treaty After Russian Complaint*, THE MARITIME EXECUTIVE (Feb. 17, 2020), <https://www.maritime-executive.com/article/norway-clarifies-svalbard-treaty-after-russian-complaint> [<https://perma.cc/ZL5G-4VZB>].

Norway gained sovereignty over Svalbard under the 1920 Svalbard Treaty, but all contracting parties—which include all the Arctic States and states as far from the Arctic as Egypt, Argentina, and Japan⁷⁴—enjoy equal rights to the archipelago’s territorial waters and to use the land for commercial purposes.⁷⁵ No state, including Norway, may use Svalbard for military purposes.⁷⁶

One prominent signatory to the Svalbard Treaty is India, which has conducted research from its Himadri research station on Svalbard.⁷⁷ India received observer status on the Arctic Council in 2013 and even published a draft Arctic policy in 2021.⁷⁸ While its presence on Svalbard is a legitimate exercise of its treaty rights, India’s Arctic policy couches its research in terms of the impact that changes in the Arctic will have on monsoon patterns and the “global ecosystem.”⁷⁹

E. China

China has “defined itself as a ‘near-Arctic state,’” released its own Arctic policy in 2018, and in 2013 gained observer status at the Arctic Council.⁸⁰ China’s ability to provide economic incentives to the Arctic States is readily apparent; it is one of the biggest mining investors in Greenland, and its acceptance as an observer state on the Council was due in part to encouragement from Iceland, which concluded a free trade deal with China in 2013.⁸¹ The Arctic’s poorer states such as Iceland are welcoming the investments of outside actors.⁸² But merely by gaining observer status, China has achieved “symbolic recognition” that non-regional states have legitimate interests in the region.⁸³

74. *Id.*

75. Svalbard Treaty, Feb. 9, 1920, 43 Stat. 1892, 2 L.N.T.S. 184, <https://www.jus.uio.no/english/services/library/treaties/01/1-11/svalbard-treaty.xml> [<https://perma.cc/7M34-T82Z>].

76. *Id.* at art. I.

77. Sahana Ghosh & Mayank Aggarwal, *With a new policy, India aims to understand the impact of the Arctic region on its monsoon*, QUARTZ INDIA (Jan. 24, 2021), <https://qz.com/india/1939274/indias-arctic-policy-to-focus-on-climate-change-monsoon-rains/> [<https://perma.cc/BP5T-K2RS>].

78. *Id.*

79. *Id.*

80. GISELA GRIEGER, CHINA’S ARCTIC POLICY: HOW CHINA ALIGNS RIGHTS AND INTEREST 2 (European Parliamentary Research Service, May 2018), [https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/620231/EPRS_BRI\(2018\)620231_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/620231/EPRS_BRI(2018)620231_EN.pdf) [<https://perma.cc/ZWK2-AUC8>].

81. See Patricia Zengerle, *China granted observer seat on Arctic governing council*, REUTERS (May 15, 2013), <https://www.reuters.com/article/us-arctic-council/china-granted-observer-seat-on-arctic-governing-council-idUSBRE94E0I120130515> [<https://perma.cc/KX6W-NRP6>]; Matthew D. Stephen & Kathrin Stephen, *The Integration of Emerging Powers into Club Institutions: China and the Arctic Council*, 11 GLOBAL POL’Y 51, 58 (Oct. 2020), <https://onlinelibrary.wiley.com/doi/epdf/10.1111/1758-5899.12834> [<https://perma.cc/QK4G-PYG3>].

82. David Auerswald, *China’s Multifaceted Arctic Strategy*, WAR ON THE ROCKS (May 24, 2019), <https://warontherocks.com/2019/05/chinas-multifaceted-arctic-strategy/> [<https://perma.cc/ASJ4-X2D6>].

83. See Stephen & Stephen, *supra* note 81, at 55–56.

China seeks to integrate Arctic shipping routes into its global economic and geopolitical strategy known as the Belt and Road Initiative (BRI), referring to Arctic trade routes as the “Polar Silk Road.”⁸⁴ It has been cooperating with Russia in developing these routes,⁸⁵ and a Chinese shipping company sends vessels through the NSR each year.⁸⁶

Like India, China also has spent significant resources on research initiatives in the Arctic, including building three research stations.⁸⁷ Indeed, China spends more on Arctic research than the United States.⁸⁸ However, a European Parliament report on China’s Arctic policy concludes that this research supports geostrategic goals—including resource extraction and advancing Chinese satellite technology to improve navigation and missile positioning—rather than developing knowledge of climate change.⁸⁹

Although China reassured the Arctic States through its 2018 Arctic policy that it is committed to existing legal frameworks, including UNCLOS, this is contrary to China’s own recent history in disregarding the Permanent Court of Arbitration’s 2016 decision, based on UNCLOS, that rejected China’s claims in the South China Sea.⁹⁰ China has also stated that its goals in the Arctic are to “build a community with a shared future for mankind,” which the European Parliament report suggests is not mere rhetoric, but policy language that fits into its broader BRI framework.⁹¹

F. European Union

The European Union (EU) is also taking an active role in developing Arctic policy, though the contours of its involvement are still evolving.⁹² Although China and others gained observer status at the Arctic Council in 2013, Canada blocked the EU’s application.⁹³ The EU potentially stands to gain the most from new shipping routes through the Arctic. The cost savings of

84. GRIEGER, *supra* note 80, at 5.

85. *Id.*

86. Alec Luhn, *Freezing cold war: militaries move in as Arctic ice retreats*, THE GUARDIAN (Oct. 16, 2020), <https://www.theguardian.com/environment/2020/oct/16/arctic-ice-retreats-climate-us-russian-canadian-chinese-military> [<https://perma.cc/R38J-LUGL>].

87. *China vies for seat at council on Arctic resources and trade routes*, PRI (July 31, 2012), <https://www.pri.org/stories/2012-07-31/china-vies-seat-council-arctic-resources-and-trade-routes> [<https://perma.cc/W44V-3MBU>].

88. Stephen & Stephen, *supra* note 81, at 56.

89. Grieger, *supra* note 80, at 5–6.

90. *Id.* at 3.

91. *Id.* at 4 (citing Xinhua, *Concept of ‘community with shared future for mankind’ being transformed into action: Xi*, CHINA DAILY (Dec. 1, 2017), http://www.chinadaily.com.cn/china/2017-12/01/content_35160220.htm [<https://perma.cc/FL5N-WXDL>].

92. C. Mark Macneill, *Splitting Canada’s Northern Strategy: Is It Polar Policy Mania?*, 20 SUSTAINABLE DEV. L. & POL’Y 13, 15 (2020).

93. Matt McGrath, *China joins Arctic Council but a decision on the EU is deferred*, BBC NEWS (May 15, 2013), <https://www.bbc.com/news/science-environment-22527822> [<https://perma.cc/2S5H-HEDC>].

faster transit times between the Atlantic and Pacific “will be especially beneficial to European and Asian nations.”⁹⁴ For the EU, this also means more direct access to the emerging and expanding markets in East Asia.

While it cannot necessarily be said to be an outside actor (Denmark, which administers Greenland, and Sweden and Finland, noncoastal Arctic States, are EU members), the EU seems to embrace a “Global Arctic” model of international engagement with the region, potentially putting it at odds with Arctic States.⁹⁵ André Gattolin, vice-chair of the French Senate’s European Affairs Committee, has authored three EU Arctic reports and recently opined that “[m]any issues have globalised the Arctic.”⁹⁶ “Top [of these] is climate change,” Gattolin wrote.⁹⁷

* * *

This is not an exhaustive list of territorial disputes in the Arctic. Rather, it illustrates a handful of disputes and potential disputes where there is overlap between environmental concerns and international boundaries, and where external considerations may creep into legal resolutions of these disputes as they develop. Even while highlighting how environmental protection claims might be manipulated by state and regional actors, however, it is important to note the very real environmental concerns that exist in the fragile ecosystem of the Arctic.

II. The Real Environmental Threats

“The Arctic is warming twice as fast as the rest of the planet,”⁹⁸ meaning that the effects of climate change will be felt faster in the Arctic than anywhere else. Melting landmass and sinking permafrost will require the relocation of coastal communities and costly repairs to infrastructure.⁹⁹ As one former defense analyst warned, “a rapidly warming Arctic will be the locus of a cascading series of environmental, economic, and public health disasters.”¹⁰⁰

94. Kraska, *supra* note 6, at 1124.

95. *See id.*

96. André Gattolin & Damien Degeorges, Opinion, *High geopolitics in the High North: A call for a deeper EU engagement*, EURACTIV (Dec. 17, 2019), <https://www.euractiv.com/section/arctic-agenda/opinion/high-geopolitics-in-the-high-north-a-call-for-a-deeper-eu-engagement/> [<https://perma.cc/KH8K-BYFT>].

97. *Id.*

98. Nevitt & Percival, *supra* note 67, at 1662.

99. *See* English & Gardner, *supra* note 65.

100. *Id.*

Despite the growing number of cargo ships transiting the NSR, shifting weather patterns could actually make the Arctic *less* accessible in the future.¹⁰¹ Yet, the number of ships entering the Arctic area grew by 25 percent from 2013 to 2019, according to the Arctic Council's first Arctic Shipping Status Report.¹⁰² The ships are also sailing farther distances.¹⁰³

Shipping contributes both to the climate change causing the warming of the Arctic in the first place, and to the risk of oil spills in the ecologically sensitive region. "Today's ships are powered by high-carbon fuel, more commonly known as bunker fuel, which is by far the most polluting fuel variant used in commercial operation," according to two environmental law experts.¹⁰⁴ Many of the ships operating in the Arctic are also transporting oil and natural gas. Not only could a damaged ship leak its own fuel, but it could also leak its cargo. Oil spills are especially difficult to clean up in the Arctic because the cold prevents oil from breaking up, letting it linger in the ecosystem far longer.¹⁰⁵ As more ships operate in narrow ice-choked sea lanes, the risks attendant with collisions—including both economic loss and the harms of an oil spill—increase.

Economically, the warming of the Arctic could result in the loss of species sustaining current indigenous communities.¹⁰⁶ Conversely, easier access to Arctic fishing stocks could also lead to overfishing, which brought the five Arctic coastal states, Iceland, the EU, China, Japan, and South Korea together to sign a legally binding 16-year moratorium on commercial fishing until they can create mechanisms to preserve the fishing stocks.¹⁰⁷

The Arctic could also be "the source of the next global pandemic."¹⁰⁸ In 2016, an anthrax outbreak in Siberia, believed to have spread from a thawed reindeer carcass infected with the bacteria, prompted the Russian government to airlift families out of the area.¹⁰⁹ Researchers expect that other dead animals and buried people frozen in the permafrost will release other pathogens as climate change warms the preserved bacteria.¹¹⁰

101. Zysk, *supra* note 64.

102. Arctic Council Protection of the Arctic Marine Environment, *The Increase in Arctic Shipping 2013–2019*, 10 (Arctic Shipping Status Report (ASSR) #1, Mar. 31, 2020), <https://www.pame.is/document-library/pame-reports-new/pame-ministerial-deliverables/2021-12th-arctic-council-ministerial-meeting-reykjavik-iceland/793-assr-1-the-increase-in-arctic-shipping-2013-2019/file> [<https://perma.cc/2LR7-ANZ8>].

103. *Id.*

104. Harsha Pisupati & Armin Rosencranz, *The Deteriorating Arctic and the Impact of the Shipping Industry*, 49 ENVTL. L. REP. NEWS & ANALYSIS 10837, 10838 (2019).

105. *See* Dubner, *supra* note 57, at 15.

106. *See* English & Gardner, *supra* note 65.

107. Grieger, *supra* note 80, at 6.

108. English & Gardner, *supra* note 65.

109. Michaelen Doucleff, *Anthrax Outbreak In Russia Thought To Be Result Of Thawing Permafrost*, NPR (Aug. 3, 2016), <https://www.npr.org/sections/goatsandsoda/2016/08/03/488400947/anthrax-outbreak-in-russia-thought-to-be-result-of-thawing-permafrost> [<https://perma.cc/HN54-YZ5R>].

110. *Id.*

Rising fears of military confrontation in the Arctic—which would be environmentally catastrophic for all parties involved—have obscured the very real threats that climate change poses to this environmentally sensitive region.¹¹¹ Where “[u]nseasonal storms will threaten hundreds of lives” and any potential naval conflict would degenerate into harrowing search-and-rescue missions, “[t]he looming catastrophe can be managed only cooperatively.”¹¹²

III. The Arctic Governance Structures that Provide Ways to Manage Competing Territorial Claims and Environmental Obligations

As one commentator has argued, a treaty among the Arctic States “could establish limits to exploitation of the Arctic natural resources, and institute other environmental standards to preserve the natural landscape and indigenous populations.”¹¹³ However, a legal regime already governs the Arctic. Indeed, the five coastal states tried to preempt attempts at “universalization” of the region which could flow from a new treaty regime.¹¹⁴ They agreed in the 2008 Ilulissat Declaration that there is no need to develop a new legal framework for the Arctic because “an extensive international legal framework applies to the Arctic Ocean,” including the “law of the sea.”¹¹⁵

A triumvirate of institutions generally provides governance over the Arctic. The Arctic Council, as a decision-making and action-oriented body of the Arctic States, acts as something like an executive. The International Maritime Organization (IMO), through regulations adopted with the consent of the Arctic States, provides an equivalent legislative function. UNCLOS, in setting out rules and dispute resolution mechanisms, provides a comparable judicial function.

A. Arctic Council

Since its founding in 1996, the Arctic Council has evolved from an informal networking group on Arctic issues into “a more or less fully-fledged international organization with a permanent secretariat.”¹¹⁶ For those outside the region maneuvering to access the Arctic’s resources, the Council has established itself as the gatekeeper to that access.¹¹⁷

111. *See id.*

112. *Id.*

113. Molly Watson, *An Arctic Treaty: A Solution to the International Dispute over the Polar Region*, 14 OCEAN & COASTAL L.J. 307, 330 (2009).

114. Touren, *supra* note 8.

115. The Ilulissat Declaration, May 28, 2008, ¶ 3, <https://arcticportal.org/images/stories/pdf/Ilulissat-declaration.pdf> [<https://perma.cc/3DJ3-2KMM>].

116. Stephen & Stephen, *supra* note 81, at 54.

117. *See id.* at 55–56.

Modern cooperation among the Arctic States began in 1991, when they adopted the Arctic Environmental Protection Strategy (AEPS),¹¹⁸ which included four programs to coordinate conservation, climate change monitoring and analysis, and best practices in pollution reduction and emergency response.¹¹⁹ On September 19, 1996, the Arctic States signed the Declaration on the Establishment of the Arctic Council (Ottawa Declaration), which absorbed these programs into the new framework of the Arctic Council.¹²⁰

Today, there are also a number of observer states, intergovernmental organizations, and non-governmental organizations,¹²¹ whose involvement in the Council is governed by rules set out in the Arctic Council Observer Manual.¹²² Some have posited that the Council's decision to invite observer states into the Council framework was itself a strategy to retain leadership of Arctic governance and prevent parallel decision-making bodies from developing under U.N. or IMO auspices.¹²³ Observers may propose projects, but their financial funding may not exceed the contributions from the Arctic States.¹²⁴ And they must “[r]ecognize Arctic States’ sovereignty [. . .] and jurisdiction in the Arctic.”¹²⁵ The rules make clear that “[d]ecisions at all levels [. . .] are the exclusive right and responsibility of the eight Arctic States with the involvement of the Permanent Participants.”¹²⁶ Still, the Arctic Council retains a flexibility that a treaty regime would not have by incorporating participation of indigenous peoples, a community that is not generally invited by states to participate in formal treaties.¹²⁷

The Arctic Council is primarily designed as a mechanism for information-sharing and cooperation on the programs established by the AEPS, though it has taken on a more structured role in other areas of cooperation. While the Ottawa Declaration explicitly states that the Council “should not deal with matters related to military security,”¹²⁸ the Arctic States’ defense chiefs met biannually until meetings were suspended following Russia’s 2014 invasion of

118. Dubner, *supra* note 57, at 7; *see also* CONSERVATION OF ARCTIC FLORA AND FAUNA: POLICY, <https://www.caff.is/policy-home> [<https://perma.cc/4UEF-UMSP>] (last visited Feb. 4, 2022).

119. The four programs are: Conservation of Arctic Flora and Fauna (CAFF), the Arctic Monitoring and Assessment Program (AMAP), the Protection of the Arctic Marine Environment (PAME), and Emergency Prevention Preparedness and Response (EPPR). *See Working Groups*, ARCTIC COUNCIL, <https://arctic-council.org/en/about/working-groups/> [<https://perma.cc/UP3T-YRUC>] (last visited Feb. 4, 2022).

120. *See* Ottawa Declaration, *supra* note 10.

121. Observer states include France, Germany, Japan, China, India, and South Korea. *Observers*, ARCTIC COUNCIL, <https://arctic-council.org/en/about/observers/> [<https://perma.cc/96S3-BEZ6>] (last visited Feb. 4, 2022).

122. ARCTIC COUNCIL, ARCTIC COUNCIL OBSERVER MANUAL FOR SUBSIDIARY BODIES 9 (May 15, 2013), https://oarchive.arctic-council.org/bitstream/handle/11374/939/EDOCS-3020-v1B-Observer-manual-with-addendum-finalized_Oct2016.pdf?sequence=13&isAllowed=y [<https://perma.cc/4RL4-FEHH>] [hereinafter ARCTIC COUNCIL OBSERVER MANUAL].

123. *See* Stephen & Stephen, *supra* note 81, at 57–58.

124. *See id.*

125. *See* Féron, *supra* note 26, at 98 (citation omitted).

126. Arctic Council Observer Manual, *supra* note 122, at 6.

127. Although the Arctic States conferred only non-voting “permanent participant” status on indigenous peoples, the practice of states has been to exclude indigenous peoples from formal treaties. *See* Nevitt & Percival, *supra* note 67, at 1687 n. 214.

128. Ottawa Declaration, *supra* note 10, footnote to 1(a).

Ukraine.¹²⁹ Despite these tensions, the Arctic States created the Arctic Coast Guard Forum in 2015 to coordinate their regional coast guards.¹³⁰ Through the Council's Emergency Prevention Preparedness and Response program, the Arctic States also engage in emergency response exercises.¹³¹ Increased competition between Russia and the United States and growing interest of outside actors—particularly China—in the region's natural resources may be driving increased attention on the Council, which in turn has formalized its cooperation structures in response.¹³²

Although the Ottawa Declaration and Council working group recommendations are non-binding, decisions of the Arctic Council must be by consensus,¹³³ which ensures a level of consistency in members' positions. The Arctic Council has also become more willing to create binding legal obligations on its members. In 2011, for example, the Council adopted the Arctic Search and Rescue Agreement; in 2013, members agreed to legally binding cooperation in oil pollution preparedness and response.¹³⁴

B. International Maritime Organization

The IMO is a specialized U.N. agency, created by a 1948 convention, which develops standards to improve safety and prevent pollution in global shipping.¹³⁵ IMO committees develop conventions which are made binding when member states accede to them; the IMO Assembly, made up of member states, also adopts mandatory resolutions.¹³⁶ All the Arctic States are members of the IMO and have acceded to a number of its conventions.

The 1974 International Convention for the Safety of Life at Sea (SOLAS) is “generally considered to be the most important of all international treaties concerning the safety of merchant ships,” and concerns measures such as fire safety, life-saving appliances and radio communications required onboard, and safety management practices.¹³⁷ The International Convention for the Prevention of Pollution from Ships (MARPOL) contains a number of annexes regulating the carriage of potentially pollutant chemicals, the discharge of sewage at sea, and other matters.¹³⁸ SOLAS and MARPOL are regularly amended to account for technological changes in shipping and environmental protection.

129. See Käpylä & Mikkola, *supra* note 34, at 7; see also Féron, *supra* note 26, at 118–19.

130. See Féron, *supra* note 26, at 118.

131. See *EPRR ABOUT*, ARCTIC COUNCIL WORKING GROUP, <https://eprp.org/about/> [<https://perma.cc/T2UG-LGYE>] (last visited Feb. 4, 2022).

132. See Stephen & Stephen, *supra* note 81, at 54–55.

133. Ottawa Declaration, *supra* note 10, art. 7.

134. See Nevitt & Percival, *supra* note 67, at 1665–66.

135. See Kraska, *supra* note 6, at 1129; see also *Frequently Asked Questions*, INT'L MAR. ORG., <https://www.imo.org/en/About/Pages/FAQs.aspx> [<https://perma.cc/6BWH-7LT5>] (last visited Feb. 4, 2022).

136. The IMO now oversees more than 50 conventions. See *Conventions*, INT'L MAR. ORG., <https://www.imo.org/en/About/Conventions/Pages/Default.aspx> [<https://perma.cc/3TAH-TWW9>] (last visited Feb. 4, 2022).

137. Kraska, *supra* note 6, at 1129 (citation omitted).

138. See *id.* at 1130; see also STATUS OF IMO TREATIES, INT'L MAR. ORG., (Sept. 29, 2021) <https://wwwcdn.imo.org/localresources/en/About/Conventions/StatusOfConventions/Status%20-%202021.pdf> [<https://perma.cc/AW8H-VQZ9>].

In 2014, the IMO adopted the International Code for Ships Operating in Polar Waters (Polar Code), which includes both mandatory and recommended measures for ship safety and pollution prevention.¹³⁹ Among other things, the Polar Code requires ships to apply for a Polar Ship Certificate designating its fitness to operate in the polar environment based on inspections.¹⁴⁰ The Polar Code is implemented through states' obligations under SOLAS and MARPOL,¹⁴¹ and also includes new rules for waste disposal, discharges of oil residues, and guidelines for ship design based on the "harsh polar environments."¹⁴² More recently, the IMO also adopted a ban on the use and carriage of heavy fuel oil in the Arctic, effective in 2024.¹⁴³

The Arctic States are party to a number of other IMO conventions, which make additional shipping requirements operative in the Arctic. For instance, ships and operators of offshore units under the jurisdiction of the Arctic States are required to have oil pollution emergency plans and to develop national response systems and procedures for responding to oil spill incidents.¹⁴⁴ The Arctic States implemented these obligations through their 2013 Agreement on Cooperation on Marine Oil Pollution, Preparedness and Response in the Arctic.¹⁴⁵ Under the 1972 London Convention, to which the Arctic States have also acceded, the parties agreed to take steps to prevent dumping of waste into the oceans and to harmonize their policies to that end.¹⁴⁶ More controversially, the 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties permits a coastal state to take

139. See *Shipping in Polar Waters*, INT'L MAR. ORG., <https://www.imo.org/en/MediaCentre/HotTopics/Pages/Polar-default.aspx> (last visited Feb. 4, 2022); see also *The Polar Code*, PAME, <https://www.pame.is/projects-new/arctic-shipment/pame-shipment-highlights/412-arctic-shipment-best-practice-information-forum> [<https://perma.cc/YKW3-G8ZK>].

140. See *id.*

141. The Polar Code is a package of amendments to SOLAS and MARPOL that became binding in 2017 through a mechanism of those conventions "which lets amendments enter into force after a certain period if no state party objects." Féron, *supra* note 26, at 108.

142. The Polar Code applies both to the Arctic and Antarctica. See Nevitt & Percival, *supra* note 67, at 1688–89.

143. See *UN approves ban on heavy ship fuel in Arctic*, REUTERS (Nov. 20, 2020), <https://www.reuters.com/article/shipment-arctic-imo/un-approves-ban-on-heavy-ship-fuel-in-arctic-idUKL8N2HY5IS> [<https://perma.cc/2B8W-GS4>]. The Arctic ban follows Norway's regulation to do the same around Svalbard. See Malte Humpert, *Norway announces plans to ban HFO around Svalbard, leapfrogging proposed IMO regulation*, ARCTIC TODAY (Nov. 13, 2020), <https://www.arctictoday.com/norway-announces-plans-to-ban-hfo-around-svalbard-leapfrogging-proposed-imo-regulation/#:~:text=The%20Norwegian%20government%20is%20finalizing,of%20HFO%20will%20be%20prohibited> [<https://perma.cc/MED2-HWKY>].

144. See International Convention on Oil Pollution, Preparedness, Response and Cooperation, arts. 3, 6, Nov. 30, 1990, 1891 U.N.T.S. 78.

145. See Féron, *supra* note 26, at 108.

146. Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, arts. 1–2, Dec. 29, 1972, 1046 U.N.T.S. 120, <https://wwwcdn.imo.org/localresources/en/OurWork/Environment/Documents/LC1972.pdf> [<https://perma.cc/KLC2-HVHH>]. All the Arctic States are parties to the Convention, though the United States and Russia have not acceded to its additional protocols.

measures on the high seas that are necessary to prevent, mitigate, or eliminate the threat of oil pollution to its coastline following a maritime casualty.¹⁴⁷ Notably, Canada, Russia, and the United States have not acceded to this convention although the other Arctic States have.¹⁴⁸

C. U.N. Convention on the Law of the Sea

All of the Arctic States, with the exception of the United States, have ratified UNCLOS.¹⁴⁹ Although the United States has not acceded to UNCLOS, it did sign the treaty's 1994 implementing agreement and remains a party to its 1958 predecessor Conventions.¹⁵⁰ These treaty obligations, which are largely congruent with UNCLOS, remain binding on the United States.¹⁵¹

UNCLOS is essentially a set of rules to which state parties have agreed, though scholars and commentators have indicated ambiguities in the rules themselves and in their enforcement. A series of UNCLOS articles require state parties to “protect and preserve the marine environment,” cooperate on conservation of living resources, and “adopt measures against pollution.”¹⁵² But several have noted that UNCLOS is only a “framework” for making further commitments, “leav[ing] the substantive content of such anti-pollution measures” to the state parties.¹⁵³

Even a rule specific to the Arctic creates ambiguity which states can exploit or remain deadlocked on. While states usually must find a violation within their territorial waters to enforce domestic environmental regulations on a foreign vessel, Article 234 gives a coastal state “extended jurisdiction and enforcement powers for the protection of the marine environment in generally ice-covered areas” of its EEZ.¹⁵⁴ This is the authority claimed by Canada and Russia to implement regulations in the NWP and NSR, respectively, though “the exact scope of these powers” has not been defined.¹⁵⁵ Of course, as one law professor observed, Article 234 only permits enhanced marine environmental protection measures when ice covers the EEZ

147. See *International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969*, INT'L MAR. ORG., <https://www.imo.org/en/About/Conventions/Pages/International-Convention-Relating-to-Intervention-on-the-High-Seas-in-Cases-of-Oil-Pollution-Casualties.aspx> [<https://perma.cc/ZB4A-S7GL>] (last visited Feb. 4, 2022).

148. *International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties*, Nov. 29, 1969, 970 U.N.T.S. 211.

149. See Nevitt & Percival, *supra* note 67, at 1690.

150. These include the Conventions on the Territorial Sea and the Contiguous Zone, on the High Seas, on the Continental Shelf, and on Fishing and Conservation of the Living Resources of the High Seas. See DAMROSCH & MURPHY, *supra* note 19, at 1312, 1315, 1318.

151. See *id.* at 1318.

152. Féron, *supra* note 26, at 107 (citing UNCLOS arts. 192, 197, 199, 207–12); see UNCLOS, *supra* note 13, art. 61.

153. *E.g., id.*; see Pisupati & Rosencranz, *supra* note 104, at 10844.

154. Féron, *supra* note 26, at 107; see UNCLOS, *supra* note 13, art. 234.

155. See Féron, *supra* note 26, at 107.

area for “most of the year.”¹⁵⁶ When ice does not “create obstructions or exceptional hazards to navigation”¹⁵⁷ in seven months out of the year, Canada’s and Russia’s “application of pre-existing measures would be legally dubious.”¹⁵⁸

Similarly, the CLCS has only recommendatory power because it is not able to bind states to its findings on the delimitation of continental shelves.¹⁵⁹ While Article 76(8) instructs that recommendations of the CLCS “shall be final and binding,” one author has concluded that, practically speaking, this only binds a state to the limits of its own submission to the CLCS.¹⁶⁰ In fact, according to its own procedures, the CLCS cannot issue a recommendation on a dispute without the consent of all the relevant parties—and even then, its recommendation is “without prejudice to their position[s].”¹⁶¹ Moreover, it remains unclear whether the United States has a right at all to submit a claim for the delimitation of its continental shelf to the CLCS and whether, as a non-party, it would even be bound by its own submission.¹⁶²

The delimitation of the Arctic States’ continental shelves will have wide-reaching consequences because it will determine which parts of the Arctic Ocean seabed are left for non-Arctic states to cultivate as the “common heritage of mankind.”¹⁶³ The phrase, to which China has alluded in its efforts to justify access to Arctic resources, is legally operative under UNCLOS, carrying rights and duties for UNCLOS members in extracting resources.¹⁶⁴ Benefits derived from a “common heritage” area are subject to “equitable sharing” among states.¹⁶⁵

Determining whether the NWP and NSR are international straits or internal waters may prove the most intractable of these unsettled questions. The answer to this question will decide whether the ships of other states must comply with Canada’s and Russia’s domestic regulations in innocent passage, or only “generally accepted international regulations” in transit passage.¹⁶⁶

UNCLOS provides for compulsory dispute resolution to sort out these ambiguities. Articles 286 and 287 confer jurisdiction over disputes regarding the interpretation or application of UNCLOS provisions to four bodies, at the contracting state’s choosing: the International Tribunal for the Law of the Sea, the ICJ, or an arbitral tribunal constituted per Annexes VII or

156. Donald R. Rothwell, *The Law of the Sea and Arctic Governance*, 107 AM. SOC’Y INT’L L. PROC. 272, 275 (2014); UNCLOS, *supra* note 13, art. 234.

157. UNCLOS, *supra* note 13, art. 234.

158. Rothwell, *supra* note 156, at 275.

159. Féron, *supra* note 26, at 102–03.

160. *Id.*

161. *Id.* at 103–04.

162. Nevitt & Percival, *supra* note 67, at 1691; *see id.* at 102–03.

163. Féron, *supra* note 26, at 101; *see* UNCLOS, *supra* note 13, pt. XI.

164. *See* Féron, *supra* note 26, at 101.

165. *See* UNCLOS, *supra* note 13, art. 140.

166. *Id.*, art. 39.

VIII of UNCLOS.¹⁶⁷ Alternatively, Article 282 provides that states parties can agree to a binding regional or bilateral dispute resolution procedure of their own, outside the UNCLOS regime.¹⁶⁸ And nothing precludes states parties from agreeing to a peaceful resolution between themselves,¹⁶⁹ such as the 2010 delimitation treaty between Norway and Russia which ended a long-running dispute in the Barents Sea.¹⁷⁰

However, a key problem facing the Arctic States in resolving their conflicting water boundary and continental shelf claims is that some states have declared exemptions to compulsory dispute settlement, which are permitted by UNCLOS.¹⁷¹ Canada has invoked the optional exemption under Article 298 regarding disputes relating to, *inter alia*, delimitations involving historic title.¹⁷² Canada's claim that parts of the NWP are internal waters is based in part on "historic use and occupation of the sea ice by Canadian indigenous people."¹⁷³ Russia and Denmark have invoked the same exemption that excepts jurisdiction over sea boundary delimitations.¹⁷⁴ Norway does not submit to alternate tribunals for the three categories of disputes listed in Article 298.¹⁷⁵ Even the United States has suggested that it will exempt itself from the same categories in the event that it ratifies UNCLOS.¹⁷⁶ While Article 298 requires parties declaring an exemption to submit their dispute to conciliation if it is not settled "within a reasonable period of time," these contested boundaries have existed for many years without resolution or submission to conciliation. The operative question, then, is: how can the Arctic States settle these disputes and disentangle them from their various environmental justifications?

IV. Reconciling the Need for Environmental Protection with Obligations in International Law Under Arctic Council Leadership

Although a state has the right to ensure proper conservation of living resources in its EEZ, UNCLOS directs that the coastal state and relevant international organizations "*shall* co-operate to this end."¹⁷⁷ International cooperation—even on environmental matters of concern to a single state—is thus mandated by the legal instrument which the Arctic's five coastal states agreed in the Ilulissat Declaration serves as the applicable legal regime in the Arctic.¹⁷⁸

167. Julia Brower et al., UNCLOS Dispute Settlement in Context: The United States' Record in International Arbitration Proceedings 1–2 (Dec. 10, 2012) (unpublished student paper), https://law.yale.edu/sites/default/files/documents/pdf/cgic/yale_law_school_-_unclos_and_arbitration.pdf [<https://perma.cc/6ZEX-PQJU>]; UNCLOS, *supra* note 13, arts. 286–87.

168. UNCLOS, *supra* note 13, art. 282.

169. *Id.*, arts. 280–82.

170. Käpylä & Mikkola, *supra* note 34, at 7.

171. Féron, *supra* note 26, at 96–97, 104.

172. *Id.*; see UNCLOS, *supra* note 13, art. 298(1)(a)(i).

173. Féron, *supra* note 26, at 92.

174. *Id.* at 104.

175. UNCLOS, *supra* note 13, Norway Declarations (Norway also has chosen to submit only to the ICJ for dispute settlement regarding the interpretation or application of UNCLOS).

176. Brower et al., *supra* note 167, at 2.

177. UNCLOS, *supra* note 13, art. 61(2) (emphasis added).

178. See discussion of the Ilulissat Declaration in Part IV *supra*.

The Arctic States need not attempt to negotiate a multilateral treaty for Arctic governance—which can get stalled by bilateral disagreements—when they have already made commitments through treaties and binding Arctic Council agreements. Using the tools provided by UNCLOS and the IMO, the Arctic States can take specific actions through the Arctic Council to enforce these commitments and regulate the protection of the Arctic environment.

Despite U.S. comparisons to the South China Sea, “the Arctic States have been remarkably successful in [balancing] national interests and peaceful cooperation” to keep the Arctic stable.¹⁷⁹ What the Arctic needs now is a set of decisions by the Arctic Council which will move some of the intractable disagreements of the Arctic States toward resolution even if they are not immediately solvable in the short term.

A. Collective Action of the Arctic Council

Given the rapidly changing landscape and the legitimate basis of environmental protection as justification for extraterritorial actions codified in UNCLOS, the Arctic States need to work from a common set of facts. As regional warming changes the “facts on the ground,” the Arctic could become a battleground over competing scientific interpretations.

A common set of facts is not just an ideal policy, it is also written into the text of at least one UNCLOS provision at issue. Article 234, which extends a coastal state’s enforcement powers “for the protection of the marine environment in generally ice-covered areas” also requires that such regulations have “due regard to [. . .] the protection and preservation of the marine environment *based on the best available scientific evidence*.”¹⁸⁰ As states continue to chafe at the regulations imposed by Canada and Russia, and potentially others, they could seek out competing science that suggests the regulatory measures are unnecessary. This will become more readily apparent as melting ice eases transit, and potentially removes states’ justifications for environmental protection measures. Escalation—such as a ship refusing the escort of Russian icebreakers, and the Russians’ possible responses—is not hard to imagine. The delimitation of a state’s continental shelf is also a highly scientific process, in which slightly different measurement points can have vastly divergent outcomes. With the resources at stake, states have every incentive to use the most advantageous measurements possible.

Through information-gathering and -sharing, the Arctic Council’s different working groups are positioned to provide these common facts. The Council’s research, which can be presumed to be accepted by all the Arctic States, can provide the basis for joint environmental protections enforced collectively by the Arctic States. It can also provide legitimate grounds for new regulations which some scholars have recommended the Arctic States pursue through the IMO.

Rather than throwing open the door to economic development, which will inevitably alter the region, and trying to manage it individually on a case-by-case basis, the Arctic States can establish regional standards. Exerting regional leadership will have the dual effect of (1) rein-

179. See Käpylä & Mikkola, *supra* note 34, at 6.

180. UNCLOS, *supra* note 13, art. 234 (emphasis added).

forcing the Arctic Council's role as gatekeeper to the region and (2) standardizing regulations in the interest of promoting consistent, sustainable economic development in line with the Ottawa Declaration.¹⁸¹

1. The Executive Function: The Arctic Council Should Enforce Joint Environmental Protections

The Arctic Council's working groups have already developed a number of policy proposals that could be implemented. For instance, the Protection of the Arctic Marine Environment (PAME) has proposed establishing a network of "Marine Protected Areas" (MPAs), specially managed ecological areas identified for conservation measures under national laws.¹⁸² The proposal provides an overarching framework to link nationally managed MPAs within the separate EEZs of Arctic States to coastal and inland habitats, with the goal of harmonizing conservation and preserving biodiversity in the region.¹⁸³ The Arctic Council could turn PAME's framework proposal into a binding agreement, as one author has suggested.¹⁸⁴

Indeed, much or all of PAME's proposals—and the proposals of the Council's other working groups—could be made binding in a one-time agreement to strengthen the working groups' role as policymakers. While some IMO conventions have been critiqued as unenforceable because they are "framework norms or norms not tailored to Arctic conditions,"¹⁸⁵ their regional enforceability can be dictated by regional organizations. Enforcement of these agreements, with special concern to Arctic conditions, is squarely within the Arctic Council's remit.

Through the Arctic Coast Guard Forum,¹⁸⁶ the Arctic States could coordinate multilateral patrols of MPAs to enforce their agreed-upon environmental regulations. Such patrols would replace more controversial exercises of environmental jurisdiction by Canada and Norway. External states are likely to comply with the Council's decisions given their eagerness to join the Council as observers, which has lent legitimacy to the Council as gatekeeper to the region.¹⁸⁷

181. See Ottawa Declaration, *supra* note 10, art. 1(a).

182. See Féron, *supra* note 26, at 114; see also ARCTIC COUNCIL/PAME, FRAMEWORK FOR A PAN-ARCTIC NETWORK OF MARINE PROTECTED AREAS 5, 6, 12 (Apr. 2015), https://pame.is/images/03_Projects/MPA/MPA_Report.pdf [<https://perma.cc/66HM-QVPW>].

183. See ARCTIC COUNCIL/PAME, *supra* note 182, at 11; see also Féron, *supra* note 26, at 114.

184. See Féron, *supra* note 26, at 114–15.

185. *Id.* at 107–08.

186. See *supra* Part IV-A.

187. See Stephen & Stephen, *supra* note 81, at 55–56.

2. The Legislative Function: The Arctic Council Should Lead Efforts at the IMO to Pass Necessary Regulations.

As for regulating shipping, Commander James Kraska, a professor of international maritime law at the U.S. Naval War College, has pointed out that SOLAS regulation V/12 allows parties to establish vessel traffic services “where [. . .] the degree of risk justifies such services.”¹⁸⁸ Canada could work “under the authority of the IMO rather than trying to haphazardly impose unilateral measures,” Kraska wrote.¹⁸⁹ The same is true of Russia.

The Arctic Council might also draw lessons from similar water management agreements. The governing body of the Panama Canal, for instance, incentivizes shipping companies to use cleaner fuels by “giving priority to [] cleaner ships.”¹⁹⁰ Just as Indonesia, Malaysia, and Singapore negotiated a “Cooperative Mechanism” under the auspices of the IMO to “develop a governance framework” for use of the Straits of Malacca and Singapore, the Arctic States could do the same for the NSR, NWP, and any other future cross-polar route.¹⁹¹ Similarly, the Arctic Council could coordinate port inspection reporting through the IMO. In 2012, the IMO’s Maritime Safety Committee adopted a mandatory ship reporting system in the Barents Sea, proposed by Norway and Russia, requiring certain ships to report either to a Norwegian or Russian center.¹⁹² The Arctic Council could organize an Arctic memorandum of understanding similar to other regional MOUs¹⁹³ to share ship reporting data among all the Arctic States.

Finally, the Arctic States could lead an effort at the IMO to designate the Arctic as an emission control area (ECA) under Annex VI of MARPOL, with stricter restrictions on certain emissions in specific coastal areas,¹⁹⁴ as two environmental law experts have suggested.¹⁹⁵ Any enforcement required could be carried out under the guidance of the Arctic Coast Guard Forum. The Arctic States could even impose a shipping emissions tax to fund the Council’s environmental protection enforcement.¹⁹⁶

3. The Judicial Function: The Arctic Council Should Build Capacity for Dispute Resolution

The Arctic Council grew out of informal inter-state collaboration on scientific research, environmental conservation, and emergency response procedures. Such soft law can create expectations, but not binding legal obligations. However, Council members have shown a willingness to subject themselves to more binding agreements.¹⁹⁷ In the interest of maintaining sta-

188. Kraska, *supra* note 6, at 1129.

189. *Id.*

190. Pisupati & Rosencranz, *supra* note 104, at 10839.

191. *See* Kraska, *supra* note 6, at 1131–32.

192. *See Shipping in Polar Waters*, INT’L MAR. ORG., *supra* note 139.

193. *See Frequently Asked Questions*, INT’L MAR. ORG., *supra* note 135.

194. Pisupati & Rosencranz, *supra* note 104, at 10839.

195. *See id.* at 10837–10.

196. *See id.* at 10843.

197. *See supra* Part IV-A.1.

bility, the Arctic States should commit themselves to upholding the legal frameworks that already apply in the Arctic—such as UNCLOS—and supplementing these with additional legal obligations as needed.

First, the Arctic States should agree, in a binding document akin to its 2011 Search and Rescue Agreement and 2013 Oil Pollution Preparedness and Response agreement, to abide by the decisions of the CLCS. Given the number of overlapping continental shelf claims—and the highly profitable resources at stake—other commentators have noted that the CLCS’s ability to issue binding recommendations is at risk.¹⁹⁸ Because the CLCS appeals process is unclear,¹⁹⁹ intractable disagreements could ensue if one state refuses to accept a CLCS recommendation. The Arctic Council could avert deadlock, and ensure its own stability, by mandating compliance with CLCS recommendations. If necessary, it could also agree to an appeals process, such as submitting persistent continental shelf disputes to the ICJ.²⁰⁰

Second, the Arctic Council should begin forming internal processes of dispute resolution, such as an agreement to submit disputes to arbitration. Notwithstanding their claimed exemptions to compulsory dispute resolution, the Arctic States need not submit disputes in the first instance to an external body such as the International Tribunal for the Law of the Sea or the ICJ. UNCLOS Article 280 provides that states parties may settle disputes “by any peaceful means of their own choice.” The Arctic States could fund an Arctic arbitration process, potentially including consent to ICJ jurisdiction for the purpose of appeals, to resolve territorial disputes amongst themselves. Such a function could be managed by a body adjacent to the Council’s permanent Secretariat.²⁰¹

More controversially, the arbitration mechanism could be given jurisdiction over disputes regarding states’ environmental protection regulations as a way to enforce the Arctic States’ *collective* environmental regulations. The arbitral panel could assess whether certain regulations by an individual state are consistent with the PAME MPA framework or impermissibly deviate from it, for example. Where, as here, territorial disputes are so intertwined with claims of right to enforce environmental protections, the dispute resolution mechanism—whatever form it takes—must be prepared and empowered to resolve disputes over environmental conditions and the consistency of purported environmental measures with the collective measures decided by the Arctic Council. Those regulations which are the initiative of a single state might then be suspect as pretense for exerting territorial sovereignty. While the arbitration mechanism itself may infringe *to an extent* on Arctic States’ sovereignty, this is an outcome they may wish to accept in order to maintain their collective position as manager of the Arctic region.

198. See Nevitt & Percival, *supra* note 67, at 1693.

199. See *id.*

200. Such leadership would also provide a solution for the broader international community in appealing CLCS decisions.

201. See *Arctic Council Secretariat*, ARCTIC COUNCIL, <https://arctic-council.org/en/about/secretariat/> [https://perma.cc/97GX-GXCA] (last visited Jan. 30, 2022).

If given the legitimacy of the Arctic States' participation, the mechanism they choose could extend to disputes with non-Arctic State actors. Such an Arctic-centric dispute resolution process will maintain the Arctic States' collective control over the region while ensuring peaceful resolutions of disputes within the consensus-based framework of the Arctic Council.

B. Individual Actions of the Arctic States

The Arctic States themselves should also prepare to actively monitor environmental conditions in the Arctic so that they can credibly contest assertions of environmental enforcement that are based on illegitimate, faulty, or falsified environmental data. This will require intelligence-gathering on more than just other states' military movements in the Arctic. It will also require intelligence-gathering on the Arctic itself: the condition of the seabed, coastal erosion, plant and animal life, the existence of pollutants, and the general health of the Arctic Ocean.

A number of Arctic States must also take actions to improve their own strategic positions in the Arctic as well as the overall strength of Arctic Council governance. First, the United States must accede to UNCLOS and ratify the 1994 implementing agreement. Although it is submitting an application to the CLCS as a non-party, the United States could remove doubts that it will comply with the CLCS's resulting recommendation—and in turn, help legitimize the findings of the CLCS in other Arctic disputes—by acceding to UNCLOS. Joining UNCLOS will also reinforce the Ilulissat Declaration, which the United States signed and which declared that the law of the sea applies in the Arctic. As long as it remains a non-party to UNCLOS, and can therefore avoid obligations under the treaty regime, the U.S. position of enforcing UNCLOS in future Arctic disputes will be untenable. Second, instead of unilateral action, Canada and Norway should work through the IMO, where “tough laws” on marine protection can be replicated in a “multilateral context.”²⁰² Finally, the 2010 delimitation treaty between Norway and Russia may serve as a model for how individual states can resolve bilateral disputes to clear the way for more concerted action on common issues challenging Arctic governance.

Conclusion: Developing an Arctic Council Strategy

The danger of armed conflict among the Arctic States is very low. The real danger confronting the Arctic is a rush for resources across unsettled boundaries and Arctic States' reactionary responses, all of which has the potential to break down long-standing norms within the law of the sea and expose the sensitive region to further environmental degradation already heightened by climate change. Yet, assertions by environmentally-conscious states that they have interests beyond their borders will lead to unpredictable outcomes where there are no rules to accommodate their purported interests.

The Arctic States have signaled that they wish to remain the managers of this increasingly complex region by progressively formalizing the Arctic Council's structure. But to retain its leadership role, the Council and its members will have to make commitments to each other and to the international rules-based order. In practice, the Arctic States should treat the Coun-

202. Kraska, *supra* note 6, at 1130.

cil as a regional security system, recognizing that their individual economic and military security is dependent on their immediate neighbors' own security. In the event of environmental or natural disasters, they will be more reliant on each other than on external actors. Clearly, it is in the Arctic States' interests—individually and collectively—for the Arctic Council to remain indispensable to Arctic governance and the sole gatekeeper to the Arctic.

The Arctic States should be quick to prevent an incremental *fait accompli* through the use of meritless environmental claims which result in dramatic changes to the *geopolitical* environment. But they also should not mistake defensive measures for offensive ones. Russia and Canada both are experiencing an unparalleled shift in defense strategy as the entire lengths of their northern borders become suddenly exposed to the threat of armed force.²⁰³ Reestablishing northern bases is as much a form of early-warning detection as it is an attempt at power projection. Canada and Russia can be expected to continue asserting their claims to internal waters or EEZ regulatory rights, respectively, if for no other reason than to delay the inevitable transit or innocent passage of foreign ships along their coasts. Building trust through regional collective action in the Arctic Council will ease these insecurities over time.

Together, the Arctic States should also make clear that the Arctic Ocean should not be treated differently than other comparable bodies of water under international law. It is home to a number of states' territorial seas as defined by UNCLOS. Claims, like China's, that the Arctic is "a community with a shared future for mankind" implicitly undermine that regime.

Yet, some of the Arctic States themselves are inviting outside actors into the region in ways that serve the outsiders' agendas. Arctic States should be wary of outside actors' large-scale investments which allow them to wield outsized influence in the region. Iceland and Greenland have welcomed investments by China.²⁰⁴ But those investments come with significant leverage, giving a non-Arctic State a foothold in the region which it parleyed into an observer seat on the Arctic Council.²⁰⁵ In a self-perpetuating cycle, outside states' increased participation in Arctic governance justifies their presence in the Arctic, which further justifies their taking on greater responsibilities, which will eventually dilute Arctic States' power within this governance structure.

Expansive environmental protection-based claims may also serve to reinforce the justifications used by outside actors to claim roles in Arctic governance. Indeed, outside states' professed interest in conducting climate change research rings hollow when it is self-evident that they are lured to the Arctic by deposits of rare earth minerals and untapped reserves of oil and natural gas.²⁰⁶

To be successful, Arctic States' strategy for the Arctic must be values-driven, not interest-driven. As such, it must be removed from the parochial concerns of individual states and based in upholding international legal regimes. Canada should not use its indigenous population as a cudgel to beat away compliance with UNCLOS. The United States should not resurrect Cold

203. See, e.g., Kraska, *supra* note 6, at 1117–18, 1124–25.

204. See Auerswald, *supra* note 82.

205. See *id.*; see also Stephen & Stephen, *supra* note 81, at 55–56.

206. See Zengerle, *supra* note 81.

War-era fears to stimulate, or perpetuate, an Arctic arms race. Informed threat assessment and trust in the multilateral Arctic Council framework, which has fostered collaboration for decades, will help the United States and other Arctic States avoid an “ideologically driven blunder.”²⁰⁷

A binding treaty to protect the Arctic environment is unnecessary where cooperation among the Arctic States will not only fill the gap in environmental protections but also foster greater collaboration on other issues that will inevitably confront the region. This broader collaboration will only be helped by an insider-outsider mentality, in which the Arctic States assert their regional authority over the Arctic Ocean as against non-Arctic States rather than succumbing to competition against each other. Reactionary cycles of escalation will not help the Arctic States ensure environmental protections or sustainable development of the Arctic’s resources. But trust in existing frameworks like UNCLOS and the IMO—and the Arctic Council—will.

207. English & Gardner, *supra* note 65.

The North-South Divide of Regulatory Chill: A Comparative Analysis of the Impact of Investor-State Dispute Settlement on Policy Makers in Developed and Developing Countries

Tim A. Hagemann*

Introduction

In the last few decades, International Investment Agreements (“IIAs”) have increasingly come under scrutiny.¹ On the one hand, many IIAs are criticized as one-sided for unilaterally obliging states to comply with far reaching protections vis-à-vis foreign investors and their investments.² On the other, most IIAs present investors with the opportunity to invoke investor-state dispute settlement (“ISDS”) mechanisms and refer claims for alleged violations of substantive protections to arbitral tribunals, hence removing them from the judicial overview of the host country’s courts and the applicability of its laws.³ While these panels do not possess the power to directly interfere with a state’s regulatory process, they may award investors compensation for their loss of profit in an investment and exempt them from their obligation to deliver their end of the contract.⁴ Given that compensation may well go into the billions,⁵ the hypothesis arose that the current system of investment arbitration could create a *regulatory chill*, i.e., a situation in which the looming threat of ISDS and the financial risks associated with its outcome deter policy makers from introducing regulations for the public good that could potentially interfere with foreign investor interests.⁶

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1. See Malcolm Langford & Daniel Behn, *Managing Backlash: The Evolving Investment Treaty Arbitrator?*, 29 EUR. J. INT’L L. 551, 554 (2018) (including a detailed account of the criticism towards investment arbitration from the 1990s until today).
2. M. SORNARAJAH, *THE INTERNATIONAL LAW ON FOREIGN INVESTMENT* 220 (Cambridge Univ. Press, 4th ed. 2017).
3. *Id.*, at 112.
4. See Kyla Tienhaara, *Regulatory Chill in a Warming World: The Threat to Climate Policy Posed by Investor-State Dispute Settlement*, 7 TRANSNAT’L ENV’T L. 229, 233 (2018) [hereinafter *Regulatory Chill in a Warming World*].
5. See Jonathan Bonnitcha & Sarah Brewin, *Compensation Under Investment Treaties*, IISD BEST PRACTICES SERIES – NOVEMBER 2020 1, 1 (Nov. 2020), <https://www.iisd.org/system/files/publications/compensation-treaties-best-practices-en.pdf>. For instance, over the course of several arbitrations in connection with actions taken against Yukos Oil Company OJSC, Russia was ordered to pay damages to the claimants in the amount of 50 billion USD. *Id.*
6. Atif M. Alenezi, *Preventing the Regulatory Chill of International Investment Law and Arbitration*, 9 INT’L L. RSCH. 85, 85 (2020).

The concept of regulatory chill remains “one of the most controversial issues in contemporary debates about investment treaties.”⁷ Some perceive regulatory chill as a major obstacle to states’ sovereignty to adopt urgently needed reforms across a multitude of sectors,⁸ while others question if there is any meaningful connection between ISDS and regulatory activity at all.⁹ In part, the existence of this debate can be attributed to the fact that regulatory chill describes an *absence* of regulatory action, which is difficult to measure. Accordingly, many authors supporting or challenging the concept of regulatory chill argue on the basis of anecdotal evidence and case studies, which arise from a myriad of individual contexts.¹⁰ Another major debate on regulatory chill is the vagueness of the concept itself. In the absence of a universally accepted definition, authors have applied the concept of regulatory chill inconsistently to fit their research question, academic perspective, or ideological conviction.¹¹ While some associate regulatory chill only with the explicit reaction of governments to the award of compensation to an investor by an investment tribunal,¹² others extend the concept beyond ISDS to a general reluctance to engage in regulatory activity that is fueled by fear of discouraging foreign capital inflows.¹³

Yet, the most important factor for discontent among scholars is the fact that the regulatory chill hypothesis is frequently applied without regard to its diverse underlying mechanisms to a broad set of contexts. At its core, regulatory chill is centered around states balancing the (perceived) risk of ISDS against the intended benefits of a regulatory act. While most high-income countries have sufficient financial resources, bureaucratic capacity, and political stability to retain considerable leeway in their ability to regulate for the public good, the legal, financial, economic, and political environment in which many developing countries operate could make them particularly vulnerable to the threat of investment arbitration. Indeed, this divergence between the Global North and South is reflected by the case studies both proponents and critics of the regulatory chill hypothesis provide to support their convictions. While the propo-

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7. JONATHAN BONNITCHA, LAUGE N. SKOVGAARD POULSEN & MICHAEL WAIBEL, *THE POLITICAL ECONOMY OF THE INVESTMENT TREATY REGIME* 239 (Oxford Univ. Press ed., 2017).
 8. See Jennifer L. Tobin, *The Social Cost of International Investment Agreements: The Case of Cigarette Packaging*, 32 *ETHICS & INT’L AFF.* 153, 164 (2018).
 9. See Nikos Lavranos, *After Philip Morris II: The “Regulatory Chill” Argument Failed – Yet Again*, KLUWER ARB. BLOG (Aug. 18, 2016), <http://arbitrationblog.kluwerarbitration.com/2016/08/18/after-philipp-morris-ii-the-regulatory-chill-argument-failed-yet-again/?print=pdf>.
 10. Tarald Laudal Berge & Axel Berger, *Do Investor-State Dispute Settlement Cases Influence Domestic Environmental Regulation? The Role of Respondent State Bureaucratic Capacity*, 12 *J. INT’L DISP. SETTLEMENT* 1, 2 (2021).
 11. Christian Tietje et al., *The Impact of Investor-State-Dispute Settlement (ISDS) in the Transatlantic Trade and Investment Partnership*, STUDY TIETJE AND BAETENS 1, 40 (June 24, 2014), https://www.eumonitor.eu/9353000/1/j4nvgs5kjg27kof_j9vvik7m1c3gyxp/vjn8exgvufya/f=/blg378683.pdf.
 12. See Arseni Matveev, *Investor-State Dispute Settlement: The Evolving Balance Between Investor Protection and State Sovereignty*, 40 *UNIV. OF W. AUSTL. L. REV.* 348, 358 (2015).
 13. See Kyla Tienhaara, *Mineral Investment and the Regulation of the Environment in Developing Countries: Lessons From Ghana*, 6 *INT’L ENV’T AGREEMENTS: POL. L. AND ECON.* 371, 374 (2006).

nents base their assessment almost entirely on analysis of case studies from the Global South,¹⁴ studies that do not find a connection between ISDS and regulatory chill often concentrate their assessment on high-income countries.¹⁵

This article argues that most of the contradictory positions between proponents and critics of regulatory chill can be reconciled by sufficiently considering the structural differences between the Global North and South and the impact of those differences on regulatory processes. In its first part, this article will lay the necessary theoretical groundwork by defining and conceptualizing regulatory chill, its underlying mechanisms, and the forms in which it may appear. In its second part, it will analyze how the distinct legal, financial, economic, and political factors in countries with different levels of development influence policy makers' assessments of ISDS risks in their regulatory decision-making process and what impact this assessment has on their exposure to regulatory chill.

The Concept of Regulatory Chill

Given the abundance of diverging approaches found in the relevant literature, it is crucial for understanding the concept and its underlying mechanisms to clarify what is meant by the term "regulatory chill." Therefore, this section will first provide a working definition of regulatory chill, and then proceed to explore the forms in which regulatory chill may manifest itself.

A. Defining Regulatory Chill

Although there is no universally accepted definition of regulatory chill, it is possible to derive some common features from scholarly works on the matter which could be described as the conceptual core of regulatory chill in the context of investment arbitration. The first common element is the concept's association with the introduction of a new regulation, *i.e.*, an act that involves a new measure or standard to accomplish a policy objective.¹⁶ This definition excludes administrative or judicial acts, as they are administered by judicial or administrative bodies and relate primarily to the application of the host's pre-existing laws and regulations. The second element is the existence of a perceived threat by the relevant decision-making body that the introduction of said regulation could lead to the initiation of investor-state arbitration.¹⁷ Thirdly, this threat or fear must cause the alteration, modification, delay, abandonment or non-enforcement of a regulatory act.¹⁸ Finally, the regulatory act must be *bona fide*, *i.e.*, without discriminatory or protectionist intent, in accordance with due process of law and,

14. See Kyla Tienhaara, *Regulatory Chill and the Threat of Arbitration: A View from Political Science*, in *EVOLUTION IN INVESTMENT TREATY LAW AND ARBITRATION* 606, 618 (Chester Brown & Kate Miles eds., Cambridge Univ. Press 2011) [hereinafter *Regulatory Chill and the Threat of Arbitration*] (This is one of the most often cited contributions to the regulatory chill debate, where Kyla Tienhaara supports her claim of the hypothesis' existence by citing two case studies from Costa Rica.).

15. See, e.g., Christine Coté, *A Chilling Effect? The Impact of International Investment Agreements on National Regulatory Autonomy in the Areas of Health, Safety and the Environment* 206 (Feb. 2014) (PhD dissertation, London School of Economics) (on file with London School of Economics Publications).

16. Ashley Schram et al., *Internalisation of International Investment Agreements in Public Policymaking: Developing a Conceptual Framework of Regulatory Chill*, 9(2) *GLOB. POL'Y* 193, 195 (2018).

17. *Id.*

18. *Id.*

where applicable, against adequate investor compensation.¹⁹ Limiting the concept to the chill of *bona fide* regulation is crucial to distinguishing regulatory chill from the host's *compliance* with its obligations under international law.²⁰ This highlights a crucial point of the regulatory chill hypothesis: its intention is not to deprive foreign investors of the fundamental safeguards of IIAs against discriminatory host state conduct but rather to criticize their unintended side effect of impeding the pursuit of legitimate policy objectives.²¹

Condensing these four elements into one definition, regulatory chill can be described as the alteration, modification, delay, abandonment or non-enforcement of a *bona fide* regulation that is fueled by a government body's fear of or perception of a threat that the regulation's uncompromised introduction may lead to investor-state arbitration.

B. Manifestations of Regulatory Chill

Although this definition provides a broad conceptual umbrella of regulatory chill, it does not explain what mechanisms cause the compromising of regulatory processes. Are government officials aware of the threat of ISDS? And in what circumstances does this compel them to abstain from introducing new regulations? It is crucial to understand that regulatory chill does not necessarily come in one specific form, but that it has the potential to manifest in several distinct ways.

One such manifestation has been termed *precedential chill*.²² It describes a situation where a settled or resolved investment dispute creates a negative precedent that deters the host state from pursuing a proposed regulation.²³ Policy makers have to carefully assess the legal and financial risks of a new regulatory act. When they become aware of a resolved investment dispute that relates to a regulation in the same sector as or that has a comparable intent to a proposed regulation, this awareness can influence their risk assessment and may ultimately lead to the abandonment or compromising of the regulation.²⁴

A related concept is *cross-border chill*.²⁵ This concept changes the perspective from that of targeted governments to that of Multi-National Corporations ("MNCs") trying to actively undermine an emerging global public policy trend by strategically filing investment claims

19. *Id.*

20. *Regulatory Chill and the Threat of Arbitration*, *supra* note 14, at 608.

21. See Andreas Börner, *Simple Truths on the Right to Regulate and Duty to Pay*, 15 SCHIEDSVZ GER. ARB. J. 3, 3 (2017). Despite the fact that the *bona fide* nature of the affected regulation(s) has been a cornerstone of the regulatory chill hypothesis for decades, some of its vocal critics still argue that the concept is intended to facilitate the introduction of illegitimate policies: "[regulatory chill] is especially put forward by those people who want to regulate freely according to their ethics and their ideas of morals and who do not want to admit that a right has limits and goes along with a corresponding duty." *Id.*

22. Tietje et al., *supra* note 11, at 41.

23. Satwik Shekhar, *'Regulatory Chill': Taking Right To Regulate For A Spin* (Ctr. for WTO Stud. Indian Inst. of Foreign Trade, Working Paper), at 23–24.

24. *Id.*, at 24.

25. See *Regulatory Chill in a Warming World*, *supra* note 4, at 237.

against those countries that first introduce relevant regulatory acts.²⁶ It is important to note that the primary aim of cross-border chill is not to protect a valuable investment or a key market but to hamper the success of a policy that could potentially interfere with the MNCs' interests on a global scale and to discourage other countries from introducing comparable acts.²⁷ Even if many such claims have little prospect of producing favorable results for the investor, the uncertainty that is associated with investment arbitration and the impact that a negative outcome might have for many states can be enough to at least postpone any related policymaking until the arbitral panel has reached its final decision.²⁸ Once investment arbitration is initiated, it usually takes several years until a final decision is rendered.²⁹ For instance, before tribunals of the International Centre for Settlement of Investment Disputes ("ICSID"), which make up the majority share of all fora for investment arbitration, an arbitral procedure requires an average of 3.6 years until a decision is rendered. Depending on their complexity and the remedies launched by the parties, however, cases may well surpass ten or more years before the dispute finally gets resolved.³⁰ As a result, the MNC retains the capacity to operate undisturbed from similar regulations across a multitude of jurisdictions during that time.³¹

Another manifestation of regulatory chill where the investor plays a dominant role is *specific response chill*.³² This concept describes the chill of a proposed or adopted regulation by policy makers *after* they become aware of a risk of ISDS.³³ Accordingly, specific response chill relates to the real or perceived threat or to the initiation of investment arbitration against the host state by an investor if a specific regulation is not adjusted according to his interests.³⁴

Finally, regulatory chill may manifest in the form of *anticipatory*³⁵ or *internalization chill*.³⁶ In contrast to specific response chill, anticipatory chill describes the chill of regulatory action *before* policy makers become aware of any specific threat of investment arbitration.³⁷ It is based on the assumption that policy makers have internalized the looming threat of investment arbitration to a degree such that new regulations that could potentially interfere with investor interests are abandoned before they even reach the drafting phase.³⁸ Anticipatory chill is particularly dangerous because unlike other forms of regulatory chill, its effects are not limited to a specific sector or a certain set of regulatory measures. Instead, anticipatory chill has the potential to hamper regulatory action across all sectors and policy areas that affect foreign investors.³⁹

26. *Id.*

27. *Id.*

28. *Id.* at 238.

29. See Bonnitcha et al., *supra* note 7, at 90.

30. *Id.*

31. *Id.*

32. Tietje et al., *supra* note 11, at 41.

33. *Id.*

34. *Id.*

35. *Id.*

36. *Regulatory Chill in a Warming World*, *supra* note 4, at 233.

37. Tietje et al., *supra* note 11, at 41.

38. Schramm et al., *supra* note 16, at 200.

39. Tietje et al., *supra* note 11, at 41.

At the same time, anticipatory chill is the most complex form of regulatory chill. It is not caused by a singular event like the observation of an arbitral award or a threat to initiate investment arbitration, but by a large variety of legal, economic and political factors that are capable of substantially influencing the relevant decision-making processes.

Despite its importance, scholarly research on internalization chill is scarce and often limited to the analysis of interviews with policy makers in very limited regional and sectoral contexts, which produced contradictory results.⁴⁰ These results are most likely due to the fact that the complexity of anticipatory chill renders it extremely difficult to measure: it would require the production of *counterfactual evidence* regarding non-existent regulations that have been abandoned or delayed by policy makers due to ISDS considerations.⁴¹ In the absence of studies capable of producing empirical evidence for or against the existence of anticipatory chill on a global level, it is still possible to assess the phenomenon on the basis of those factors that are likely to have a positive or negative impact on the decision-making process of relevant policy makers.

The North-South Divide of Regulatory Chill

As mentioned above, the concept of regulatory chill covers a variety of behavior that leads to the chill of *bona fide* regulations and may manifest itself in several distinct ways. Yet, understanding the theoretical conceptualization of regulatory chill does not conclusively answer the question of in which contexts and under what circumstances it may appear. Ultimately, the choice to chill a regulation lies with the relevant policy makers. It is their assessment of the real or perceived risks associated with a regulation that determines whether or not a legitimate policy objective will be further pursued. However, policy makers do not act in a political vacuum. They are affected by the legal, financial, economic, and political framework in which they operate.

On the one hand, this framework defines the leeway that policy makers enjoy when they consider regulations that may interfere with investor interests. In an environment where several factors can constrain this leeway, the threshold for chilling a proposed regulation is accordingly lower. On the other hand, the environment has a substantial influence on the form in which regulatory chill manifests. For instance, an environment that encourages the internalization of ISDS risks might facilitate anticipatory chill, while one that involves the thorough vetting of arbitral practice could increase the probability of precedential chill.

The framework in which policy makers operate differs considerably in the Global North and South. While all developing countries are subject to their individual conditions and have to be considered in their own right, there are several factors that distinguish the Global South

40. Compare Coté, *supra* note 15. (finding Canadian policy makers are concerned with health, safety and environment regulations and largely unaware of Canada's obligations under various IIAs), with Gus Van Harten & Dayna Nadine Scott, *Investment Treaties and the Internal Vetting of Regulatory Proposals: A Case Study from Canada*, 12 OSGOODE LEGAL STUD. RSCH PAPER SERIES 1, 26–27 (Apr. 19, 2016) (finding the Canadian province of Ontario's trade ministry was heavily invested in the vetting of policy propositions from environmental agencies on their compliance with IIAs).

41. JONATHAN BONNITCHA, *SUBSTANTIVE PROTECTION UNDER INVESTMENT TREATIES: A LEGAL AND ECONOMIC ANALYSIS* 115 (James Crawford & John S. Bell eds., 2014).

as a distinct group from the countries of the Global North, aside from the apparent differences in their income levels. As will be discussed in more detail below, developing countries tend to rely more heavily on the import of foreign technology and capital, have lower budgetary, administrative and educational capacities, operate in a more investor-friendly legal framework, and may have a less stable political environment with less pronounced civil societies than countries of the Global North. In order to understand what consequences this structural north-south divide has on the autonomy of policy makers to regulate for the public good in developed and developing countries, it is thus necessary to analyze the relationship of these distinguishing factors with the concept of regulatory chill and the forms in which it may manifest.

A. Precedential Chill and Specific Response Chill

When policy makers become aware of the initiation of investment arbitration that relates to an adopted regulatory act, or where a regulation that pursues a similar objective or targets a similar sector as a proposed regulatory act is found to be in violation of a substantive standard of investment protection, policy makers face a tough choice; they must carefully assess if the pursued public interest outweighs the legal and financial risks associated with ISDS.⁴² If they conclude that the benefits of a regulation cannot justify the burden associated with a negative ISDS outcome, there is a high chance that the relevant regulatory act will be compromised, leading either to precedential or specific response chill depending on the circumstances triggering their reaction.

However, the efficient performance of a rigorous risk-assessment and regulatory vetting requires a significant degree of bureaucratic capacity.⁴³ The notion of bureaucratic capacity does not only relate to the raw number of administrative resources or public servants tasked with crafting a specific regulation but covers a much larger concept that involves such factors as the quality of policy formulation and implementation, the expertise of public servants, and the transparency of administrative procedures, as well as the existence of communication and coordination channels between different government agencies.⁴⁴ It is only where experienced public servants are in place to monitor and analyze incoming investment claims or trends in international investment arbitration and coordinate their findings with the relevant policy makers that an initiated investment dispute or the creation of a negative precedent may be translated into a regulatory response.⁴⁵

There are two prominent indicators that measure the key aspects of bureaucratic capacity. The first is the *Rigorous and Impartial Public Administration* (“RIPA”) index by the Varieties of Democracy project (“V-Dem”).⁴⁶ The second is the *Government Effectiveness* (“GE”) indicator

42. Berge & Berger, *supra* note 10, at 8.

43. *Id.* at 8–9.

44. *Id.* at 9.

45. *Id.*

46. See MICHAEL COPPEDGE ET AL., VARIETIES OF DEMOCRACY CODEBOOK 175 (University of Gothenburg, v11.1 March 2021). The RIPA index is based on an expert-survey that assesses the quality of a country’s bureaucracy on a scale from 0 to 4, particularly focusing on the extent to which public officials generally abide by the law and refrain from arbitrary and biased decision-making. *Id.* at 175–76.

of the World Bank's *Worldwide Government Indicators* project.⁴⁷ Both indicators suggest a strong correlation between a country's level of income and its bureaucratic capacity. According to the RIPA index for the year 2020, highly developed regions such as Western Europe and North America scored an average of 3.46 out of 4 points, while generally less-developed regions, such as Eastern Europe, Central Asia, Sub-Saharan Africa, Latin America, the MENA region, and South Asia, only scored between 1.34 and 2.04 points on average.⁴⁸ The same tendency can be observed in the data provided by the GE indicator: while high-income countries achieved an average percentile rank of 75.02 (non-OECD) and 87.22 (OECD), respectively, middle-income countries scored significantly lower with a percentile rank of 48.92 (upper-middle-income) and 35.59 (lower-middle-income), while low-income countries formed the bottom of the list with an average percentile rank of only 18.84.⁴⁹

Indeed, a recent study by Tarald Laudal Berge and Axel Berger provided the first empirical evidence of a correlation between a country's bureaucratic capacity and negative regulatory responses to initiated ISDS procedures in the field of environmental law.⁵⁰ Due to the correlation between a country's income level and its bureaucratic capacity, the data suggests that developed countries are significantly more prone to engage in specific response chill to initiated investment procedures than low- and middle-income countries ("LMICs").⁵¹

Whether the same correlation exists in relation to negative precedents has not yet been the subject of an empirical study. Yet, it is important to note that a negative precedent can only impact a country's regulatory responses if the relevant policy makers are aware of the precedent. Such a response necessitates the employment of skilled public servants that rigorously monitor trends in ISDS, analyze the outcome of investment disputes, and coordinate regularly with the relevant policy makers regarding perceived implications of the observed precedents. As this requires an even higher degree of bureaucratic capacity, it can be assumed that a similar if not stronger correlation exists between a country's level of income and its tendency to chill a regulatory act on the grounds of a negative precedent.

The reduced ability of many developing countries to translate ISDS precedents into policy responses not only creates the favorable side effect of preventing the chill of legitimate policy objectives. It may conversely reinforce a chill where a positive precedent has been created, as is regularly the case where a cross-border chill is dissolved. Systematic evidence for this assumption can be drawn from the prominent Philip Morris cases: when Philip Morris initiated two

47. See generally Daniel Kaufmann et al., *The Worldwide Governance Indicators: Methodology and Analytical Issues 12* (The World Bank, Policy Research Working Paper No. 5430), <https://openknowledge.worldbank.org/bitstream/handle/10986/3913/WPS5430.pdf>. The GE indicator combines the views of a large number of enterprise, citizen, and expert survey respondents to assess a country's overall quality of public and civil services as well as their policy formulation and implementation, its independence from political interference, and the level of commitment to these policies on a percentile rank ranging from 0 to 100. *Id.* at 4, 12.

48. See Coppedge et al., *supra* note 46.

49. Kaufmann, *supra* note 47, at 27–28. The percentile rank indicates a country's rank among all countries in the world, with 0 corresponding to the lowest and 100 to the highest rank. *Id.* at 12.

50. See Berge & Berger, *supra* note 10, at 25.

51. *Id.* at 9.

investment disputes against cigarettes plain-packaging laws in Australia⁵² and Uruguay⁵³ to deter other countries from adopting similar regulations,⁵⁴ both developed and developing countries alike chilled proposed anti-smoking laws.⁵⁵ However, after Philip Morris lost both cases, only the developed countries re-adjusted their regulatory responses accordingly, while the developing countries remained inactive.⁵⁶

The situation may present itself differently in cases where the investor merely threatens to initiate investment arbitration if a certain policy is not adjusted according to his wishes. Indeed, there are several examples where an actual or perceived threat by MNCs against developing countries compelled their policy makers to compromise proposed legislation that would have conflicted with the MNCs' interests.⁵⁷ For instance, in response to threats of initiating ISDS procedures, Ghana⁵⁸ and Indonesia⁵⁹ compromised proposed environmental laws by altering them so that foreign mining companies could continue to exploit resources in protected forest areas. By contrast, ISDS threats involving developed countries seem to be less effective, as seen in a case study from Canada. There, the threat of a large chemical producer, which was intended to chill the ban of a particular pesticide in Quebec, ended in a failure for the investor: neither the threat nor the subsequent arbitration had any significant influence on Quebec legislation, nor did they prevent the adoption of similar regulations in other Canadian provinces.⁶⁰

A plausible explanation for this perceived vulnerability of developing countries to investor threats could be the different power balance between MNCs and developing countries, as developing countries depend more heavily on investors' capital and technology inflow. Another may be that MNCs are more afraid to create political opposition and incite civil society discontent in developed countries. Yet, it must be noted that there is no empirical evidence supporting a correlation between development and regulatory chill caused by investor threats, mainly because both MNCs and governments have no interest in disclosing the relevant data.⁶¹

By analyzing the regulatory responses of countries to initiated investment disputes and the creation of precedents in ISDS, it becomes apparent that there is a strong correlation between the level of bureaucratic capacity and the trend to chill proposed regulatory acts in response to

52. See generally Philip Morris Asia Ltd. v. The Commonwealth of Austl., UNCITRAL Case No. 2012-12 (Perm. Ct. Arb. 2011).

53. See generally Philip Morris SÀRL v. Oriental Republic of Uru., ICSID Case No. ARB/10/7, Decision on Jurisdiction (July 2, 2013).

54. See *Regulatory Chill in a Warming World*, *supra* note 4, at 237–38.

55. Carolina Moehlecke, *The Chilling Effect of International Investment Disputes: Limited Challenges to State Sovereignty*, 64 INT'L STUD. Q. 1, 2 (2020).

56. *Id.*

57. See Schram et al., *supra* note 16, at 4.

58. See Tienhaara, *supra* note 13, at 388.

59. See Stuart G. Gross, *Inordinate Chill: Bits, Non-NAFTA MITs, and Host-State Regulatory Freedom – An Indonesian Case Study*, 24 MICH. J. INT'L L. 893, 895 (2003).

60. See Kathleen Cooper et al., *Seeking a Regulatory Chill in Canada: The Dow Agrosciences NAFTA Chapter 11 Challenge to the Quebec Pesticides Management Code*, 7 GOLDEN GATE UNIV. ENV'T L. J. 5, 6–7 (2014).

61. See Berge & Berger, *supra* note 10, at 8.

initiated ISDS procedures.⁶² Only high-capacity bureaucracies have the administrative resources to engage in the detailed risk-assessment and regular inter-bureaucratic communication and coordination that enables negative regulatory responses in the first place. As a country's administrative resources depend on its level of income, developed countries thus have a much stronger tendency to chill regulatory acts through precedential and specific response chill. On the other hand, the Philip Morris cases have shown that the same correlation seems to exist in relation to the assessment of a positive precedent that would allow the pursuit of a formerly chilled regulation, hence creating a higher vulnerability of developing countries to cross-border chill. Despite some case studies suggesting that this correlation also exists in relation to the chill caused by MNCs' arbitration threats, the lack of accessible data makes it hard to provide reliable assertions for this claim.

B. Anticipatory Chill

In contrast to specific response chill and precedential chill, anticipatory chill does not rely on the administrative resources that are needed to make an *ex-post* assessment of the legal and financial risks associated with an event relevant to ISDS and to translate it into appropriate policy responses. Instead, anticipatory chill depends on the *ex-ante* assessment of a regulatory objective by the relevant policy makers themselves.⁶³ This means that their internalized perceptions of the risks associated with investment arbitration are decisive for the emergence of anticipatory chill. In general, risk is defined as the combination of the probability that a specific detrimental event will occur and the severity of its impact for a desired objective.⁶⁴ Accordingly, where the perceived probability of investment arbitration is sufficiently low or where its detrimental impact is considered minor or outweighed by the expected positive effects of a pursued policy objective, the potential for internalized fear of ISDS and hence for anticipatory chill is limited. To evaluate the relevance of anticipatory chill in a north-south context, it is therefore necessary to analyze the exposure of policy makers in developed and developing countries to those legal, economic, and political factors that potentially influence their perception of either the probability of the realization of a risk associated with ISDS or the severity of its consequences.

1. Legal Factors

The right of foreign investors to circumvent the jurisdiction of the host state and instead refer their claims for alleged infringements of their investments to arbitration does not exist in a legal vacuum; states must grant investors this pathway by explicitly consenting to ISDS.⁶⁵ In investment arbitration, however, this consent is almost exclusively given to all eligible foreign investors in advance by a clause in the bi- or multilateral investment treaty governing the investment relations of the host state and the investor's home state.⁶⁶ Accordingly, the proba-

62. See Berge & Berger, *supra* note 10, at 25.

63. See Schram et al., *supra* note 16, at 4, 6.

64. Huihui Ni et al., *Some Extensions on Risk Matrix Approach*, 48 SAFETY SCI. 1269, 1269–71 (2010).

65. M. SORNARAJAH, *supra* note 2, at 358.

66. See *id.* at 360. As of January 2022, less than 3% of all IIAs in force do not comprise any ISDS provisions. See *International Investment Agreements Navigator*, UNCTAD, <https://investmentpolicy.unctad.org/investment-investment-agreements> (last visited Jan. 13, 2022).

bility that investors will successfully file for investment arbitration depends primarily on the extent of the host state's commitments towards foreign investors and their investments as prescribed by the relevant treaty.⁶⁷ Naturally, the scope of these substantive standards of foreign investor protection is not homogenous across the world.⁶⁸ This is particularly relevant in relation to those standards that are most often invoked by investors to claim damages against host states: Fair and Equitable Treatment ("FET") and (Indirect) Expropriation.⁶⁹ Due to the relatively open language that most older IIAs employ in describing these standards of protection, and aggravated by the lack of a doctrine of precedent in international investment arbitration,⁷⁰ arbitral tribunals interpreted the standards' scope inconsistently and in many cases without proper regard to the legitimate regulatory interests of host states.⁷¹ While the majority of recently signed IIAs incorporate stricter treaty language that narrows the tribunals' scope for interpretation and forces them to consider the hosts' regulatory autonomy,⁷² it is important to consider that most IIAs in force still have open language provisions.⁷³ One reason for the limited number of new-generation IIAs might be that the reform or replacement of old IIAs requires enormous administrative resources.⁷⁴ This is particularly problematic for many developing countries whose limited bureaucratic capacity makes it extremely difficult for them to alter their IIA environment.⁷⁵ As a consequence, not only are most investment claims initiated by investors from developed countries against developing host countries,⁷⁶ but these claims are also almost exclusively based on old-generation treaties.⁷⁷

Nowadays, investment tribunals tend to grant states greater leeway to achieve their legitimate policy objectives regardless of the underlying treaty language ("*Right to Regulate*").⁷⁸ Nevertheless, the states retain a high degree of discretion when it comes to drawing the line

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67. See Moshe Hirsch, *Sources of International Investment Law*, in INTERNATIONAL INVESTMENT LAW AND SOFT LAW 9, 10–11 (Andrea K. Bjorklund & August Reinisch eds., 2012).
 68. See *International Investment Agreements Navigator*, *supra* note 66.
 69. See *International Dispute Settlement Navigator*, UNCTAD, <https://investmentpolicy.unctad.org/investment-dispute-settlement> (last visited Jan. 13, 2021).
 70. Gabriele Kaufmann-Kohler, *Arbitral Precedent: Dream, Necessity or Excuse?*, 23 ARB. INT'L. 357, 368 (2007).
 71. N. Jansen Calamita, *International Human Rights and the Interpretation of International Investment Treaties: Constitutional Considerations*, in INVESTMENT LAW WITHIN INTERNATIONAL LAW: INTEGRATIONIST PERSPECTIVES 164, 167 (Freya Baetens ed., 2013); Maryam Malakotipour, *The Chilling Effect of Indirect Expropriation Clauses on Host States' Public Policies: A Call for a Legislative Response*, 22 INT'L CMTY. L. REV. 235, 244–47 (2020).
 72. See U.N. CTAD, World Investment Rep. 2021: Investing in Sustainable Recovery, U.N. Doc. UNCTAD/WIR/2021, at 131–32 (2021) [hereinafter World Investment Report 2021].
 73. UNCTAD, *Phase 2 of IIA Reform: Modernizing the Existing Stock of Old-Generation Treaties*, IIA Issues Note No. 2, 3 (June 2017), http://unctad.org/en/PublicationsLibrary/diaepcb2017d3_en.pdf. In 2017, "old-generation" treaties with open language provisions still made up 95% of all IIAs in force. *Id.*
 74. See *id.* at 22.
 75. *Id.*
 76. World Investment Report 2021, *supra* note 72, at 129–30. In 2020, three out of four investment claims were brought against developing countries, while 70% of all investment disputes were initiated by developed country investors. *Id.*
 77. *Id.* at 130.
 78. See Joseph Charles Lemire v. Ukraine, ICSID Case No. ARB/06/18, Decision on Jurisdiction and Liability, ¶¶ 284–85, 505 (2010).

between the adoption of regulations that are in the public interest and the illegitimate infringement of foreign investor rights.⁷⁹ Accordingly, policy makers are constantly confronted with a certain degree of ambiguity when it comes to the adoption of regulations that interfere with investor interests.⁸⁰ This ambiguity marks another instance where developing countries' lack of bureaucratic capacity negatively impacts their regulatory activities: while developed countries possess the proper administrative resources to thoroughly vet proposed regulations in light of recent arbitral awards, many developing countries are unable to correctly identify the threshold between legitimate regulation and illegitimate interference.⁸¹ Given this level of uncertainty, policy makers in developing countries may be particularly reluctant to adopt regulations for which the legal and financial risks cannot be sufficiently anticipated.⁸²

Another factor that could deter policy makers from pursuing potentially contentious regulations is a lack of confidence in the impartiality of the tribunals that adjudicate investment disputes. This is particularly relevant for developing countries: from their perspective, international arbitration appears to have a pro-corporate bias that puts them at a disadvantage vis-à-vis investor claimants.⁸³ While each investment dispute has to be assessed on its own merit, the accessible data seems to support the sentiment that countries from the Global South are more prone to lose investment disputes than their Northern counterparts.⁸⁴ Between 1987 and 2016, 59% of all concluded investment disputes ended favorably for the claimant investor.⁸⁵ Yet, investors only prevailed in 32% of the disputes where the respondent was a high-income country.⁸⁶ By contrast, success rates for investors against lower and upper middle-income countries stood between 62% and 63%, respectively, while investors won almost four out of every five disputes brought against low-income countries.⁸⁷ Although several explanations exist for this phenomenon,⁸⁸ it is important to reiterate that it is not the existence of a bias *per se* that fuels anticipatory chill, but merely the internalized *perception* of its existence by the relevant policy makers. The fact that the United States, itself home to the majority of inves-

79. *Regulatory Chill in a Warming World*, *supra* note 4, at 236.

80. Bonnitcha et al., *supra* note 7, at 28.

81. *Regulatory Chill and the Threat of Arbitration*, *supra* note 14, at 615.

82. *Id.*

83. Nora Ciancio, *The Implications of Recent ICSID Arbitrator Disqualifications for Latin America*, 6 Y.B. ON ARB. AND MEDIATION 440, 441 (2014).

84. Daniel Behn et al., *Empirical Perspectives on Investment Arbitration: What Do We Know? Does It Matter?*, 21 J. WORLD INV'T. & TRADE 188, 226 (2020).

85. Daniel Behn et al., *Poor States or Poor Governance? Explaining Outcomes in Investment Treaty Arbitration*, 38 NW. J. INT'L. L. & BUS. 333, 369 (2018) (comparing the rates at which countries of different income-groups either lost or settled an investment dispute).

86. *Id.*

87. *Id.* at 369–70.

88. Compare *id.* at 374, with Susan D. Franck, *Conflating Politics and Development? Examining Investment Treaty Arbitration Outcomes*, 55 VA. J. INT'L. L. 13, 60 (2014). While Behn et al. come to the conclusion that all statistical data suggest a bias of international arbitration that favors developed country respondents, Susan D. Franck argues that there is no reliable link between a state's level of development and the outcome of investment disputes; instead, the results could be traced to the host state's level of democracy and its political infrastructure. *Id.*

tor claimants, has never explicitly lost an investment dispute,⁸⁹ while states in the region most targeted by ISDS, Latin America and the Caribbean,⁹⁰ prevailed in less than a third of cases brought against them,⁹¹ certainly supports the narrative of investment arbitration as an instrument of the Global North against the developing world designed to discourage policy makers from embracing regulations which could conflict with foreign investor interests.⁹²

2. Financial and Economic Factors

For several reasons, the distinct financial and economic conditions that exist in countries of the Global North and South can play a decisive role in shaping policy makers' perception of the probability and severity of ISDS risks. One major concern of policy makers when it comes to the latter could be the immense amounts of compensation that investors claim for alleged violations of relevant IIA provisions. Compensation can be claimed not only for the immediate damages that arise due to an alleged infringement of investor rights but may also include the estimated loss of future revenues.⁹³ By May 2020, the mean value of damages claimed by investors stood at 1.16 billion USD per case, while the average compensation awarded was 437.5 million USD.⁹⁴ However, some investment disputes ended with awards of significantly higher amounts: to date, there are eleven known cases in which investor compensation exceeded the threshold of 1 billion USD,⁹⁵ with the highest combined compensation amounting to over 50 billion USD.⁹⁶ While even some high-income countries might struggle to afford the payment of foreign investor compensation that exceeds a certain threshold, it could be absolutely disastrous for many economies of the Global South.⁹⁷ What might be even more troubling for policy makers in developing countries is that, aside from the cases against Russia, all other

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89. See *International Dispute Settlement Navigator*, *supra* note 69 (showing that of the 17 disputes with the US as respondent concluded by Dec. 31, 2021, none have been decided by the tribunals in favor of the investor, although four cases were settled by the parties).
 90. Cecilia Olivet et al., *ISDS in Numbers: Impacts of Investment Arbitration against Latin America and the Caribbean*, TRANSNAT'L INST., 1, 3 (Dec. 2017), https://www.tni.org/files/publication-downloads/isds_en_numeros-en2017.pdf.
 91. *Id.* at 4.
 92. Thomas Schultz & Cedric Dupont, *Investment Arbitration: Promoting the Rule of Law or Over-Empowering Investors? A Quantitative Empirical Study*, 25 EUR. J. INT'L L. 1147, 1167–68 (2014).
 93. Karthik Balisagar & Tim Batrick, *Assessing Damages for Breach of Contract*, in THE GUIDE TO DAMAGES IN INTERNATIONAL ARBITRATION 162, 168 (John A. Tenor ed., L. Bus. Res., 4th ed. 2021).
 94. Matthew Hodgson et al., *Costs, Damages and Duration in Investor-State Arbitration*, BIICL 1, 28 (June 2021), https://www.biicl.org/documents/136_isds-costs-damages-duration_june_2021.pdf.
 95. See *International Dispute Settlement Navigator*, *supra* note 69 (showing that between 2005 and 2016, eleven investment disputes were resolved where investor claimants were awarded compensation in the amount of over 1 billion USD).
 96. See *Hulley Enterprises Limited (Cyprus) v. The Russian Federation*, PCA Case No. 2005-03/AA226, Final Award, para. 1, 2.5 (UNCITRAL Jul. 18, 2014) (outlining that this number comprises the total amount of compensation that was awarded to investor claimants in three formally separate but substantively connected investment disputes relating to the expropriation of the Yukos Oil Company by the Russian state).
 97. See *GDP (current US\$) 1960–2020*, WORLD BANK, <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD> (last visited Jan. 13, 2022) (giving the rather drastic example *Hully v. Russia*, where the compensation awarded in arbitration exceeded the nominal GDP of over half of all countries and the annual expenditure of 3/4 of all governments); see also The World Factbook, *Field Listing – Budget*, CENT. INTEL. AGENCY, <https://www.cia.gov/the-world-factbook/field/budget/> (2017).

respondent states in disputes featuring compensation of over 1 billion USD were developing countries.⁹⁸ The award of such large amounts of compensation has increased discontent among many policy makers in the Global South and prompted several governments, such as Bolivia and Ecuador, to denounce and withdraw from the ICSID Convention,⁹⁹ while others began to terminate their bilateral investment treaties.¹⁰⁰

Although the costs of arbitration might seem minor in comparison with the aforementioned compensation for damages, it is nevertheless an important factor that every regulator has to consider when it comes to the financial risks of ISDS.¹⁰¹ The costs of arbitration consist of party costs, *i.e.* the costs incurred by the parties' legal representation, including expenses for witnesses and experts, fees for the arbitrators, and the institutional administration of the arbitration.¹⁰² As of 2020, the combined costs of arbitration amounted to more than 11 million USD on average.¹⁰³ However, in some exceptionally complex and lengthy cases such as that of Yukos against Russia, the overall costs for the investor claimant alone reached almost 80 million USD.¹⁰⁴ Not only might costs for investment arbitration be higher than comparable litigation before domestic courts,¹⁰⁵ but arbitral tribunals also frequently refrain from shifting these costs to the losing party once the dispute is resolved.¹⁰⁶ Instead, the parties are usually ordered to pay an even share of the arbitration costs and their own legal expenses irrespective of the outcome of the arbitration ("pay-your-own-way rule").¹⁰⁷ The internalized fear of carrying these costs might be one reason why developing countries are 22% more likely to settle investment dis-

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98. See *International Dispute Settlement Navigator*, *supra* note 69 (showing that of the 11 cases exceeding 1 billion USD, 4 were directed against Russia in relation to the expropriation of Yukos and the expropriation of assets in crimes, while the rest were directed against developing countries).
99. Michael Waibel et al., *The Backlash Against Investment Arbitration: Perceptions and Reality*, ALLARD RSCH. COMMONS 1, 8 (2010), https://commons.allard.ubc.ca/cgi/viewcontent.cgi?article=1193&context=fac_pubs.
100. See Antony Crockett, *Indonesia's Bilateral Investment Treaties: Between Generations?*, 30 ICSID REV. 437, 438 (2015). For instance, due to domestic concerns of excessive compensation claims by foreign investors, Indonesia began to gradually terminate its Bilateral Investment Treaties with other nations. *Id.*
101. See Bonnitca et al., *supra* note 7, at 87.
102. D. Gaukrodger & K. Gordon, *Investor-State Dispute Settlement: A Scoping Paper for the Investment Policy Community*, OECD 5, 19 (Mar. 2012), https://www.oecd.org/investment/investment-policy/WP-2012_3.pdf.
103. Hodgson et al., *supra* note 94, at 10.
104. See *Hulley Enterprises Limited (Cyprus) v. The Russian Federation*, *supra* note 96, para. 1887.
105. See Bonnitca et al., *supra* note 7, at 88–89 (a case study that compared the costs for civil litigation in US and UK domestic courts with those for investment arbitration found that the average cost for comparable cases before domestic courts stood at 2 million USD (US) and 1.5 million USD (UK) respectively, which suggests that arbitration can be significantly more expensive).
106. See Hodgson et al., *supra* note 94, at 16. As of May 2020, tribunals only fully adjusted both the party and tribunal costs in 11% of all observed disputes to the losing party of the arbitration as compared to the 47% of cases where a partial adjustment had taken place and 42% of cases where tribunals refrained from any cost adjustment at all. *Id.*
107. Diana Rosert, *The Stakes Are High: A Review of the Financial Costs of Investment Treaty Arbitration*, INT'L INST. FOR SUSTAINABLE DEV., 13 (July 2014), <https://www.iisd.org/system/files/publications/stakes-are-high-review-financial-costs-investment-treaty-arbitration.pdf>.

putes than high income countries.¹⁰⁸ These costs also effect respondent states' quality of legal counsel: in order to cut costs, developing countries in particular tend to rely on poorly trained government officials who must then compete against some of the most renowned experts in the field on the side for the investor.¹⁰⁹ Naturally, the imbalance in the quality of legal representation influences the perceived probability of a negative outcome, and might further enforce policy makers' aversion to ISDS risks in the regulatory process.¹¹⁰ While there is an observable trend in recent years to shift some of the tribunal costs and legal fees to the losing party,¹¹¹ ISDS still lacks a general "loser pays rule," and the allocation of costs remains largely within the discretion of the tribunals.¹¹² This does not impact investors to the same degree as respondent states: while the former usually finance their litigation costs through third party funding,¹¹³ states do not have this option.¹¹⁴ Accordingly, the costs for arbitration may significantly impact the finances of smaller developing economies,¹¹⁵ especially considering developing countries' limited revenue channels, comparably lower GDPs and the necessity of converting arbitration

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108. See generally Anton Strezhnev, *Why Rich Countries Win Investment Disputes* 40 (Sept. 22, 2017) (unpublished manuscript) (on file with author), https://static1.squarespace.com/static/5931baca440243906ef65ca3/t/59c55e2829f187ed71aba071/1506106921710/why_rich_countries_win_investment_disputes.pdf (arguing on the basis of empirical data that high litigation costs compel developing countries to settle investment disputes even in cases they would ultimately win).
 109. Catherine A. Rodgers, *The Arrival of the "Have-Nots" in International Arbitration*, 8 NEV. L. J. 341, 357 (2007).
 110. See generally Behn et al., *supra* note 85, at 374 (showing that respondent states gain a higher probability for a positive arbitration outcome when they are represented by a Global 100 law firm).
 111. See, e.g., UNCITRAL, *The UNCITRAL Arbitration Rules*, 27 (2010), <https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/arb-rules-revised-2010-e.pdf> (stating that "[t]he costs of the arbitration shall in principle be borne by the unsuccessful party or parties," yet, arbitrators retain the right to split the costs between the parties if it deems it reasonable); see also *The Comprehensive Economic and Trade Agreement ("CETA")*, OFF. J. OF THE EUROPEAN UNION, Art. 8.39(5) (Jan. 14, 2017), <https://ec.europa.eu/trade/policy/in-focus/ceta/ceta-chapter-by-chapter/> (showing that several more recent IIAs by the EU and the US comprise provisions intended to shift the burden of arbitration costs to the losing party while granting a certain discretion for apportionment to the tribunal).
 112. Gaukrodger & Gordon, *supra* note 102, at 22.
 113. See Rosert, *supra* note 107, at 8 (showing that investor claimants dispose over access to a well-developed funding industry that provides the financial means for arbitration against a share of the compensation awarded by the tribunal); see also *Third Party Funders for International Arbitration*, INT'L ARB., <https://www.international-arbitration-attorney.com/third-party-funders-international-arbitration/> (last visited Jan. 13, 2022) (showing a comprehensive list of third party funders of investment arbitration).
 114. See Bonnitca et al., *supra* note 7, at 243 (since states cannot expect any financial benefit from a positive arbitration outcome other than not having to pay compensation, investors have no monetary incentive to support the respondent's side); see also *Philip Morris Brands Sàrl v. Oriental Republic of Uruguay*, ICSID Case No. ARB/10/7 (noting that in exceptionally rare cases, states may gain access to funding for ideological reasons, such as here, where respondent state was only able to successfully defend its anti-smoking laws by receiving millions of USD in contributions from Michael Bloomberg and the Bill and Melinda Gates Foundation).
 115. See Ministry of Finance and Development Planning, *Republic of Liberia National Budget for the Fiscal Year 2019/2020*, xxxii (Feb. 2, 2020), <https://mfdp.gov.lr/index.php/main-menu-reports/mm-bdp/mm-bd-nb/national-budget-fy-2019-2020/viewdocument> (demonstrating that the average arbitration costs of approximately 11 million USD alone would match the annual budget for the entire Energy and Environment sector of the Republic of Liberia).

costs from weak local currencies into USD.¹¹⁶ It is, therefore, likely that policy makers from the Global South internalize the existence of risks associated with arbitration costs and may consider them in their regulatory decision-making process.¹¹⁷

However, it is not only the financial situation of many developing countries that could negatively impact their policy decisions but also the structure of their economies. One important factor that distinguishes most developing countries' economies from those in the Global North is their commodity dependency, *i.e.* their reliance on the export of agricultural products, fuels, and mineral resources.¹¹⁸ In 2019, only about 23% of developed countries were commodity-dependent, compared to about 59% of transition countries and more than 86% of developing countries.¹¹⁹ Overall, only 15% of all commodity-dependent countries belong to the high-income group.¹²⁰ However, commodity dependency does not necessarily increase a country's exposure to investment arbitration. For instance, only around 3% of all known investment disputes relate to investments in the agricultural sector.¹²¹ In contrast, a country's dependence on fuels and mineral resources may significantly increase the perception of vulnerability for developing countries in regard to both the probability and severity of negative arbitration outcomes.

One factor that might be particularly relevant is the sheer amount of litigation. The extractive industry is the second most litigated sector in investment arbitration: as of January 2022, investor claimants initiated 177 known disputes in connection with fuels and mineral resources, 157 of which were directed against developing countries.¹²² One explanation for the high number of disputes could be the degree of governmental involvement that is necessary to curb the negative effects of the sector.¹²³ The operation of large scale mining and drilling ventures comes with tremendous risks for the environment and the health and livelihood of local communities.¹²⁴ Mitigating these risks and ensuring the fair distribution of generated wealth requires strong involvement of the state, in the form of economic, environmental, and social law-making that may reduce foreign investors' profit margins.¹²⁵ The reason why developing countries are especially targeted by investment arbitration can be explained by the economic environment in which they operate: the establishment of large scale mining and drilling opera-

116. SUSAN D. FRANCK, *ARBITRATION COSTS: MYTHS AND REALITIES IN INVESTMENT ARBITRATION* 197 (Oxford Univ. Press, 2019).

117. *Regulatory Chill in a Warming World*, *supra* note 4, at 236 (arguing that the legal costs of investment arbitration likely lead developing country regulators to be particularly cautious not to incite ISDS).

118. See U.N. CTAD, *State of Commodity Dependence 2021*, U.N. Doc. UNCTAD/DITC/COM/2021/2, at v (2021). According to the United Nations Conference on Trade and Development ("UNCTAD"), a country is commodity dependent when more than 60% of its exports consist of commodity merchandise. *Id.*

119. *Id.* at 5–6.

120. *Id.* at 15.

121. See *International Dispute Settlement Navigator*, *supra* note 69.

122. *Id.*

123. See Lise Johnson & Jesse Coleman, *International Investment Law and the Extractive Industries Sector*, COLUMBIA CTR. ON SUSTAINABLE INV. 2 (Jan. 2016).

124. See Iva Pesa & Corey Ross, *Extractive Industries and the Environment: Production, Pollution, and Protest in Global History*, 8 EXTRACTIVE INDUS. AND SOC'Y 1, 2 (2021).

125. See Johnson & Coleman, *supra* note 123, at 1, 2.

tions requires both capital and technology, which are comparably scarce in most LMICs.¹²⁶ These countries must therefore attract foreign investors that provide the relevant technological and financial resources to develop and exploit the countries' fossil and mineral deposits.¹²⁷ As a consequence, the extractive industry sector in many developing countries is dominated by multinational enterprises which – as foreign investors – are eligible to initiate ISDS procedures against their host states under most IIAs.¹²⁸

Investors could be further encouraged to initiate ISDS procedures by the fact that they not only prevail in the vast majority of disputes that relate to an extractive industry claim¹²⁹ but that the compensation awarded in these cases is among the highest in investment arbitration.¹³⁰ Such high awards are due to the fact that in return for the immense capital that investors have to provide to lay the groundwork for a large scale mining or drilling project, they are usually given a concession allowing them to exploit the resource deposit for a fixed period of 10–30 years by an investment contract.¹³¹ If over this time period, the political, geological or economic environment of the host country changes or it seeks to pursue policy objectives that impact foreign investor interests, it may violate relevant IIA provisions if it does not manage to renegotiate the investment contract accordingly.¹³² As the valuation of compensation usually includes future loss of profits, the whole remaining period of the investment contract may be considered for the award.¹³³ What such a scenario can mean for a developing country is demonstrated by a recently initiated dispute against the Republic of the Congo (“the Congo”).¹³⁴ By late 2020, the Congo, the country with the highest dependency on natural

126. See UNCTAD, *Commodities and Development Report 2021, Escaping from the Commodity Dependence Trap through Technology and Innovation*, U.N. Doc. UNCTAD/DITC/COM/2021/1, at 58–9 (2021). On a technological development index from 0 to 100 where 100 indicates the economic complexity of the United States, the UNCTAD calculates that fuel-dependent developing countries scored median 2.24 points while mineral resources-dependent developing countries only stood at median 1.79 points; in comparison, the median technological development score for developed countries is 34.36 points. *Id.*

127. Hany Besada et al, *Regulating Extraction in Africa: Towards a Framework for Accountability in the Global South*, 2(1) GOV. IN AFRICA 4 (June 2015). This need for foreign FDI led to a competition among some developing countries to attract foreign investors by granting them extensive tax concessions and incentives for their investments such as very low royalty fees, exemptions from VAT, customs duties, export and corporate tax. See *Id.*; see also Africa Progress Report 2013: Equity in Extractives - Stewarding Africa's natural resources for all, AFRICA PROGRESS PANEL 63 (May 8, 2013).

128. See *Commodities and Development Report 2021*, *supra* note 126, at 58.

129. See *International Dispute Settlement Navigator*, *supra* note 69. While only 49% of all investment disputes are either won by the investor or settled in their favor, investor claimants prevailed in roughly 2/3 of all disputes relating to mining and quarrying. See *id.*; see also *World Investment Report 2021*, *supra* note 72, at 130.

130. See *International Dispute Settlement Navigator*, *supra* note 69. Of the eleven disputes that ended with the award of compensation in the amount of 1 billion USD or more, only one case did not relate to the extractive industry sector. See *id.*

131. See Johnson & Coleman, *supra* note 123, at 8.

132. *Id.* at 8–9.

133. Jonathan Bonnitca & Sarah Brewin, *Compensation Under Investment Treaties*, INT'L INST. FOR SUSTAINABLE DEV. 1, 3, 18 (2020), <https://www.iisd.org/system/files/publications/compensation-treaties-best-practices-en.pdf>.

134. Avima Launches Arbitration Against Congo Republic in Iron Ore Dispute, REUTERS (June 7, 2021, 9:10 AM), <https://www.reuters.com/article/us-congorepublic-iron-idUSKCN2DJ1IC>.

resources rents,¹³⁵ revoked the iron ore mining licenses of two MNCs and transferred them to a Chinese company instead.¹³⁶ Consequently, both companies initiated ISDS procedures against the Congo, seeking compensation of over 35 billion USD,¹³⁷ an amount fourteen times the country's annual budget of around 2.5 billion USD.¹³⁸

3. Political Factors

The third set of factors that have the potential to impact policy makers' *ex-ante* assessment of regulatory action are those that relate to a country's political environment. While a state's ideological position towards interventionist economic policies, its general risk-aversity, and its degree of political corruption may play a certain role in the internalization of fears associated with ISDS, the most important factor in the development context is arguably the exposure of policy makers to a strong and dedicated civil society.¹³⁹ The reason why civil society plays such an important part in domestic policy making is twofold. On the one hand, civil society actors are capable of creating media attention surrounding the negative effects that some foreign investments have for the environment or the rights or well-being of affected local communities.¹⁴⁰ Consequently, MNCs that are afraid of negative publicity may be reluctant to initiate ISDS against host state behavior that is related to the enhancement of environmental or human protection.¹⁴¹ On the other hand, civil society campaigns are able to build up strong political pressure on governments to initiate regulatory changes even where business interests are at stake.¹⁴² Accordingly, civil society activism must be treated as a mitigating factor in policy makers' regulatory risk-assessment that has the potential to outweigh internalized perceptions of ISDS risks.

This is best illustrated by the 2011 decision of the German government to engage in nuclear phase-out.¹⁴³ Against the backdrop of the Fukushima nuclear disaster in early 2011, pressure from the historically strong anti-nuclear movement and mass demonstrations compelled the government to shut down several old nuclear power plants and to revise its decision to delay the planned nuclear phase-out for another eight to fourteen years, even though this clearly affected the interests of foreign investors.¹⁴⁴ Consequently, one of the biggest foreign

135. *Total Natural Resources Rents (% of GDP) – Congo, Rep.*, WORLD BANK (2022), https://data.worldbank.org/indicator/NY.GDP.TOTL.RT.ZS?most_recent_value_desc=true (noting that in 2019, Congo's natural resources rents accounted for almost 48% of its GDP).

136. See REUTERS, *supra* note 135.

137. *Id.*

138. The World Factbook, *supra* note 97.

139. Schram et al., *supra* note 16, at 200.

140. M. SORNARAJAH, RESISTANCE AND CHANGE IN THE INTERNATIONAL LAW ON FOREIGN INVESTMENT 322 (Cambridge Univ. Press, 2015).

141. *Id.*

142. Bridget M. Hutter & Joan O'Mahony, *The Role of Civil Society Organisations in Regulating Business*, ESRC CTR. FOR ANALYSIS OF RISK & REGULATION, 8 (Sept. 2004), <https://www.lse.ac.uk/accounting/assets/CARR/documents/D-P/DissPaper26.pdf>.

143. See generally Nathalie Bernasconi-Osterwalder & Rhea Tamara Hoffmann, *The German Nuclear Phase-Out Put to the Test in International Investment Arbitration? Background to the New Dispute Vattenfall v. Germany (II)*, INT'L INST. FOR SUSTAINABLE DEV. 1, 2–3 (2012), https://www.iisd.org/system/files/publications/german_nuclear_phase_out.pdf.

144. Alexander Glaser, *From Brokdorf to Fukushima: The Long Journey to Nuclear Phase-Out*, 68(6) BULL. OF THE ATOMIC SCIENTISTS 1, 11, 18–19 (2012).

investors in the German nuclear energy sector, the Swedish company Vattenfall, initiated an investment dispute against Germany¹⁴⁵ that was ultimately settled against payment of 1.425 billion EUR in 2021.¹⁴⁶ Naturally, the capacity of civil society actors to create this kind of pressure on governments is not equal across the world. As shown by the *Core Civil Society Index* (“CCSI”) and the *Civil Society Participation Index* (“CSPI”), both the robustness of and the involvement in civil society organizations is significantly more pronounced in developed countries.¹⁴⁷ For instance, while Western Europe and Northern America have an average score of 0.94 (CCSI) and 0.93 (CSPI), less developed regions such as Africa (CCSI: 0.68 / CSPI: 0.34) and South Asia (CCSI: 0.4 / CSPI: 0.6) score significantly lower on average.¹⁴⁸ The stronger involvement of civil society actors in domestic politics might be one reason why developed countries seem more prone to adopt disruptive regulations for the public good even though such regulations could lead to ISDS proceedings.¹⁴⁹

Nevertheless, it should not be forgotten that unlike many countries of the Global South, developed countries have the necessary financial leeway to prioritize popular public policy objectives over ISDS risks. The effect of civil society engagement on regulatory chill is therefore best understood as a mitigating factor in the context of the legal and economic framework in which a state operates.

4. Evaluation

The preceding analysis of the legal, financial, economic, and political environment in developing and developed countries suggests that those factors that may reenforce policy makers’ internalization of ISDS risks are not evenly distributed between the Global North and South. First, the outdated legal investment framework in which many developing countries operate makes them a viable target for the initiation of large-scale investment disputes, while their comparably lower bureaucratic capacity prevents them from reliably predicting the legal consequences of their regulatory activities. Developing countries are more often subject to enormous compensation claims than developed countries and due to their limited financial resources, most struggle with the high costs of arbitration and legal representation. Finally, their economic dependency on the extraction and export of natural resources, and the consequent

145. Vattenfall AB v. Fed. Republic of Ger., ICSID Case No. ARB/12/12, Order of the Tribunal Taking Note of the Discontinuance of the Proceeding, ¶ 11 (Nov. 9, 2021).

146. See Press Release, *Understanding to terminate disputes on German nuclear phase out*, VATTENFALL (Mar. 05, 2021), <https://mb.cision.com/Main/865/3300935/1382912.pdf>.

147. See Coppedge et al., *supra* note 46, at 305, 333. Both the CCSI and CSPI are based on expert-surveys that measure the robustness as well as the involvement of civil society organizations in the political process respectively on a scale from 0 to 1. *Id.* While the CCSI assesses the autonomy of civil society organizations from state interference and citizen’s freedom of participation, the CSPI focuses *inter alia* on the frequency with which they are consulted by policy makers, the quantity of people involved and the entry barriers for women. *Id.*

148. *Id.*

149. See Aaron Cosbey, *Can Investor-State Dispute Settlement Be Good for the Environment?*, IISD (Apr. 12, 2017), <https://www.iisd.org/articles/can-investor-state-dispute-settlement-be-good-environment> (showing that the US, Canada, Germany and Italy all adopted disruptive regulations in the environmental sector that were later challenged by foreign investors before arbitral tribunals).

demand for foreign technology and capital, puts them in a vulnerable position vis-a-vis MNCs and their interests. All the while, the civil society in developing countries plays a comparably smaller role as a factor in the prioritization of public policy objectives.

While each of these listed factors might not directly influence every regulatory activity in developing countries, the sheer number of factors has an impact on policy makers' perception of ISDS risks. This is especially true for those factors that have generated considerable media coverage and heated public debate in their home countries, such as the immense compensation awarded to foreign investors by some tribunals, the alleged encroachment of ISDS on states' regulatory sovereignty and, more generally, the influence of MNCs on developing countries' politics. The resulting impact on policy makers is further bolstered by the deep mistrust of many developing countries' governments towards investment tribunals (*i.e.* the arbitrators), a sentiment justified by a notably uneven win/lose ratio of developed and developing countries against investor claimants. From the perspective of the individual developing country policy maker who, in most cases, has to deal with very limited financial resources, the perceived unfairness of investment arbitration might present itself as a deterrent to enacting regulations that contravene the interests of powerful foreign investors in the country.

As discussed above, the conceptualization of anticipatory chill makes it virtually impossible to produce reliable evidence of its existence. Accordingly, all work on this subject involves a certain degree of informed speculation that is based on the sum of indicators believed to influence relevant governments' *ex-ante* risk assessment of regulatory acts. What the preceding analysis has shown, though, is that the legal, financial, economic, and political conditions that exist in most developing countries can facilitate the internalization of policy makers' ISDS risks. Taking this into consideration, the emergence of anticipatory chill is likely to be significantly more pronounced in the Global South than it is in the Global North.

Conclusion

This article raises the question of whether the structural differences between developed and developing countries have a significant influence on policy makers' assessment of ISDS risks in their regulatory decision-making process and, consequently, their exposure to regulatory chill. The preceding analysis has demonstrated that the high bureaucratic capacity typically found in countries of the Global North plays a decisive role in the emergence of those manifestations of regulatory chill that are connected to the *ex-post* assessment of perceived ISDS risks, *i.e.* precedential chill and specific response chill. By contrast, the relevant factors that play a role in internalizing fears of ISDS in the *ex-ante* stage of policymaking point to a higher exposure of developing countries to anticipatory chill.

This conclusion has far-reaching implications for both domestic and global politics. On a domestic level, a high exposure to anticipatory chill means that states' capacity to pursue reforms and regulate for the public good can be severely hampered in sectors with a high degree of foreign capital inflow. This might also have dire consequences for a state's development: where developing country governments fail to make foreign investors comply with basic labor and human rights standards, to respect the environment and to ensure the fair distribution of the acquired wealth, the chances for sustainable and inclusive progress are low. Even more problematic could be the consequences on a global level. In a time where the greatest challenges

to mankind cannot be tackled on a national level anymore, the reluctance of some developing countries to adopt the necessary policies for human and environmental protection could severely impede the capacity of the global community to respond to pressing issues such as climate change, human rights and global health risks.

For this reason, it is in the vital interest of the Global North to help developing countries mitigate their exposure to anticipatory chill. This can be done by supporting them to dissolve those conditions that have a negative impact on their *ex-ante* assessment of ISDS risks. One key area where development cooperation could produce significant results is in strengthening developing countries' bureaucratic capacities, *e.g.* by providing administrative trainings to enhance the realistic assessment of ISDS risks by the relevant policy makers and by offering solutions for the implementation of inter-agency coordination channels. Yet, the most important goal must be to improve the position of host state governments vis-à-vis MNC investors, particularly in those industries that are most vulnerable to investment arbitration. One such initiative that already produced some promising results is the CONNEX Support Unit, which was initiated by the G7 countries and implemented by the German development agency GIZ. Its task is to advise developing countries in the (re)negotiation of complex investment contracts in the extractive industry sector and to strengthen their long-term capacities to handle and monitor such contracts by themselves.¹⁵⁰

Despite these first steps to mitigate ISDS risks in developing countries, there is still a lot of untapped potential. For instance, while there are already civil society organizations and networks that provide developing countries with pro bono legal advice for disputes that relate to foreign investments,¹⁵¹ there is still no comparable initiative from developed countries to boost developing countries' quality of legal representation before investment tribunals or to reform old-generation IIAs. It is especially the latter that has the biggest potential of changing developing countries' perception of ISDS risks in the long run. When policy makers realize that IIAs leave them sufficient steering capacity to regulate for the public good, fears of inciting ISDS will decrease and the power imbalance between developing countries and MNCs will lessen over time. Since reconciling the international investment regime with the interests of host countries, local communities, and the environment would remove an important obstacle to addressing some of the most pressing global challenges, the international community must realize that the fight against regulatory chill and its root causes cannot be treated as a second class priority any longer.

150. Karl P. Sauvant, *Perspectives on topical foreign direct investment issues No. 210: The Importance of Negotiating Good Contracts*, COLUMBIA CTR. ON SUSTAINABLE INV., 2–3 (Oct. 9, 2017) <https://www.connex-unit.org/wp-content/uploads/2019/02/columbia-fdi-perspectives-no-210-sauvant.pdf>.

151. See *Support Providers*, NEGOTIATION SUPPORT PORTAL FOR HOST GOVERNMENTS, <https://www.negotiation-support.org/providers> (last visited Jan. 13, 2022) (listing all major public and private support providers that offer host states assistance in the planning, preparation, negotiation, monitoring, and implementation of large-scale investments).

Ensuring Developing Countries' Access to COVID-19 Vaccines: Why the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Flexibilities Fail and the Current International Framework Needs Immediate Reform

Michael J. Cavaliere*

Introduction

The low point of the COVID-19 pandemic drastically changed each of our daily lives. Businesses and schools closed. Cities seemed empty. Yet, hospitals filled with more patients than ever before. Entire populations were confined to their homes. This once-in-a-generation virus brought the world to a halt. The long-term effects on public health, the economy, and future generations have yet to be determined. This virus has created a “new normal” as fast as it came onto the global stage. Luckily, there is an end in sight. Pharmaceutical companies produced safe and effective vaccines in record time.¹ More than 4.77 billion people have received a dose of a COVID-19 vaccine, and this number will continue to rise in the coming months and years.² Establishments everywhere are beginning to re-open, and people are finally feeling safe to leave their homes. Each and every day that vaccines are produced and distributed to the general population is a day closer to COVID-19 no longer being a serious concern.

However, this mindset is one of an individual privileged enough to live in a developed country. A person within such a country does not have to worry about gaining access or affording a vaccine. Once a vaccine is sufficiently produced and tested, it can be distributed to the population with ease because the developed country can absorb the costs to ensure the public health. For the vast majority of the developing world, however, vaccines are substantially more expensive than what the countries can afford. Even in desperate times or crises, developing countries and their populations have serious trouble acquiring adequate amounts of vaccines to ensure public health.

In the past, developing countries could purchase cheaper, generic versions of essential medicines to protect their public health during a crisis. However, with the implementation of the Agreement on Trade-Related Aspects of Intellectual Property Rights (“TRIPS Agreement”), generic copies would violate the intellectual property rights (“IPRs”) of drug manufacturers.³

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1. See Drew Armstrong, *The World's Most Loathed Industry Gave US a Vaccine in Record Time*, BLOOMBERG BUSINESSWEEK (Dec. 23, 2020, 5:00 AM EST), <https://www.bloomberg.com/news/features/2020-12-23/covid-vaccine-how-big-pharma-saved-the-world-in-2020>.
2. See Josh Holder, *Tracking Coronavirus Vaccinations Around the World*, N.Y. TIMES, <https://www.nytimes.com/interactive/2021/world/covid-vaccinations-tracker.html> (Mar. 12, 2022).
3. See Marrakesh Agreement Establishing the World Trade Organization, Apr. 15, 1994, 1867 U.N.T.S. 154 [hereinafter TRIPS Agreement] (encompassing the Agreement on Trade-Related Aspects of Intellectual Property Rights).

Restrictions on generic medication leave developing countries with few options to gain access to affordable essential medicines without violating the TRIPS Agreement, and these restrictions will continue to be an issue during the COVID-19 pandemic.

There are a few exceptions within the TRIPS Agreement for developing countries to ignore the IPRs of medicines in a time of crisis. Through the use of compulsory licensing and parallel importation (“TRIPS flexibilities”), these countries can acquire certain drugs without violating the IPRs of the owner. However, these TRIPS flexibilities are unusable and impractical for developing countries. The time and cost of implementing these procedures make them ineffective during a sudden outbreak. Furthermore, threats of sanctions and economic restrictions have these countries concerned about adverse long-term effects. Developed countries show resentment and hostility to any developing country that wishes to use either of these mechanisms. Yet, many developing countries have no choice but to use the TRIPS flexibilities to ensure that inequitable access to essential medicines does not severely damage their own public health.

For these reasons, the international framework needs immediate reform to help these developing countries sufficiently in times of crisis. There needs to be a permanent suspension of the IPRs for essential medicines in developing countries to ensure global public health, fairness, and liberty. For COVID-19, a permanent suspension of the IPRs for vaccines would allow developing countries to effectively combat the pandemic while preventing developed countries from taking retaliatory action. However, such a permanent suspension is a drastic change that will certainly not be approved in the coming months and possibly years of the COVID-19 outbreak. Readily available methods for waiving the IPRs for COVID-19 vaccines must be used to meet the needs of developing countries quickly and efficiently. However, compulsory licensing and parallel importation are insufficient in assisting developing countries. So, more robust alternatives to the current international framework are needed.

Part I of this article will review the background of the TRIPS flexibilities from their implementation to the modern-day structure. This section focuses particularly on the ways developing countries would have to use compulsory licensing or parallel importation to access pharmaceutical drugs such as COVID-19 vaccines.

Part II of this article will demonstrate how the TRIPS flexibilities have failed developing countries during past epidemics and pandemics. This section will show that by evaluating these past failures, the use of the TRIPS flexibilities for COVID-19 vaccines will also be inadequate for developing countries due to similar limitations and consequences.

Part III of this article will argue that the COVID-19 crisis demonstrates the long-term need to abandon the TRIPS flexibilities and move towards a permanent suspension of the IPRs for essential medicines in developing countries. This section will argue that the permanent suspension of IPRs would benefit both developed and developing countries during the COVID-19 pandemic and any future outbreak. This section will then examine more efficient short-term solutions within the TRIPS Agreement and international framework, as a complete suspension of IPRs is a lofty goal that will take time. The proposed methods of using tiered pricing

ing, security exceptions, and voluntary licensing are more substantial alternatives to compulsory licensing and parallel importation that can be implemented almost immediately for COVID-19 vaccines.

I. Background on TRIPS Flexibilities

On January 1, 1995, the TRIPS Agreement came into effect and drastically changed the international legal landscape.⁴ The TRIPS Agreement was implemented by the then newly-formed World Trade Organization (“WTO”) and required all of its members to provide specific minimum protection standards for all kinds of IPRs and effective enforcement of IPRs.⁵ However, not all WTO members were required to implement the Agreement immediately, as designated developing countries were granted extended transitional periods until January 1, 2000.⁶ After this date, all countries were expected to comply with most provisions of the TRIPS Agreement and its obligations.⁷

While the WTO does not define “developed” or “developing” countries, members may be designated as a developing country on the basis of self-selection and WTO approval.⁸ Developing countries currently make up two-thirds of the WTO’s 164 members.⁹ Of this group, there is a subset of members defined as least-developed countries (“LDCs”) that are particularly at risk and receive extra attention from the WTO.¹⁰ Currently, 35 WTO members are LDCs.¹¹ The LDCs are not required to enforce the IPRs for pharmaceutical products until January 1, 2033, or until they cease to be designated as an LDC.¹² There is still a barrier to adequate pharmaceutical access for the vast majority of developing countries due to the strict requirement to enforce IPRs.

There are, however, exceptions to the TRIPS Agreement that developing countries can use to ignore IPRs and gain access to certain pharmaceuticals in times of crisis. These exceptions are the use of compulsory licensing and parallel importation and are commonly referred to as TRIPS flexibilities. In the context of pharmaceuticals, compulsory licensing is an exception to patent rights that allows a government to produce a patented product without the patent owner’s permission.¹³ Although the term “compulsory licensing” does not appear in the TRIPS

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4. *See Overview: The TRIPS Agreement*, WORLD TRADE ORGANIZATION, https://www.wto.org/english/tratop_e/trips_e/intel2_e.htm (last visited Mar. 15, 2022).
 5. Aysegul Ozdemir, *TRIPS Agreement and Access to Essential Medicines*, 1 ANKARA B. REV. 90, 90 (2008).
 6. *Id.* at 91.
 7. *Id.*
 8. *See Developing Countries Overview*, WORLD TRADE ORGANIZATION, https://www.wto.org/english/thewto_e/whatis_e/tif_e/org7_e.htm (last visited Mar. 15, 2022).
 9. *Id.*
 10. *Id.*
 11. *Id.*
 12. *Responding to Least Developed Countries’ Special Needs in Intellectual Property*, WORLD TRADE ORGANIZATION, https://www.wto.org/english/tratop_e/trips_e/ldc_e.htm (Oct. 16, 2013).
 13. *TRIPS and Pharmaceutical Patents Obligations and exceptions*, WORLD TRADE ORGANIZATION (Sept. 2006), https://www.wto.org/english/tratop_e/trips_e/factsheet_pharm02_e.htm#bolar [hereinafter *Obligations and exceptions*].

Agreement, it is part of the phrase “other use without authorization of the right holder” that appears within the title of Article 31.¹⁴ While compulsory licensing is part of the TRIPS Agreement’s overall attempt to promote a balance of access and innovation in pharmaceuticals, this exception may only be used under a limited number of conditions to ensure the protection of the IPR holder.¹⁵ Article 31(b) provides that a person or company applying for the license must first have attempted and been denied a voluntary license from the IPR holder on reasonable terms.¹⁶ However, an attempt to gain a voluntary license is not required during national emergencies, other circumstances of extreme urgency, or for public non-commercial use.¹⁷ Article 31(h) follows that adequate compensation is still owed to the patent holder after issuing a compulsory license.¹⁸

Parallel importation is the other common exception to the IPRs in pharmaceuticals that arises out of the TRIPS Agreement. Through parallel importation, developing countries may import a patented product without the owner’s approval or permission.¹⁹ In the case of pharmaceuticals, these imports are not counterfeits or generic copies but rather the manufacturer’s product.²⁰ This process is based on the principle of exhaustion in which a patent owner no longer has any legal rights or control over the use of their product once it has been sold.²¹ Similar to compulsory licensing, the TRIPS Agreement does not contain the term “parallel importation” but states that only non-discrimination provisions can be used to address WTO disputes of exhaustion.²² In practice, this allows WTO members to use parallel importation for patented products unless non-discrimination principles are involved, which is rarely the case with pharmaceuticals.²³

It was not always clear to WTO members how TRIPS flexibilities could be properly used and applied.²⁴ This lack of clarity was not resolved until the Declaration on the TRIPS Agreement and Public Health, which resulted from the Doha Ministerial Conference (the “Doha Declaration”), recognized “the gravity of the public health problems afflicting many developing and least-developed countries, especially those resulting from HIV/AIDS, tuberculosis, malaria and other epidemics.”²⁵ However, the purpose of the Doha Declaration was not to override the TRIPS Agreement.²⁶ The WTO recognized the importance of strong IPRs for the develop-

14. TRIPS Agreement, *supra* note 3, art. 31.

15. *See generally Obligations and exceptions, supra* note 13.

16. TRIPS Agreement, *supra* note 3, art. 31(b).

17. *Obligations and exceptions, supra* note 13.

18. TRIPS Agreement, *supra* note 3, art. 31(h).

19. *Obligations and exceptions, supra* note 13.

20. *Id.*

21. *Id.*

22. *Id.*

23. *Id.*

24. *Id.*

25. World Trade Organization, Declaration on the TRIPS agreement and public health of 14 November 2001, WTO Doc. WT/MIN (01)/DEC/2, 41 ILM 746 (2002) [hereinafter Doha Declaration].

26. *Id.* para. 4.

ment of new medicines.²⁷ Instead, the focus was to ensure that the TRIPS Agreement would not prevent its members from protecting public health and, in particular, to promote access to medicines for all.²⁸

The Doha Declaration specifically acknowledged the use of the TRIPS flexibilities for developing countries by approving the use of compulsory licenses and the ability to establish parallel importation regimes.²⁹ Yet, one of the problems identified and not yet solved before the Doha Declaration was the use of compulsory licensing by WTO members that have “insufficient or no marketing capacities in the pharmaceutical sector.”³⁰ The TRIPS Agreement requires medicines produced and subject to compulsory licensing to be used entirely for the WTO member’s domestic market.³¹ Therefore, any country that lacked the infrastructure to produce the desired amounts would have difficulty using compulsory licensing, as importing sufficient quantities was restricted.³² The WTO later resolved this issue by adopting the “Decision on the Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health.”³³ The decision was adopted by the General Council of the WTO on August 30, 2003 and effectively waived the compulsory licensing restriction of exporting medicines to WTO members in need.³⁴ Countries that are unable to manufacture pharmaceuticals themselves are now able to import from other countries when using compulsory licensing.³⁵

The COVID-19 pandemic has brought the use of the TRIPS flexibilities back into the international spotlight. As the global death toll continues to rise, developing countries worldwide are calling for compulsory licenses to vaccinate their populations.³⁶ These countries believe that the severity of the crisis justifies making all effective COVID-19 vaccines public goods.³⁷ In particular, India and South Africa have led the charge in ensuring that their citizens have access to COVID-19 vaccines in a timely fashion.³⁸ On October 2, 2020, both countries jointly put forth a proposal to temporarily waive the IPRs of COVID-19 vaccines so that devel-

27. *Id.*

28. *Id.* para. 4.

29. *Id.* para. 5.

30. *Id.* para. 6.

31. Ozdemir, *supra* note 5, at 94.

32. *Id.*

33. World Trade Organization, Implementation of paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health, WTO Doc. WT/L/540 and Corr.1 (2003), para. 2.

34. *Id.*

35. *Obligations and exceptions, supra* note 13.

36. Nasos Koukakis, *Countries worldwide look to acquire the intellectual property rights of Covid-19 vaccine makers*, CNBC (Jan. 22, 2021, 11:45 AM), <https://www.cnbc.com/2021/01/22/countries-look-to-acquire-the-ip-of-vaccine-makers-to-fight-pandemic.html>.

37. *Id.*

38. Manvi Rathod & Keiya Barot, *India and South Africa’s COVID Vaccine Proposal to the WTO: Why Patent Waiver Must Be Considered Over Compulsory Licensing*, IPWATCHDOG (Jan. 2, 2021), <https://www.ipwatchdog.com/2021/01/02/india-south-africas-covid-vaccine-proposal-wto-patent-waiver-must-considered-compulsory-licensing/id=128652/>.

oping countries in need could gain access or produce generics as quickly as possible.³⁹ Unsurprisingly, developed countries have opposed this proposal due to the financial burden on pharmaceutical companies who have spent substantial costs in researching and developing the vaccines.⁴⁰

The proposed waiver has been discussed numerous times amongst the TRIPS Council for over a year and has consistently been blocked.⁴¹ Such a proposal would require backing from a consensus of the WTO's 164 members to pass, but passing is unlikely due to the United States, Britain, Switzerland, and other developed countries strongly opposing it.⁴² On January 27, 2022, WTO members finally resumed discussions for responding to the COVID-19 pandemic.⁴³ Finally, on March 16, 2022, the WTO welcomed a "breakthrough" compromise between the European Union, India, South Africa, and the United States for a waiver of the TRIPS Agreement for production of COVID-19 vaccines.⁴⁴ While this was a "major step forward", many details still within this internal negotiation need to be determined, and the waiver must be decided by a consensus of all 164 WTO members.⁴⁵ As a result, many developing countries continue to be at the mercy of the pandemic with no reasonable access to appropriate countermeasures until, at least, this time. The barrier created by the TRIPS Agreement can currently only be overcome by such a proposal or by using the TRIPS flexibilities and other exceptions.

II. Failure of the TRIPS Flexibilities for COVID-19 Vaccines

It is unlikely that either compulsory licensing or parallel importation will be effective in ensuring developing countries gain access to COVID-19 vaccines. While one intention of the TRIPS Agreement and its subsequent flexibilities was to promote its members' global public and economic health, the lack of progress in this area in the decades following its implementation show that this goal is far from reality. Enforcement of the TRIPS Agreement has proven to be complex and imbalanced due to the various development levels of WTO member states.⁴⁶ Specifically, the TRIPS Agreement failed to predict correctly the problems faced by developing countries "due to outbreak of epidemics and pandemics" and how those problems could be

39. See World Trade Organization, Waiver from Certain Provisions of the Trips Agreement for The Prevention, Containment and Treatment of Covid-19, WTO Doc. IP/C/W/669 (Oct. 2, 2020).

40. Rathod & Barot, *supra* note 38.

41. Rich, *developing nations wrangle over COVID vaccine patents*, REUTERS (Mar. 10, 2021, 10:16 AM), <https://www.reuters.com/article/us-health-coronavirus-wto/rich-developing-nations-wrangle-over-covid-vaccine-patents-idUSKBN2B21V9>.

42. See Emma Farge, *A year after COVID vaccine waiver proposal, WTO talks are deadlocked*, REUTERS (Oct. 4 2021), <https://www.reuters.com/business/healthcare-pharmaceuticals/year-after-covid-vaccine-waiver-proposal-wto-talks-are-deadlocked-2021-10-04/>.

43. *Members discuss way forward in dedicated meeting on WTO pandemic response*, WORLD TRADE ORGANIZATION (Jan. 27, 2022), https://www.wto.org/english/news_e/news22_e/gc_27jan22_e.htm.

44. *Director-General Okonjo-Iweala hails breakthrough on TRIPS COVID-19 solution*, WORLD TRADE ORGANIZATION (Mar. 16, 2022), https://www.wto.org/english/news_e/news22_e/dgno_16mar22_e.htm.

45. *Id.*

46. Muhammad Z. Abbas & Shamreeza Riaz, *Flexibilities under Trips: Implementation Gaps between Theory and Practice*, 2013 NORDIC J. COM. L. 1, 1 (2013).

resolved.⁴⁷ The TRIPS Agreement provided compulsory licensing and parallel importation as exceptions, rather than the focus of its main provisions, for developing countries to gain access to essential medicines in times of such outbreaks.⁴⁸ The COVID-19 pandemic is yet another example in a long list of global outbreaks that illustrate why the TRIPS flexibilities fail developing countries in times of need.

A. Compulsory Licensing Fails Developing Countries in Need of COVID-19 Vaccines

Compulsory licensing initially had no practical significance for developing countries that lacked the manufacturing capacity to produce necessary medicines.⁴⁹ As already mentioned, these licenses applied only to pharmaceutical products to be used domestically.⁵⁰ The Doha Declaration attempted to address this problem by allowing generic medications to be exported to developing countries in times of need, but this too fell short of reality.⁵¹ Part of the failure to successfully implement compulsory licensing can be explained from the unnecessarily complicated and burdensome procedural requirements.⁵² The implementation requirements are costly and time-consuming, with no guarantee of success in meeting the needs of the developing countries intending to use them.⁵³ Cooperation between developed and developing countries is difficult enough during a crisis but even more so when only developing countries benefit from such a transaction.

However, even more concerning is the practical implications of implementing compulsory licensing. First, compulsory licensing is avoided by developing countries due to a fear of trade sanctions and financial repercussions by developed countries and pharmaceutical companies.⁵⁴ Developing countries looking to protect their public health by implementing a compulsory license for a pharmaceutical would face intense pressure from developed countries not to perform or face devastating short- and long-term consequences. Developed countries have imposed unilateral trade sanctions on developing countries with weak IPRs to incentivize stronger adherence to the TRIPS Agreement.⁵⁵ Further, vulnerable developing countries are seemingly forced into bilateral free trade agreements that prioritize economic growth rather than public health.⁵⁶

47. *Id.*

48. *Id.*

49. *Id.* at 2.

50. *Id.*

51. *Id.* at 3.

52. Abbas & Riaz, *supra* note 46, at 4.

53. *Id.*

54. *Id.*

55. See Abbas & Riaz, *supra* note 46, at 6. "Therefore, the fear of potential vulnerability to unilateral trade sanctions from the United States prevents developing and least developed countries from exercising the flexibilities, exceptions and safeguards provided under the TRIPS Agreement." *Id.* at 8.

56. *Id.* at 9–10 ("Governments of poorer countries consent to enter into these agreements because they prefer economic growth over access to health care. In return of these agreements that impair public health, the third world countries get access to Western investment, access to large, industrialized country markets, low tariffs on particular goods, and foreign aid.").

Second, by just having the option to use compulsory licensing, developing countries will be harmed by the lessened incentive for pharmaceutical companies to research and develop medicines specifically affecting these countries.⁵⁷ Pharmaceutical companies usually focus their research and development on global drugs, such as those for treating cancer and HIV/AIDS.⁵⁸ These types of drugs are created primarily for use by developed countries but will also be needed by developing countries.⁵⁹ Other drugs, however, only needed by developing countries for diseases such as tuberculosis and malaria are not the priority of pharmaceutical companies due to the weaker prospect of financial gain.⁶⁰ If pharmaceutical companies believe that any drug produced for the primary benefit of developing countries will result in a compulsory license, these companies would have no financial incentive to research and produce any such drug.⁶¹ The populations of developing countries would then continue to be devastated by diseases that are essentially nonexistent in the developed world.

For developing countries, it becomes clear that any use of compulsory licenses for COVID-19 vaccines would have a similarly negative effect. Compulsory licenses are well-known mechanisms that have been properly established in the international framework, but they have not been used for a crisis like the COVID-19 pandemic.⁶² The use of such licenses has generally been limited to enforcement on a national scale and has been successful in ensuring public health.⁶³ However, the COVID-19 virus differs from cancer, HIV/AIDS, Ebola, and malaria due to its sudden onset, rapid spread, and lack of accessible treatment.⁶⁴ Regardless, developed countries would seek to recuperate any financial losses if compulsory licenses were issued. This would almost certainly be accomplished through unilateral trade sanctions or bilateral trade agreements imposed by developed countries upon developing countries for acquiring COVID-19 vaccines through these licenses. During a pandemic such as this, it is easy to predict the ineffectiveness of compulsory licensing for COVID-19 vaccines on such a massive, global scale and the unwillingness of all parties, especially developed countries, to participate.

B. Parallel Importation Fails Developing Countries in Need of COVID-19 Vaccines

Parallel importation is similarly limited in its applicability and effectiveness for developing countries attempting to access essential medicines. Pharmaceutical companies and developed countries have continuously placed substantial trade pressure on developing countries attempt-

57. Alexandra G. Watson, *International Intellectual Property Rights: Do Trips' International Intellectual Property Rights: Do Trips' Flexibilities Permit Sufficient Access to Affordable HIV/AIDS Medicines in Developing Countries*, 32 B. C. INT'L & COMP. L. REV. 143, 153 (2009).

58. Abbas & Riaz, *supra* note 46, at 23.

59. *Id.*

60. *Id.*

61. Ann Weilbaecher, *Diseases Endemic in Developing Countries: How to Incentivize Innovation*, 18 ANNALS HEALTH L. 281, 281 (2009) ("Pharmaceutical companies and other drug developers thus have little incentive to develop treatments for diseases endemic in developing countries because the treatments are too expensive for the people who need them, and the developers will be unable to recoup their significant R&D expenditures.").

62. Jorge L. Contreras et al., *Pledging intellectual property for COVID-19*, 38 NATURE BIOTECHNOLOGY 1146, 1148 (2020).

63. *Id.*

64. *Id.* at 1146.

ing to acquire cheaper drugs through parallel importation.⁶⁵ The protection of IPRs for pharmaceuticals is of utmost importance for the developed world, and any country that does not follow along will face harsh consequences.⁶⁶ So, while parallel importation and exhaustion of IPRs is technically permissible under the TRIPS Agreement, coercion by developed countries leaves little benefit to developing countries attempting to decrease drug prices, promote rights conducive to social and economic welfare, or adopt measures necessary to protect public health.⁶⁷

In practice, parallel importation detrimentally affects price differentiation.⁶⁸ The purpose of parallel importation is to allow certain low-market developing countries to gain access to pharmaceuticals directly from the manufacturer at a cheaper rate.⁶⁹ However, high- and middle-market developed countries take advantage by purchasing these discounted drugs from developing countries.⁷⁰ If this form of exploitation is not restricted, pharmaceutical companies would either have to increase prices in the lower-priced markets or just discontinue distribution activities in these markets altogether.⁷¹ Like compulsory licensing, this unrestricted use could even lead to the extreme circumstance of discouraging companies from investing in research and development (“R&D”) of drugs that are primarily needed only in developing countries.⁷² Without proper control of parallel importation, developing countries’ economies and public health will continue to suffer.

If parallel importation is left unchecked for COVID-19 vaccines, developing countries will suffer a similarly dismal fate. Pharmaceutical companies, in most cases, will allow low-income developing countries to acquire vaccines for reduced prices or even for free. The issue arises when other high- and middle-income countries that can afford the full cost of the vaccines choose to acquire these discounted vaccines from developing countries. Pharmaceutical companies would then be taking financial losses in developing countries and from the more developed countries in which they expected to generate profits to compensate for costly R&D of the vaccines. This will encourage pharmaceutical companies to first sell and contract their vaccines to developed countries, where they can recuperate costs and generate profits faster.

Compulsory licensing and parallel importation are two methods that have continuously failed developing countries in times of crisis. Neither approach provides a beneficial way of gaining access to essential medicines without detrimental short- and long-term effects. Still, developing countries are desperate and may have no choice but to implement either of these policies for COVID-19 vaccines. In that case, the long-term consequences imposed upon these countries by developed countries could be worse off than if developing countries never received vaccines at all.

65. Sarah McKeith, *Pharmaceutical Patents in Developing Nations: Parallel Importation and the Doctrine of Exhaustion*, 6 AFR. J. LEGAL STUD. 287, 297 (2013).

66. *Id.* at 297–99.

67. *Id.* at 299.

68. *Id.*

69. *Id.*

70. *Id.*

71. *Id.*

72. McKeith, *supra* note 65.

III. Solutions for Developing Countries During the COVID-19 Pandemic and Beyond

The use of the TRIPS flexibilities for excepting the IPRs of COVID-19 vaccines, or for any other essential medicine needed in a future outbreak, cannot adequately meet the needs of developing countries. The TRIPS Agreement requires reform to ensure that IPRs for essential medicines will not be barriers to public health and safety in times of need. However, while a call for change may be effective in future situations, it will undoubtedly take time. These solutions do little to help those in developing countries currently suffering from the COVID-19 crisis that need an immediate resolution to vaccine access. Therefore, while the long-term goal will be to remove all the IPRs for essential medicines in developing countries, short-term solutions need to be implemented within the current international framework for COVID-19 vaccines.

A. Long-Term Solution: A Permanent Suspension of the IPRs for Essential Medicines in Developing Countries

To properly combat the current COVID-19 crisis, there needs to be a permanent suspension of the IPRs for vaccines in all developing countries. Such a permanent suspension, however, should not be limited to COVID-19 vaccines but all essential medicines. This type of suspension is not only necessary for developing countries to properly combat future outbreaks, but it will also greatly benefit developed countries and the world as a whole.

First, ensuring access to essential medicines is of utmost importance in maintaining global public health.⁷³ The issue of medicine access is obviously more prevalent in developing countries than in developed countries. At the same time, this problem has indirect consequences on developed countries that should make global health a priority for all.⁷⁴ Due to international travel and business in modern society, an outbreak in one country can put the health of all nations at risk in an instant.⁷⁵ Viruses, bacteria, and other diseases are “not deterred by state or national borders,” and may lead to a widespread outbreak if not adequately controlled.⁷⁶ Therefore, developed countries have plenty of incentives to ensure public health in the developing world, if for no other reason, to protect their health and economies.

Never has this issue of access been more evident than during the COVID-19 pandemic. As of January 24, 2022, there have been 353.9 million COVID-19 cases reported in 223 countries since the first cases in December 2019.⁷⁷ The entire world remains at risk as the 5.6 mil-

73. Jennifer M. Champagne, *Access to Essential Medicines in Developing Countries: The Role of International Intellectual Property Law & Policy in the Access Crisis*, 22 ALB. L. J. SCI. & TECH. 75, 75–76 (2012).

74. *Id.* at 77.

75. *Id.* (“In today’s society of mass international travel, an outbreak in sub-Saharan Africa is one plane ride to JFK International Airport away from being an outbreak in New York City, where it could then easily spread throughout the entire United States.”).

76. *Id.*

77. See Henrik Pettersson et. al, *Tracking Covid-19’s global spread*, CNN HEALTH, <https://www.cnn.com/interactive/2020/health/coronavirus-maps-and-cases/> (Mar. 15, 2022).

lion death total continues to rise.⁷⁸ Surprisingly enough, the most significant number of deaths have occurred in developed countries, specifically the United States.⁷⁹ The virus has quickly spread across the globe leaving all countries at its mercy. Even if developed countries vaccinated their entire populations completely, they would not necessarily be safe. The virus, likely, would remain widespread and predominantly affect developing countries. With time, the virus will mutate, and new variants will be immune to current vaccines.⁸⁰ Developed countries will be vulnerable to another outbreak regardless of their level of vaccination. The cycle would be never-ending, so the only solution to effectively combat the COVID-19 virus is to ensure it is completely eradicated across the globe.

Second, access to essential medicines protects the economies of developing and developed countries alike.⁸¹ Global outbreaks cause an obvious financial burden of increased medical expenses and indirect effects on international travel, trade, commerce, and tourism.⁸² Containing and subduing any virus must be prioritized to prevent a long-lasting financial burden on all economies. Many may argue that such a financial burden is too great to place upon developed countries to ensure the health of the global community. A permanent suspension of the IPRs for essential medicines would, theoretically, increase drug prices and decrease innovation. However, developing countries naturally have minimal purchasing power for these essential medicines.⁸³ A complete suspension of IPRs in these markets will have very little effect in stimulating developed countries to continue R&D and bring new products to the market.⁸⁴

The COVID-19 pandemic has shown how quickly the global economy can come to a halt during an international crisis. The WTO predicts that there was a 9.2 percent decline in global trade volume during 2020.⁸⁵ Tourism worldwide fell by 72 percent in the first ten months of 2020, with no sign of returning to normal levels anytime soon.⁸⁶ While these negative economic effects are occurring globally, developing countries are particularly at risk and in danger. Financial capital flows from developed to developing countries decreased by \$508 billion in 2020.⁸⁷ COVID-19 has forced an estimated 124 million people into extreme poverty during 2020, the first increase from a previous year since 1998.⁸⁸

78. *Id.*

79. *Id.* (showing that as of January 24, 2022, there have been 868,123 reported COVID-19 deaths in the United States).

80. *Variants and Genomic Surveillance for SARS-CoV-2*, CTRS. FOR DISEASE CONTROL AND PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/variant-surveillance.html> (Apr. 2, 2021).

81. Champagne, *supra* note 73, at 85.

82. *Id.*

83. Lisa Forman et al., *Assessing the UN High-Level Panel on Access to Medicines Report in Light of the Right to Health*, LAWS (Nov. 22, 2016), at 1, 7, <https://www.mdpi.com/2075-471X/5/4/43>.

84. *Id.*

85. Mikaela Gavas & Samuel Pleeck, *Global Trends in 2021: How COVID-19 is Transforming International Development*, CTR. FOR GLOB. DEV. (Mar. 2021), at 3, <https://www.cgdev.org/sites/default/files/Gavas-Pleecck-Global-Trends.pdf>.

86. *Id.*

87. *Id.*

88. *Id.* at 4.

Developing countries have already suffered enough financial losses during the current pandemic. How can developed countries expect these countries to continue to multiply these losses by being forced to purchase expensive vaccines they so desperately need? If not for moral goodness, developed countries should be motivated by the effects on their economies. The National Bureau of Economic Research predicts that if there is inadequate distribution of COVID-19 vaccines, specifically to developing countries, the global economy would be at a \$9 trillion loss in 2021 alone.⁸⁹ Developed countries will suffer nearly half of this loss, regardless of how effectively their own populations have been vaccinated.⁹⁰ To stop the financial bleeding, developed countries must prioritize global vaccination. If they do not, the economic costs of the pandemic will continue to rise for years to come.

Third, the national security of all countries may be at risk due to the outbreak of a pandemic.⁹¹ Poor health in a country will lead to social and political unrest and ultimately prevent proper conflict resolution in times of war and other crises.⁹² Governments understand that populations will become angry and impatient if public health is not a top priority, especially during a pandemic.⁹³ These effects are felt by both developed and developing countries, although with different severity.

The COVID-19 pandemic has not halted national security issues. Riots and political unrest have been a global occurrence since the start of the pandemic. In developing countries, protests against the government have mobilized due to their populations' fear for their livelihood.⁹⁴ Citizens of these countries, such as Malawi and Ecuador, have been forced to riot against pandemic polices that have threaten to impoverish them unless retracted.⁹⁵ In developed countries, protests have occurred but have less to do with fears from COVID-19 and more to do with societal issues that have found a spotlight.⁹⁶ For example, the United States experienced an uprising against racial injustice through the Black Lives Matter movement, where the connection between Black Americans' disproportionate suffering from police brutality and COVID-19 fueled the fire.⁹⁷ While some may argue the connection between this movement and the pandemic is a stretch, the timing and surge of violent protests during this

89. Jonathan Tepperman, *The Global Vaccine Rollout is Failing - and That Puts Everyone, Everywhere, In Danger*, FOREIGN POL'Y (Jan. 28, 2021, 4:02 PM), <https://foreignpolicy.com/2021/01/28/vaccine-rollout-covid-19-economic-unrest>.

90. *Id.*

91. Champagne, *supra* note 73, at 87–8.

92. *Id.* at 87.

93. Michael Morell, *Analysis: The national security implications of COVID-19*, CBS NEWS (May 8, 2020, 5:45 PM), <https://www.cbsnews.com/news/coronavirus-national-security-implications-analysis/>.

94. Andreas Kluth, *Social Unrest Is the Inevitable Legacy of the Covid Pandemic*, BLOOMBERG OPINION (Nov. 14, 2020, 1:00 AM), <https://www.bloomberg.com/opinion/articles/2020-11-14/2020-s-covid-protests-are-a-sign-of-the-social-unrest-to-come>.

95. *Id.* "In Malawi, street vendors have marched with signs saying, '[w]e'd rather die of corona than of hunger.' The citizens of Ecuador have rioted against coronavirus policies that threaten to impoverish them, including the shutdown of state-owned companies and salary cuts." *Id.*

96. *Id.*

97. *Id.*

global crisis cannot be ignored.⁹⁸ Developed countries may not always feel the direct effects against their national security from the COVID-19 virus itself but rather from the profound political and social unrest from related restrictions.

B. Short-Term Solutions: Alternative Mechanisms within the Existing Framework

1. Tiered Pricing With a Ban on Parallel Importation

While the ultimate hope would be a permanent suspension of the IPRs for essential medicines in developing countries, this is a lofty goal that will continue to face resistance in the years to come. However, COVID-19 is an urgent crisis that will continue to devastate the public health of these countries if the issue of vaccine accessibility is not quickly addressed. Therefore, due to the unlikely probability that a permanent ban will be implemented in the immediate future, the best course of action for developing countries would be to work within the existing international framework. These proposed short-term solutions are often overlooked and will provide more effective results than compulsory licensing and parallel importation have been able to in the past.

Tiered pricing is one solution that is already standard practice for many drugs throughout the world.⁹⁹ A tiered pricing scheme mandates that patented medicines and vaccines be sold at a reduced cost in designated countries.¹⁰⁰ Developing countries, through tiered pricing, will be able to access vaccines and medications that would typically be well outside their price range.¹⁰¹ While tiered pricing is not explicitly addressed within the TRIPS Agreement, it is extrinsically linked to parallel importation to bring patented products created in developed countries into markets of developing countries.¹⁰² However, the main difference between the two is that tiered pricing still allows the manufacturer to control their product and be compensated for its use in developing countries. Parallel importation exhausts all the IPRs of the product and leaves the owner with no control or financial incentive in allowing their product to be sent to developing countries.

Therefore, the most efficient and practical use of a tiered pricing scheme is in concert with an explicit ban on parallel importation.¹⁰³ If the WTO mandated that a tiered pricing scheme be based upon the gross domestic product (“GDP”), developing countries could then pay lower prices for vaccines and medicines at all times.¹⁰⁴ Combining this mandate with a ban on parallel importation would prevent other countries from abusing the system by buying price-

98. *Id.*

99. Watson, *supra* note 57, at 155.

100. *Id.*

101. Muhammad Z. Abbas, *COVID-19 and the global public health: Tiered pricing of pharmaceutical drugs as price-reducing policy tool*, 17(3) J. GENERIC MED. 115, 116 (2020). “For instance, GlaxoSmithKline (GSK) agreed to sell its 10-valent vaccine at a price as low as \$7 per dose under an 8-year agreement negotiated with the government of Brazil. GSK sold the same vaccine at \$56 per dose in Europe and \$71 per dose in the U.S.” *Id.*

102. Watson, *supra* note 57, at 155.

103. *Id.* at 157.

104. *Id.* at 156.

reduced drugs from developing countries for commercial exploitation.¹⁰⁵ Further, the combined system would allow pharmaceutical companies and developed countries to provide their drugs at a cheaper cost to developing countries while retaining control over their product and market power.¹⁰⁶

The main argument against such a system is that reduced sales in developing countries will have such a negative financial impact upon pharmaceutical companies to make tiered pricing impractical.¹⁰⁷ However, this reasoning is unpersuasive. Tiered pricing's impact on pharmaceutical profits will be minimal because the overwhelming majority of global sales continue to occur in wealthy developed countries.¹⁰⁸ Drug prices are already too expensive for developing countries, which causes total sales in these nations to continuously remain low.¹⁰⁹ Implementing a tiered pricing scheme with a ban on parallel importation will only ensure that each country is paying what they are objectively deemed able to afford.

Tiered pricing with a ban on parallel importation is a decisive action that can help alleviate the financial burden of distributing COVID-19 vaccines to countries in need.¹¹⁰ Not only will developing countries be able to take advantage of reduced prices to protect their public health, but pharmaceutical companies will be able to maximize profits by selling in regions that could not normally afford the full cost of the vaccine. Also, these companies will be able to control the distribution of their vaccines and bring an action upon any party trying to beat the system through parallel importation. Such a tiered pricing scheme is one viable option that can be taken quickly and allow for mutually beneficial outcomes for all countries involved.

2. Article 73 Security Exceptions

Another potentially life-saving measure that developing countries could use is the invocation of Article 73 of the TRIPS Agreement.¹¹¹ Article 73 is the "security exceptions" provision of the TRIPS Agreement that allows WTO members to override the IPRs for COVID-19 vaccines.¹¹² Specifically, Article 73(b) prevents the TRIPS Agreement from forcing any WTO member from taking any action against the protection of their security interests.¹¹³ Article 73(b)(iii) further states that these security exceptions must be taken either in time of war or another emergency in international relations.¹¹⁴

105. *Id.* at 157.

106. Abbas, *supra* note 101.

107. Watson, *supra* note 57, at 155.

108. *Id.* at 157. "Research reflects that tiered pricing's impact on pharmaceutical profits would be insignificant because eighty to ninety percent of global sales occur in the thirty wealthy countries that make up the Organization for Economic Cooperation and Development (OECD)." *Id.* at 156–57.

109. *Id.*

110. Abbas, *supra* note 101, at 119.

111. See TRIPS Agreement, *supra* note 3, art. 73.

112. Frederick Abbott, *The TRIPS Agreement Article 73 Security Exceptions and the COVID-19 Pandemic*, S. CTR. (Aug. 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3682260.

113. *Id.* at 2.

114. *Id.*

If the COVID-19 pandemic is evaluated under this Article 73 provision, it clearly shows that the requirements to implement these security exceptions are satisfied to waive the IPRs for vaccines.¹¹⁵ First, developing countries are undoubtedly suffering from an emergency in international relations due to COVID-19.¹¹⁶ The pandemic continues to threaten the public health, economies, and national security of these countries on a massive scale. Second, the suspension of the IPRs for COVID-19 vaccines would be taken in the time of an international emergency.¹¹⁷ The virus has ravaged through the global community for years and will not slow down until everyone is either infected or immune. Once vaccines are sufficiently manufactured, distribution to developing countries is imperative. Third, the developing countries taking these measures can easily articulate their essential security interests.¹¹⁸ Again, a nation's public health is of utmost importance to the government due to the possible adverse effects on internal order and defensive vulnerability.¹¹⁹ If the impact of the COVID-19 pandemic becomes so severe on any developing country, they would be at a security risk from much more than the virus itself. Fourth, the suspension of IPRs for vaccines is not so remote from or unrelated to the COVID-19 crisis that this action would be considered unnecessary.¹²⁰ Global access to COVID-19 vaccines would quickly remove the public health threat and burdens caused by the current pandemic. That is why a suspension of the IPRs in vaccines is tied to the close relationship of protecting essential security interests, especially in developing countries.

At first glance, the Article 73 security exceptions may appear to be a similar course of action to compulsory licensing. However, that is not entirely the case. Compulsory licenses are typically issued on a country-by-country or case-by-case basis.¹²¹ They sometimes require prior negotiations and may be limited to only specific uses.¹²² The use of compulsory licenses requires cooperation between many different parties, such as the country that holds the IPRs of the drug, the country that produces the drug, and the country that imports the drug.¹²³ Such a process will undoubtedly be time-consuming and difficult.

The Article 73 security exceptions, on the other hand, can be implemented on a global scale. Article 73 requires a heightened level of emergency and crisis compared to what is needed when using a compulsory license. Developed countries are much more secure in knowing that the security exceptions will only be used in the most extreme of circumstances, such as what is occurring during the COVID-19 pandemic. The Article 73 security exceptions are another powerful tool that could possibly prevent the issue of vaccine access in developing countries from becoming fatal during the COVID-19 crisis.

115. *Id.* at 9.

116. *Id.*

117. *Id.*

118. Abbott, *supra* note 112, at 10.

119. *Id.*

120. *Id.*

121. Ronald Labonte & Brook K. Baker, *How Trade Rules Affect Access to COVID-19 Vaccines*, THE WIRE SCI. (Jan. 12, 2021), <https://science.thewire.in/health/trade-covid-19-vaccines-waiver/>.

122. *Id.*

123. *Id.*

3. Voluntary Licensing

Lastly, developing countries would benefit tremendously if voluntary licenses for COVID-19 vaccines were implemented globally. Voluntary licenses, also referred to as voluntary pledges, allow specified products to have their IPRs ignored or used freely during a limited period of time.¹²⁴ These pledges do not directly generate monetary compensation for the product owner, so they are usually deemed economically irrational.¹²⁵ However, past uses of voluntary pledges for various technologies show developed countries are not the only beneficiaries.¹²⁶ Developed countries receive benefits such as accelerating the diffusion of emerging technology, seeking favor with governmental agencies and courts, enhancing public relations, and acting in accordance with corporate social responsibility and philanthropic goals.¹²⁷

Some may argue that a voluntary license is so similar in its effect to a compulsory license that IPR holders would vehemently reject it. Yet, voluntary licensing provides the same overall benefit to developing countries while still giving IPR holders adequate control over their products. Compulsory licenses are typically opposed by IPR holders who are forced to share their product, which will almost always lead to inadequate knowledge transfer and unmeaningful cooperation.¹²⁸ On the other hand, voluntary licenses must be initiated by the IPR holder or developed country. That way, there should be little reluctance in sharing and distributing products with developing countries, as the developed countries retain control.

The use of voluntary pledges for COVID-19 vaccines may not only be a desirable option for equitable access but a necessary one. Pharmaceutical companies such as Moderna, Inc. (“Moderna”) have publicly pledged not to enforce their patents for COVID-19 vaccines against others who are reproducing their vaccines to fight the pandemic.¹²⁹ Moderna understands that all pharmaceutical companies have a special obligation to use their resources to end the pandemic as quickly as possible.¹³⁰ However, Moderna knows that a voluntary pledge will still allow sufficient control over its vaccine and that the company will most likely be compensated in the long term.¹³¹ The company’s pledge only extends through the duration of the pandemic.¹³² After the pandemic has been deemed subdued, Moderna will require a fee-based license from developing countries that continue to use and require the company’s vaccine.¹³³ Moderna’s use of a voluntary license allows immediate assistance to developing countries in need while still providing the company economic benefits in the near future.

124. Contreras et al., *supra* note 62, at 1146.

125. *Id.*

126. *Id.* at 1147.

127. *Id.*

128. *Id.* at 1148.

129. Jorge Contreras, *Deconstructing Moderna’s COVID-19 Patent Pledge*, BILL OF HEALTH (Oct. 21, 2020), <https://blog.petrieflom.law.harvard.edu/2020/10/21/moderna-covid19-patent-pledge/>.

130. *Id.*

131. *Id.*

132. *Id.*

133. *Id.*

Further, over the next couple of years developed countries may have enough surplus vaccine to immunize everyone in the developing world.¹³⁴ The excess doses the United States would possess alone could vaccinate at least 200 million people.¹³⁵ The considerable amount of predicted excess is another reason why voluntary licenses will not negatively affect developed countries. These vaccines have already been contracted for and will only go to waste if not properly distributed and used. Developing countries would be severely wronged if the developed world did not ensure access to excess vaccines through a voluntary license.

Conclusion

To protect to developing countries during the COVID-19 crisis and for any future outbreaks, there needs to be equitable access to vaccines. Yet, the current TRIPS flexibilities of compulsory licensing and parallel importation do not provide developing countries sufficient mechanisms to obtain this access. Both methods contain procedural and practical limitations that prevent developing countries from acquiring pharmaceuticals without suffering negative financial consequences. The use of either method by developing countries for COVID-19 vaccines will leave these countries similarly harmed.

There needs to be a complete, permanent suspension of IPRs for essential medicines in developing countries. Such a suspension will ensure the global public health, economy, and national security for developing and developed countries alike. For the COVID-19 pandemic, a complete suspension of IPRs for vaccines in developing countries will be the most efficient way to battle this outbreak from a global perspective. However, because it is unlikely that such a proposal can be implemented quickly and efficiently for the pandemic, alternatives within the existing international framework are necessary. By using the TRIPS Agreement methods of tiered pricing, security exceptions, or voluntary licensing, developing countries will be able to access COVID-19 vaccines in a much more beneficial way than through compulsory licensing or parallel importation.

134. Jon Cohen & Kai Kupferschmidt, *Countries now scrambling for COVID-19 vaccines may soon have surpluses to donate*, SCI. MAG. (Mar. 9, 2021), https://www.sciencemag.org/news/2021/03/countries-now-scrambling-covid-19-vaccines-may-soon-have-surpluses-donate?utm_source=newsletter&utm_medium=email&utm_campaign=newsletter_axiosvitals&stream=top.

135. *Id.*

Updates Available?—Remind Me Later: The Case for Rebooting the Outdated Cybersecurity Framework in the U.S.

Raymond Iglesias*

Introduction

Cyberattacks are among the most pervasive, widespread, and misunderstood international threats we face as a society. On any given week, a reader taking part in their daily-news ritual can expect to learn about dozens of significant cyberattacks happening around the world. In 2020, the world saw hundreds of major attacks targeting financial institutions.¹ Cyberattacks on the energy sector and pharmaceutical industry doubled from the previous year.²

In 2021, international government agencies and technology companies also experienced a fair share of hacking incidents.³ In January 2021, hackers targeted New Zealand's central bank as well as internet service providers in the United States ("U.S."), United Kingdom ("U.K."), Egypt, Israel, Lebanon, Jordan, Saudi Arabia, and the United Arab Emirates ("U.A.E").⁴ In February 2021, Iranian hacking groups launched campaigns against Iranian dissidents across the Middle East, Europe, South Asia, and North America.⁵

For the most part, the effects of a cyberattack are invisible to the average American—there, but not there. A news article may reference a cyberattack on some large corporation that led to the breach of some data, resulting in the loss of some money. Understanding the gravity of a cyberattack is a difficult task for those without advanced degrees in coding or computer science. News of an attack routinely overwhelms individuals with esoteric terminology like malware, firmware, backdoor attack, ransomware, and supply chain attack.

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1. *Timeline of Cyber Incidents Involving Fin. Insts.*, CARNEGIE ENDOWMENT FOR INT'L PEACE, <https://carnegieendowment.org/specialprojects/protectingfinancialstability/timeline> (last visited Feb. 15, 2021).
2. *IBM Security Report: Attacks on Indust. Supporting COVID-19 Response Efforts Double*, IBM NEWSROOM (Feb. 24, 2021), <https://newsroom.ibm.com/2021-02-24-IBM-Security-Report-Attacks-on-Industries-Supporting-COVID-19-Response-Efforts-Double> [hereinafter IBM Newsroom].
3. *Significant Cyber Incidents*, CTR. FOR STRATEGIC AND INT'L STUD., <https://www.csis.org/programs/strategic-technologies-program/significant-cyber-incidents> (last visited Feb. 15, 2021).
4. *Id.*
5. *Id.*

It is all too common to feel that the effects of a cyber incident are too remote to worry about. However, this has changed since the pandemic fundamentally reshaped the definition of critical infrastructure, and hackers have adjusted accordingly.⁶ Hackers are adapting and targeting the vulnerable sectors, like those responsible for COVID-19 relief efforts.⁷ Cyberattacks on healthcare doubled in 2020.⁸ Moreover, North American industries faced more ransomware attacks than any other global region.⁹

Hospitals are now routine targets for cyberattacks. The UVM Health Network shut down all systems after a cyberattack on October 28, 2020, which infected over 5,000 network computers and lasted over forty days.¹⁰ As a result of the outage, healthcare professionals were furloughed, about three hundred workers were unable to assist patients, and the hospital reported a 63 million dollar loss in 2021.¹¹ Ryuk ransomware targeted six U.S. hospitals on October 26, 2020.¹² During the attack, the federal government discovered a target list of 400 additional hospitals circulating among Russian hackers.¹³

Recent attacks targeting U.S. hospitals shatter the misconception that cyberattacks pose a remote danger to the average American citizen. And the targeting of essential utilities by hacking groups reinforces how severe the issue is. For example, in February 2021, a cyberattack at a water treatment plant in Florida resulted in an increase of dangerous chemicals into the town's water supply.¹⁴ The prevalent dependency on technology in the average American home, private life, as well as health and financial sectors creates a readily cognizable threat.¹⁵ This threat poses risks to vehicles, home automation devices, and even pacemakers.¹⁶ The growing dependence on computers and digital networks makes natural gas pipelines,¹⁷ nuclear power plants,¹⁸ and other critical infrastructure obvious targets.

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6. IBM Newsroom, *supra* note 2 (“In essence, the pandemic reshaped what is considered critical infrastructure today, and attackers took note. Many organizations were pushed to the front lines of response efforts for the first time—whether to support COVID-19 research, uphold vaccine and food supply chains, or produce personal protective. . . . Victimology shifted as the COVID-19 timeline of events unfolded, indicating yet again, the adaptability, resourcefulness and persistence of cyber adversaries.”).
 7. Jessica Davis, *Healthcare Cyberattacks Doubled in 2020, with 28% Tied to Ransomware*, HEALTH IT SEC. (Feb. 25, 2021), <https://healthitsecurity.com/news/healthcare-cyberattacks-doubled-in-2020-with-28-tied-to-ransomware>.
 8. *Id.*
 9. *Id.*
 10. Laura Dyrda, *The 5 most significant cyberattacks in healthcare for 2020*, BECKER'S HEALTH IT (Dec. 14, 2020), <https://www.beckershospitalreview.com/cybersecurity/the-5-most-significant-cyberattacks-in-healthcare-for-2020.html>.
 11. *Id.*
 12. *Id.*
 13. *Id.*
 14. Jonathan Greig, *FBI, Secret Service investigating cyberattack on Florida water treatment plant*, TECH REPUBLIC (Feb. 9, 2021), <https://www.techrepublic.com/article/fbi-secret-service-investigating-cyberattack-on-florida-water-treatment-plant>.
 15. GEORGE LOUKAS, *CYBER-PHYSICAL ATTACKS: A GROWING INVISIBLE THREAT*, 105–143 (1st ed. 2015).
 16. *Id.*
 17. *Id.* at 23.
 18. *Id.* at 26.

The general lack of understanding of cyberthreats, coupled with the increasing number of attacks, leaves Americans with only one option—trust that the government will figure out a coherent strategy. Federal agencies hold valuable and highly confidential citizen data. The Department of Education collects financial data from students and parents for the acquisition of student loans.¹⁹ Americans with disabilities give up years of personal health records to prove that they qualify for disability benefits from the Social Security Administration.²⁰ Citizens looking to purchase homes give payroll and savings information to the Department of Housing and Urban Development to apply for loans.²¹

Government agencies also hold information related to national security, visa applications, and personal data belonging to foreign nationals.²² The Department of agriculture retains information concerning hazardous pathogens and toxins that could threaten the ecosystem.²³ With all of this information stored electronically, what happens when the U.S. agencies responsible for safeguarding it admit that they too are lost?²⁴

This note argues that the U.S.'s current cybersecurity regulation strategy is fragmented, ineffective, and should move towards the model set forth by the European Union's ("E.U.") Network and Information Security Directive ("NIS Directive"). This note further argues that the U.S. should supplement its multi-jurisdictional approach with comprehensive federal legislation to create a harmonized framework. The U.S. should mirror future cybersecurity legislation on California's Consumer Privacy Act ("CCPA"), which takes vital cues from the E.U.'s NIS Directive.²⁵

The current fragmented and multi-jurisdictional approach relies heavily on statutes such as The Health Insurance Portability and Accountability Act of 1996 ("HIPAA") and The Gramm–Leach–Bliley Act ("GLBA").²⁶ These statutes narrowly focus on specific data types while leaving out other critical information systems. This trend is harmful to the American public, who increasingly depend on the safe transfer of data. Part I of this note discusses the implications of the December 2020 cyberattack on the U.S. government while exploring the technology behind prominent modes of hacking. Part II discusses the current cybersecurity framework in the U.S. Part III examines the emerging cybersecurity framework in the E.U., highlighting its strengths and advantages over the current U.S. approach. Lastly, Part IV makes a case for implementing a hybrid of California's CCPA and the E.U. cybersecurity model to develop a harmonized cybersecurity framework in the U.S.

19. STAFF OF PERMANENT S. COMM. ON INVESTIGATIONS, 116TH CONG., REP. ON FEDERAL CYBERSECURITY: AMERICA'S DATA AT RISK (2019), <https://www.portman.senate.gov/sites/default/files/2019-06/2019.06.25-PSI%20Report%20Final%20UPDATE.pdf> [hereinafter Senate Homeland Security Report].

20. *Id.*

21. *Id.*

22. *Id.*

23. *Id.* at 2.

24. See Alex Johnson, *Federal Cybersecurity Defenses Are Critical Failures, Senate Report Warns*, NBC NEWS (June 26, 2019, 12:29 AM), <https://www.nbcnews.com/news/us-news/federal-cybersecurity-defenses-are-critical-failures-senate-report-warns-n1021816>.

25. Council Directive 2016/1148, 2016 O.J. (L 194) 1, 1–30 [hereinafter NIS Directive].

26. Health Insurance Portability and Accountability Act ("HIPAA") of 1996, Pub. L. No. 104-191, 110 Stat. 1936; Gramm-Leach-Bliley Act of 1999, Pub. L. No. 106-102, 113 Stat. 1338.

I. Still Buffering: Explicating the Current Cybersecurity Dilemma in the U.S.

A. December 2020 SolarWinds-Orion attack

In December 2020, the Trump administration announced that state-sponsored hackers broke into critical government networks related to the Commerce and Treasury Department.²⁷ As the situation unraveled, officials expected that multiple systems were compromised and required an immediate shutdown. With an upcoming election and telltale signs of foreign interference, the administration speculated that Russia was behind the attack.²⁸ The cyberattack was not merely a one-time breach or rare lapse in U.S. government data security—It was an invasive and systematic attack, akin to a “burglar . . . going in and out of your house for the last six months” without you even noticing.²⁹

Along with various U.S. government agencies, a large group of Fortune 500 companies were also affected by the Russia-based attack.³⁰ The attack, initiated in the spring, went undetected for months and involved SolarWinds, a software corporation that supplies the U.S. Government and hundreds of thousands of companies with IT systems.³¹ The attackers took advantage of a standard SolarWinds update in its Orion product.³²

How did the cyberattack go unnoticed for so long? The hack was sophisticated in nature. The government never stood a chance because it lacked the requisite defense systems needed to fend off a stealthy cyberattack from a third-party source. First, the hackers inserted electronic indicators that masked the identity of the hacking computer system to Google and other providers.³³ Second, the hackers bypassed security by “sandboxing,” a method that purposefully delayed the execution of the malware once it was in place.³⁴ After strategically delaying the attack, the installed malware determined the IP address of the infected system right before its execution.³⁵ The hackers guaranteed evasion from identification because the malware would not execute if the infected network was “Microsoft-owned or linked to a Microsoft-owned network.”³⁶

27. David E. Sanger, *Russian Hackers Broke into Federal Agencies, U.S. Officials Suspect*, N.Y. TIMES (May 10, 2021), <https://www.nytimes.com/2020/12/13/us/politics/russian-hackers-us-government-treasury-commerce.html>.

28. *Id.*

29. Bill Chappell et al., *What We Know About Russia's Alleged Hack of the U.S. Government and Tech Companies*, NPR (Dec. 21, 2021, 6:15 PM), <https://www.npr.org/2020/12/15/946776718/u-s-scrambles-to-understand-major-computer-hack-but-says-little>.

30. Mark Lanterman, *The SolarWinds Breach and Third-Party Vendor Security*, BENCH & BAR MINN. (Feb. 1, 2021), <https://www.mnbar.org/resources/publications/bench-bar/columns/2021/02/01/the-solarwinds-breach-and-third-party-vendor-security> [hereinafter Lanterman].

31. *Id.*

32. *Id.*

33. *Id.*

34. Lanterman, *supra* note 30.

35. *Id.*

36. *Id.*

B. The Aftermath

The cyberattack compromised email systems in multiple government departments.³⁷ The Department of Homeland Security, the National Security Council, and the Commerce Department were blindsided by the attack and unable to provide details aside from a statement announcing that “we have been working close with our agency partners regarding recently discovered activity on government networks.”³⁸

The U.S. government responded with emergency advisories from the Cybersecurity and Infrastructure Security Agency (“CISA”). The first advisory included an emergency directive that ordered all affected federal civilian agencies to shut down SolarWinds Orion products.³⁹ The second alert, coming four days after the first, “determined that [the] threat pose[d] a grave risk to the Federal Government and state, local, tribal, and territorial governments as well as critical infrastructure entities and other private sector organizations.”⁴⁰ The overall message from CISA promised to supply agencies and private companies information and resources to “help recover quickly from this incident.”⁴¹ Time has shown that the scope of the attack is alarming and will require serious legwork from the U.S. government for years to come.⁴²

The effects of the cyberattack likely extend beyond the “nuclear laboratories, Pentagon, Treasury, and Commerce Department systems.”⁴³ Microsoft president Brad Smith explains that “there are more nongovernmental victims than there are governmental victims, with a big focus on I.T. Companies, especially in the security industry.”⁴⁴ The attack also compromised the Energy Department and National Nuclear Security Administration.⁴⁵ The full extent of the attack took months to unravel, during which American networks and I.T. companies could have been subject to reoccurring attacks.⁴⁶

37. Jaclyn Diaz, *Russia Suspected In Major Cyberattack On U.S. Government Departments*, NPR (Dec. 14, 2020), <https://www.npr.org/2020/12/14/946163194/russia-suspected-in-months-long-cyber-attack-on-federal-agencies>.

38. *Id.*

39. The Cybersecurity and Infrastructure Security Agency, *Joint Statement by the Federal Bureau of Investigation (FBI), the Cybersecurity and Infrastructure Security Agency (CISA), and the Office of the Director of National Intelligence (ODNI)*, (Dec. 16, 2020), <https://www.cisa.gov/news/2020/12/16/joint-statement-federal-bureau-investigation-fbi-cybersecurity-and-infrastructure> [hereinafter CISA Joint Statement].

40. Andrea Carcano, *CISA Alert: Sophisticated, Ongoing Cyberattacks Go Beyond SolarWinds*, SEC. BOULEVARD (Dec. 18, 2020), <https://securityboulevard.com/2020/12/cisa-alert-sophisticated-ongoing-cyberattacks-go-beyond-solarwinds>.

41. CISA Joint Statement, *supra* note 39.

42. Lanterman, *supra* note 30.

43. David E. Sanger & Nicole Perlroth, *More Hacking Attacks Found as Officials Warn of ‘Grave Risk’ to U.S. Government*, N.Y. TIMES (July 19, 2021), <https://www.nytimes.com/2020/12/17/us/politics/russia-cyber-hack-trump.html>.

44. *Id.*

45. *Id.*

46. *Id.*

The SolarWind attack should instigate a paradigm shift in which the U.S. fundamentally changes how data is protected. President Biden echoed this sentiment when he announced that his administration “will make dealing with cybersecurity a top priority at every level of the government—and we will make dealing with this breach a top priority from the moment we take office.”⁴⁷

C. Errors Found: Senate Report on Federal Agencies’ Cybersecurity Failures

According to a ten-month long review of ten years of reports from the inspector general, Senate Homeland Security Committee, and Permanent Sub Committee on Investigations, the U.S. is in dire straits when it comes to protecting its citizens’ data.⁴⁸ The report details how government agencies are using “woefully outdated systems.”⁴⁹ Homeland Security, the U.S. federal executive department responsible for public safety and disaster prevention, still uses Windows XP and Windows Server 2003.⁵⁰ Even more concerning is that Microsoft Corp terminated support for Windows Server and Windows XP back in 2003 and 2014, respectively.⁵¹

The report notes that there were 35,277 cyber incidents involving U.S. federal agencies in 2017 alone.⁵² One of the most significant breaches reported occurred in 2015 and involved the exfiltration of over 22 million security clearance files from the pentagon.⁵³ Researchers explain that the number of data breaches reported in recent years correlates to the U.S. government’s weakened cybersecurity posture.⁵⁴ The government’s cybersecurity defense weaknesses are exacerbated by reports finding that agencies are unequipped and ill-prepared to protect citizens’ personally identifiable information (“PII”).⁵⁵

Federal agencies failed across the board when it came to adhering to basic cybersecurity guidelines.⁵⁶ Seven of the eight agencies failed to protect PII.⁵⁷ The report found that five agencies could not identify all the applications on their networks because they could not maintain comprehensive information technology assets.⁵⁸ A majority of the agencies failed to install

47. *Id.*

48. Alex Johnson, *Federal Cybersecurity defenses are critical failures, Senate report warns*, NBC NEWS (Mar. 29, 2021), <https://www.nbcnews.com/news/us-news/federal-cybersecurity-defenses-are-critical-failures-senate-report-warns-n1021816> (reporting eight U.S. Government agencies rely on outdated systems and fail to update software and patches).

49. *Id.*

50. *Id.*

51. *Id.*

52. Senate Homeland Security Report, *supra* note 19, at 3.

53. *Id.* at 1.

54. *Id.*

55. *Id.*

56. *Id.* at 3.

57. *Id.*

58. Senate Homeland Security Report, *supra* note 19, at 3.

vital patches to their networks.⁵⁹ Many of the agencies failed to maintain valid authorities to operate, which certify and protect from system vulnerabilities.⁶⁰ Agencies also showed overreliance on legacy systems that are “costly and difficult to secure.”⁶¹ The report concluded that the agency failures could be attributed to the following: (1) the “reliance on legacy information technology;” (2) “limited situational awareness;” (3) “limited network visibility;” and (4) “lack of accountability for managing risks.”⁶²

The U.S. Government Accountability Office (“GAO”) determined that the federal government spent more than 75 percent of the total budget for IT on maintaining legacy systems in 2015.⁶³ Most of the spending is aimed at maintaining obsolete systems with outdated software languages and hardware parts.⁶⁴ At the time of the 2015 GAO report, the Department of Defense (“DOD”) used eight-inch floppy disks in a legacy system that coordinated the nation’s nuclear force operational functions.⁶⁵ The department of the Treasury used a computer language from the 1950’s.⁶⁶ Multiple government agencies used unsupported Windows XP and Windows 2003 operating systems.⁶⁷

Reliance on legacy systems, while posing significant risks to cybersecurity, is costly. In 2015, the U.S. spent \$61.2 billion on maintaining outdated systems and only \$19.2 billion on updating and modernizing existing systems.⁶⁸ These figures show that government spending is one of the primary issues when it comes to legacy system overreliance. The bottom line is that agencies are hindered by inefficient spending and left “unable to comply with critical cybersecurity statutory and policy requirements.”⁶⁹

In May 2017, “President Trump issued an executive order that stated, ‘the executive branch has far too long accepted antiquated and difficult to defend IT.’”⁷⁰ Executive Order 13800 urged that maintenance, improvements, and modernization occur in a “coordinated way and with appropriate regularity.”⁷¹

59. *Id.* (“Vendors issue security patches to secure vulnerabilities. Hackers exploit these vulnerabilities during data breaches. Depending on the vulnerability and abilities of the hacker, the vulnerability may allow access to the agency’s network.”).

60. *Id.*

61. *Id.* (“Legacy systems are systems a vendor no longer supports or issues updates to patch cybersecurity vulnerabilities.”).

62. *Id.* at 16–32.

63. U.S. GOV’T ACCOUNTABILITY OFF., GAO 16-696T, *Information Technology: Federal Agencies Need to Address Aging Legacy Systems* (May 25, 2016), at 6, <https://www.gao.gov/assets/gao-16-696t.pdf> [hereinafter GAO Report].

64. *Id.*

65. *Id.*

66. *Id.*

67. Senate Homeland Security Report, *supra* note 19, at 4.

68. GAO Report, *supra* note 63, at 7.

69. *Id.* at 4. (In 2015, 5,233 out of 7,000 government investments were spent on upkeeping legacy systems resulting in a \$7.3 billion decline in development and modernization of existing systems.).

70. Senate Homeland Security Report, *supra* note 19, at 16.

71. Exec. Order No. 13800, 82 Fed. Reg. 22,391 (May 11, 2017).

In its 2018 Risk Determination Report and Action Plan, The Office of Management and Budget (“OMB”) determined that “agencies do not understand and do not have the resources to combat the current threat environment.”⁷² The report highlights the fact that threat actors are sophisticated, and government agencies’ defenses are not.⁷³ Federal agencies cannot effectively determine threat actors’ “motivations and methods for staging cyber-attacks.”⁷⁴ The report goes on to reveal that the departments tasked with defending agency networks “lack timely information regarding tactics, techniques, and procedures that threat actors use to exploit government information systems.”⁷⁵

When it comes to identifying threat actors and attack vectors, federal agencies are in the dark. In 2016, federal agencies could not identify the attack vector or method of attack in 11,802 out of the 30,899 cyber incidents.⁷⁶ Only 59% of agencies reported having systems in place to allow for reporting and communication regarding cyber threats; in response, the OMB report suggested the implementation of the Cyber Threat Framework.⁷⁷

The OMB also found that “agencies lack visibility into what is occurring on their networks and most notably lack the ability to detect data exfiltration.”⁷⁸ Lack of standardization, organization, and outdated technology hinders network visibility at the federal agency level.⁷⁹ The overall lack of standardization of systems and technology leads to a situation where “agencies cannot apply a single solution to address specific cybersecurity challenges and eventually reduce their overall attack surface.”⁸⁰

The OMB notes that limited network visibility and currently decentralized IT landscape led to “ineffective identity, credential, and access management [] processes.”⁸¹ Additionally, “only 27 percent of agencies have the ability to detect and investigate attempts to access large volumes of data.”⁸² This means that a shocking 73 percent of agencies cannot detect data exfiltration from their networks.⁸³

72. Senate Homeland Security Report, *supra* note 19, at 32 (quoting OFFICE OF MGMT. & BUDGET, FEDERAL CYBERSECURITY RISK DETERMINATION REPORT AND ACTION PLAN, 2 (2018)).

73. OFFICE OF MGMT. & BUDGET, FEDERAL CYBERSECURITY RISK DETERMINATION REPORT AND ACTION PLAN, 6 (2018) [hereinafter OMB Risk Determination Report] (“Federal agencies’ and private organizations’ ability to determine threat actors’ motivations and methods for staging cyber-attacks has not improved.”).

74. *Id.* at 6.

75. *Id.*

76. *Id.* (“38% of Federal cyber incidents did not have an identified attack vector, suggesting limited situational awareness.”).

77. *Id.* at 6–7 (explaining that the Cyber Threat Framework “demonstrates the potential impact of current threats by using an analysis-driven, repeatable process to synchronize and balance cybersecurity investments, minimize redundancies, eliminate inefficiencies, and improve all-around mission performance”).

78. Senate Homeland Security Report, *supra* note 19, at 33.

79. OMB Risk Determination Report, *supra* note 73, at 12.

80. *Id.*

81. *Id.*

82. Senate Homeland Security Report, *supra* note 19, at 33.

83. *Id.*

Issues concerning the lack of network visibility consistently overlap with overreliance on legacy systems. For example, one agency used 62 different email services, “making it virtually impossible to track and inspect inbound and outbound communications across the agency.”⁸⁴ The report also indicated that only 49 percent of agencies could whitelist (the process where agencies authorize applications for use in various organizations).⁸⁵ Federal agencies across the board also failed to manage access to their systems in a way that a given user’s access was limited to only the information required to perform their roles.⁸⁶

The last finding made by the OMB report concerned the “lack [of] standardized and enterprise-wide processes for managing cybersecurity risks.”⁸⁷ The OMB found that most agencies delegated cybersecurity compliance tasks to Chief Information Officers (“CIOs”).⁸⁸ The report indicated that this delegation was concerning because CIOs lack the authority necessary to make organization-wide decisions.⁸⁹ Overall, the federal agencies’ awareness and accountability structures were “uneven across the Federal enterprise.”⁹⁰

D. Ignoring the Warning Signs

Despite the critical state of U.S. cybersecurity, government officials, policymakers, and agencies have been slow in implementing the necessary systems to combat cyber threats. The GAO has made over 3,000 recommendations to federal agencies to address cybersecurity weaknesses.⁹¹ Around 600 of these recommendations (including 75 high-priority recommendations) have not been fully implemented.⁹²

The GAO has also reported on the need for clearly defining “a central leadership role to coordinate the government’s efforts to overcome the nation’s cyber-related threats and challenges.”⁹³ As it stands, it is challenging to determine which government officials are responsible for coordinating the execution of the various GAO recommendations.⁹⁴ Moreover, once agencies implement plans for rolling out the recommendations, there is no central leadership position responsible for maintaining accountability.⁹⁵

84. *Id.*

85. *Id.*

86. *Id.*

87. *Id.* at 34.

88. OMB Risk Determination Report, *supra* note 73, at 17.

89. *Id.*

90. *Id.*

91. U.S. GOV’T ACCOUNTABILITY OFF., GAO 21-288, High-Risk Series: Federal Government Needs to Urgently Pursue Critical Actions to Address Major Cybersecurity Challenges (Mar. 4, 2021), <https://www.gao.gov/assets/gao-21-288.pdf>.

92. *Id.*

93. U.S. GOV’T ACCOUNTABILITY OFF., GAO 20-629, *Cybersecurity: Clarity of Leadership Urgently Needed to Fully Implement the National Strategy* (Sep. 22, 2020), <https://www.gao.gov/products/gao-20-629>.

94. *Id.*

95. *Id.*

The GAO reports get to the heart of the U.S. cybersecurity issue: there is an inherent lack of centralized leadership to coordinate activities, monitor progress, and maintain accountability. The U.S. has no other choice but to fall back on a set of fragmented statutes that do not consistently protect personally identifiable information in most circumstances.⁹⁶

II. A Patchwork System: The Current U.S. Cybersecurity Framework

A. How the U.S. Defines Cybersecurity and Information Systems

With information from GAO memoranda, it is apparent that the U.S. government has a problem when it comes to protecting against cyber threats. When looking into the root cause of these inadequacies, it is crucial to understand *how* the U.S. goes about cybersecurity. The U.S. employs an “uncoordinated and mishmash of requirements that mostly were conceived long before modern cyber-threats.”⁹⁷ The U.S. derives much of its cybersecurity legislation from “century-old privacy norms, torts, and criminal laws that bear little relation to the protection of the confidentiality, integrity, or availability of systems, networks, and data.”⁹⁸

While outdated laws are a significant cause for concern, many overlook the lack of a consistent definition of “cybersecurity” in the U.S.⁹⁹ Often, the term “cybersecurity” is conflated with the term “data security.”¹⁰⁰ The U.S. approach has focused on data security for far too long. While data security is essential to cybersecurity, it is only one part of the equation.¹⁰¹ The norm has been for legislators to focus on securing specific categories of data, subsequently forgetting to develop security systems and networks that would protect all information as a whole.¹⁰²

Congress defines the term “information systems” as “a discrete set of information organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information.”¹⁰³ Further, 44 U.S.C §3502 defines “information resources” as “information and

96. U.S. GOV'T ACCOUNTABILITY OFF., GAO 21-288, High-Risk Series: Federal Government Needs to Urgently Pursue Critical Actions to Address Major Cybersecurity Challenges (Mar. 4, 2021), <https://www.gao.gov/products/gao-21-288>.

97. Jeff Kosseff, *Defining Cybersecurity Law*, 103 IOWA L. REV. 985, 988 (2018).

98. *Id.*

99. *Id.*

100. *Id.* at 995.

101. *Id.*

102. *Id.* at 996–97.

103. Eric A. Fischer, CONG. RSCH. SERV., R42114, FEDERAL LAWS RELATING TO CYBERSECURITY: OVERVIEW OF MAJOR ISSUES, CURRENT LAWS, AND PROPOSED LEGISLATION (2021) [hereinafter Fischer].

related resources, such as personnel, equipment funds, and information technology.”¹⁰⁴ Between the two definitions provided in §3502, we get no insight into the “somewhat fuzzy concept” of cybersecurity.¹⁰⁵

The definitions are also conflicting. The Interagency Committee on National Security Systems defines “cybersecurity” as “the ability to protect or defend the use of cyberspace from cyberattacks.”¹⁰⁶ The Cybersecurity Act of 2010 defines “cybersecurity” as synonymous with “information security.”¹⁰⁷ The lack of a concrete definition of cybersecurity causes confusion between lawmakers and policymakers. This confusion inevitably resurfaces in statutes dealing with data protection because the scope and goals of data security legislation are never adequately defined.¹⁰⁸

B. The Statutory Approach

The U.S. and the E.U. are at the top of the list when it comes to producing the largest amount of consumer data in the international community.¹⁰⁹ However, the way they protect their data could not be more different.¹¹⁰ The E.U. centralizes its cyber defense decision-making authority by using an advanced framework composed of Directives. Alternatively, the U.S. addresses cyber threats through a complicated network of statutes and executive orders. Currently, over 50 U.S. statutes deal with cybersecurity either directly or indirectly, with no overarching framework.¹¹¹ These statutes have been revised over the years but continue to lag behind the advancement and sophistication of technology.

A majority of the statutes that involve cybersecurity focus on narrow areas of data protection.¹¹² These areas include the following: sharing of information between private and government entities; protection of privately held critical infrastructure; protection of federal systems; reform of the Federal Information Security Management Act (“FISMA”); and research and development.¹¹³

104. *Id.*

105. *Id.* According to the National Initiative for Cybersecurity Careers and Studies, “cybersecurity” should be defined as “[t]he activity or process, ability or capability, or state whereby information and communications systems and the information contained therein are protected from and/or defended against damage, unauthorized use or modification, or exploitation.” Kosseff, *supra* note 97, at 997.

106. Fischer, *supra* note 103, at 1.

107. *Id.*

108. Kosseff, *supra* note 97, at 987.

109. Bhaskar Chakravorti, *Which Countries Are Leading the Data Economy?*, Harvard Business Review (Feb. 9, 2021), <https://hbr.org/2019/01/which-countries-are-leading-the-data-economy>.

110. Stuart A. Panensky, *European Union vs. United States: approaches to cybersecurity*, ADVISEN (Feb. 14, 2021), <https://www.advisenltd.com/2014/11/06/european-union-vs-united-states-approaches-to-cybersecurity>.

111. Fischer, *supra* note 103, at 1.

112. *Id.*

113. *Id.*

Some of the earliest acts dealing with cybersecurity are the Counterfeit Access Device and Computer Fraud and Abuse Act of 1984 (which prohibits attacks on federal computer systems) and the Electronic Communications Privacy Act of 1986 (which prohibits unauthorized electronic eavesdropping).¹¹⁴ In 1987, Congress passed the Computer Security Act, which gave the National Institution of Standards and Technology (“NIST”) the responsibility to develop cybersecurity standards for federal computer systems.¹¹⁵

The first statute dealing specifically with federal agency cybersecurity was the Federal Information Security Management Act of 2002 (“FISMA”).¹¹⁶ FISMA was an update of the Government Information Security Reform Act of 2001 (“GISRA”), which required Chief Information Officers to develop a “risk-based security management program covering all operations and assets of the agency.”¹¹⁷ GISRA also required each agency to conduct annual evaluations of its information security program.¹¹⁸

In 2002, Congress passed the Homeland Security Act (“HSA”), which authorized the Department of Homeland Security (“DHS”) to take part in cybersecurity responsibilities beyond those pertaining to homeland security and infrastructure.¹¹⁹ Congress also enacted the Cyber Security Research and Development Act (“CSRDS”), which established research goals for the National Science Foundation. The CSRDS was followed by FISMA, which made the OMB responsible for “promulgating federal cybersecurity standards.”¹²⁰

Despite passing FISMA, Congress realized that securing federal agency information was still a major problem.¹²¹ In 2012, GAO discovered that most federal agencies were unable to identify unauthorized access to their systems.¹²² The 2012 GAO report also noted that all 24 agencies had inadequate power to address “unauthorized changes to information system resources.”¹²³ What is more, the OMB, which had the “lead statutory authority over federal cybersecurity” under FISMA, delegated its authority to the Department of Health and Safety (“DHS”).¹²⁴ This power delegation created an accountability nightmare, leaving agencies and officials confused about who was in charge.¹²⁵

114. Fischer, *supra* note 103, at 2.

115. *Id.*

116. Senate Homeland Security Report, *supra* note 19, at 17.

117. *Id.*

118. *Id.*

119. Fischer, *supra* note 103, at 2.

120. *Id.*

121. Senate Homeland Security Report, *supra* note 19, at 17.

122. *Id.* at 17–18.

123. *Id.* at 18.

124. *Id.*

125. *Id.*

Congress attempted to address these issues in the Federal Information Security Modernization Act of 2014 (the “2014 FISMA”).¹²⁶ The 2014 FISMA handled the accountability issue from the 2002 FISMA by establishing OMB as the department responsible for “develop[ing] and oversee[ing] ‘the implementation of policies, principles, standards, and guidelines on information security.’”¹²⁷ The 2014 FISMA also “required the DHS to ‘administer the implementation of agency information security policies and practices for information systems.’”¹²⁸

In 2014, Congress also passed the Cybersecurity Enhancement Act (“CEA”), “which updated NIST’s role to ‘facilitate and support the development of a voluntary consensus-based, industry-led set of standards, guidelines, best practices, methodologies, procedures, and processes to cost-effectively reduce cyber risks to critical infrastructure.’”¹²⁹

Under the power granted by the CEA, the NIST enacted its Framework for Improving Critical Infrastructure Cybersecurity on April 16, 2018.¹³⁰ This framework “sought to improve organizational risk management” by using “risk management processes ‘to enable organizations to inform and prioritize decisions regarding cybersecurity.’”¹³¹ The framework “encourages frequent risk assessments ‘to help organizations select target states for cybersecurity activities that reflect desired outcomes.’”¹³²

C. Executive Actions

The current executive branch structure gives cybersecurity responsibilities to each agency as follows:

- DHS protects the .gov domain and oversees critical infrastructure protection.¹³³
- OMB promulgates and enforces FISMA requirements.¹³⁴
- NIST develops FISMA requirements and standards.¹³⁵
- The Department of Justice (“DOJ”) is tasked with law enforcement concerning cybersecurity.¹³⁶

126. *Id.*

127. Senate Homeland Security Report, *supra* note 19, at 18.

128. *Id.*

129. *Id.* at 20.

130. *Id.* at 20–21.

131. *Id.*

132. *Id.*

133. Fischer, *supra* note 103, at 4.

134. *Id.*

135. *Id.*

136. *Id.*

- DOD and the National Security Agency (“NSA”) deal with Military operations and protect national security systems.¹³⁷
- The Intelligence Community (“IC”) deals with intelligence and collection operations.¹³⁸
- Sector-specific regulatory agencies protect critical infrastructure.¹³⁹

Historically, U.S. presidents have supplemented the agency cybersecurity structure by way of issuing executive orders. President Trump signed Executive Order 13800 on May 11, 2017, which required that agencies improve specific issues by addressing cybersecurity risks.¹⁴⁰ The Bush Administration established the Comprehensive National Cybersecurity Initiative (“CNCI”) in 2008 through National Security Presidential Directive 54.¹⁴¹ In December 2009, the Obama Administration was responsible for appointing the first White House Cybersecurity Coordinator.¹⁴² In February 2013, the Obama Administration also signed Executive Order 13636 to improve critical infrastructure cybersecurity.

As it stands, the U.S. cybersecurity framework is the product of over thirty years of patchwork statutes and executive actions. As technology advances, Congress and the executive branch are perpetually forced to revisit, modernize, correct, and reform many of these statutes. The current legislative framework, composed of laws that target specific data types, struggles to keep up with evolving technology. Aside from the previously mentioned acts, Congress enacted the Paperwork Reduction Act of 1995, which gave the OMB responsibility for implementing cybersecurity procedures.¹⁴³ Passed in 1996, the Clinger Cohen Act gave authority to agency heads and the Secretary of Commerce to promulgate security standards.¹⁴⁴ The E-Government Act of 2002 was put into place to guide federal IT management systems.¹⁴⁵

Aside from the nine acts mentioned in this note, over forty other laws that have provisions dealing with cybersecurity that are pending revision and modification.¹⁴⁶ The 111th Congress proposed over sixty proposals and resolutions concerning cybersecurity.¹⁴⁷ The 112th and 113th Congresses introduced over forty bills and resolutions each.¹⁴⁸

137. *Id.*

138. *Id.*

139. Fischer, *supra* note 103, at 4.

140. Senate Homeland Security Report, *supra* note 19, at 21.

141. Fischer, *supra* note 103, at 3.

142. *Id.* at 4–5.

143. *Id.* at 2.

144. *Id.*

145. *Id.*

146. *Id.* at 3.

147. Fischer, *supra* note 103, at 3.

148. *Id.*

Even with such a comprehensive range of statutes dealing with cybersecurity, the U.S. continues to face serious data security issues. The current legislative framework is confusing and fragmented. Under the existing structure, the statutes rarely overlap, and agencies continuously delegate their cybersecurity responsibilities to other departments creating major accountability issues.¹⁴⁹ The U.S. needs an overarching framework that will meet the challenges posed by the rapid advancement of cyber threats—something such as the E.U.’s NIS Directive. By adopting a cybersecurity framework that mirrors the NIS Directive, the U.S. will effectively centralize decision-making authority, create accountability, and protect critical infrastructure.

III. The Update We’ve Been Waiting for: E.U.’s Network and Information Security Directive

The NIS Directive was introduced in 2016 as the E.U.’s first horizontal legislation geared towards protecting network and information systems across the E.U. The Directive responds to the rising threat of cyber-attacks to the operation and function of the E.U.’s internal market. This comprehensive approach focuses on “measures with a view to achieving a high common level of security of network and information systems within the [E.U.] so as to improve the functioning of the internal market.”¹⁵⁰ This legislative measure extends across the entire E.U., requiring all members to adhere to strict security obligations. The Directive emphasizes improving cooperation between member states when it comes to tackling cybersecurity issues and protecting critical infrastructure.

In the preamble, the NIS Directive states that “the magnitude, frequency, and impact of security incidents are increasing, and represent a major threat to the functioning network and information systems.”¹⁵¹ The purpose of the NIS Directive is to facilitate “discussions and exchanges on good policy practices” and facilitate European cyber-crisis cooperation through a “Cooperation Group, composed of representatives of Member States, the commission, and the E.U. Agency for Network and Information Security (‘ENISA’).”¹⁵²

A. Breaking Down the Directive: Articles 1–27

Made up of 27 articles, the NIS Directive sets out the obligations of member states, outlines national strategies, appoints national authorities, and creates a single point of contact for reporting incidents.¹⁵³ Articles 1–6 set out the scope and definitions while clarifying “the identification of operators of essential services.”¹⁵⁴ Articles 7–10 detail the national framework that each member state is required to adopt regarding “the security of network and information sys-

149. *Id.* at 2.

150. NIS Directive, *supra* note 25, at 11.

151. *Id.* at 1.

152. *Id.* at 1–2.

153. Dimitra Markopoulou et al., *The new EU cybersecurity framework: The NIS Directive, ENISA’s role and the General Data Protection Regulation*, 35 COMPUT. L. & SEC. R. 1, 2 (2019) [hereinafter *Cybersecurity Framework*].

154. *Id.*

tems.”¹⁵⁵ Articles 11–13 outline the cooperation mechanism.¹⁵⁶ Articles 14–18 give detailed security requirements and incident reporting strategies for operators of essential services and digital service providers.¹⁵⁷ Articles 19 and 20 detail the adoption of standards and voluntary notification procedures.¹⁵⁸ Lastly, articles 21–27 discuss the final provisions of the NIS Directive.¹⁵⁹

Article 5 deals with definitions of terms such as “operators of essential services” (“OES”) and digital service providers (“DSPs”). Specifically, OESs are entities that “provide a service which is essential for the maintenance of critical societal and/or economic activities.”¹⁶⁰ To be identified as an OES, the entity needs to demonstrate that an incident “would have significant disruptive effects on the provision of [their] service.”¹⁶¹

While Article 5 lays out a comprehensive list of OES and DSPs, it does so in a way that encourages member states to update that list continuously. Even though OES and DSPs had to be identified by November 9, 2018, the Directive requires member states to update their lists every two years to accommodate any shifts in the market.¹⁶² Key provisions like these ensure that Member States expand and apply security wherever needed.

Article 4, in part, defines “network and information systems” as “any device or group of interconnected or related devices . . . pursuant to a program, perform automatic processing of digital data; or digital data stored, processed, retrieved or transmitted . . . for the purposes of their operation, use, protection, and maintenance.”¹⁶³ Within Article 4, you can find definitions of cutting-edge technological terms that are typically left out of U.S. legislation. For example, Article 4 defines “online search engine” as “a digital service that allows users to perform searches of . . . all websites . . . on the basis of a query on any subject.”¹⁶⁴ The Directive even tackles terms like “cloud computing service,” which is defined as a “service that enables access to a scalable and elastic pool of shareable computing resources.”¹⁶⁵

Article 6, titled “Significant disruptive effect,” defines whether an incident will qualify as significant. This article also considers factors such as: the number of users relying on the service provided; dependency of other sectors on the service; the impact that incidents could have on

155. *Id.*

156. *Id.*

157. *Id.*

158. *Id.*

159. *Cybersecurity Framework, supra* note 153.

160. NIS Directive, *supra* note 25, art. 5.

161. *Id.*

162. *Cybersecurity Framework, supra* note 153, at 3.

163. NIS Directive, *supra* note 25, art. 4.

164. *Id.*

165. *Id.*

economic and societal activities; the market share of the entity; the geographic spread concerning the area that could be affected by an incident; and the importance of the entity for maintaining a sufficient level of the service.¹⁶⁶

Article 7, titled “National strategy on the security of network and information systems,” outlines the goals and strategic objectives behind adopting the Directive.¹⁶⁷ Further, each member state must adopt a strategy that addresses (1) governance, (2) identification of measures, (3) training programs, (4) research plans, (5) risk assessment plans, and (6) a list of actors involved in implementing the plan.¹⁶⁸ Overall, accountability structures and rollout plans are the central features of Article 7.

Article 8 outlines the common point of contact for all member states for incident response: the Computer Security Incident Response Teams (“CSIRTs”) and the Cooperation Group.¹⁶⁹ The single point of contact outlined in this article is a “cross-border cooperation of member state authorities” that connects with the relevant authorities in other member states.¹⁷⁰ Once again, the Directive calls for member states to notify the Commission of the delegation of each competent authority and single point of contact.¹⁷¹ Article 8 ensures that there are no accountability issues when dealing with cyber incidents.

The goals and mechanisms behind cooperation and cohesiveness are outlined in articles 11–13. Specifically, the Directive calls for a network of CSIRTs that would allow the CSIRTs to exchange information while discussing and identifying cross-border incidents. Discussions include “categories of risks and incidents,” “early warnings,” “mutual assistance,” and “principles and modalities for coordination.”¹⁷²

Articles 14–18 establish requirements for incident reporting for OES and digital service providers. Article 15, in particular, defines the powers that member states have to assess compliance of operators of essential services with their obligation found in Article 14.¹⁷³ Article 15 ensures that member states have the power to conduct security audits and issue binding instructions to the operators of essential services “to remedy the deficiencies identified.”¹⁷⁴ Article 18 establishes that digital service providers not established in the E.U. “shall designate a representative in the [E.U].”¹⁷⁵

166. *Id.* art. 6.

167. *Id.* art. 7.

168. *Id.* at art. 7.

169. NIS Directive, *supra* note 25, art. 8.

170. *Id.*

171. *Id.*

172. *Id.* at art. 12.

173. *Id.* at art. 15.

174. *Id.*

175. NIS Directive, *supra* note 25, art. 18.

Articles 19 and 20 go over standardization and voluntary notification. Article 19 sets out that “Member States shall, without imposing or discriminating in favour of the use of a particular type of technology, encourage the use of European or internationally accepted standards and specifications.”¹⁷⁶ Article 20 allows for providers who are not OESs or DSPs to voluntarily report incidents “having a significant impact on the continuity of the services which they provide.”¹⁷⁷ The notification scheme serves a gatekeeping function, “sorting the wheat from the chaff” and allowing operators to respond to high-risk incidents “without undue delay.”¹⁷⁸

Finally, Articles 21–27 deal with sanctions, committee procedures, review processes, transitional measures, and other final provisions. Article 21 allows member states to create the rule for penalties “applicable to infringements of national provisions adopted pursuant to this directive,” so long as they are “effective, proportionate, and dissuasive.”¹⁷⁹

As the first of its kind at the E.U. level, the NIS Directive takes a unique approach to manage data security. The E.U. legislation does not seek to regulate all data sectors in a heavy-handed manner. Instead, the Directive takes on a flexible approach.¹⁸⁰ With flexibility as its primary tool of choice, the Directive is postured to effectively regulate a sector “under constant reform and development.”¹⁸¹

B. Applying Lessons from the NIS Directive to U.S. Cybersecurity

The four major issues that the U.S. faces when it comes to cybersecurity are: (1) the lack of accountability; (2) lack of agency visibility; (3) lack of standardized and enterprise-wide processes for managing cybersecurity risks; and (4) no clear cybersecurity framework encouraging cooperation between the U.S. states. The NIS Directive effectively addresses each of these issues in a clear and commonsense manner.

Article 6 of the NIS Directive sets out the goals and scope of cybersecurity throughout the E.U. Article 7 tackles the issue of accountability by requiring member states to inform the Commission who the individual member state chose to authorize. The NIS Directive has a clear structure of accountability. When it comes to understanding who is in charge, the U.S. falls victim to repeated delegations of responsibility. Article 8 of the NIS Directive establishes a single point of contact for reporting cyber incidents. Articles 21–27 also establish a baseline for standardized and enterprise-wide practices. The Directive also allows for member states to implement and regulate based on what is best for their territory.

176. *Id.* at art. 19.

177. *Id.* at art. 20.

178. Emily Pehrsson, *Protecting Consumers from Data Breaches: Regulatory Approaches in the European Union, United States, and India* 13 (Stan.-Vienna TTLF, Working Paper No. 45, 2019) [hereinafter Pehrsson].

179. NIS Directive, *supra* note 25, art. 21.

180. *Cybersecurity Framework*, *supra* note 153, at 7.

181. *Id.*

The U.S. could consolidate its fragmented and patchwork system of statutes and executive orders by taking cues from the E.U. and adopting a cybersecurity framework similar to the E.U.'s NIS Directive. The E.U. has dramatically benefited from implementing the NIS Directive. Countries within Europe rose to the top of the Global Cybersecurity Index ("GCI") improving overall consumer confidence.¹⁸² California, among other states, has taken notice of the benefits of the E.U. model and put together an effective piece of cybersecurity legislation in the CCPA.

IV. The California Model

The California Consumer Privacy Act ("CCPA"), enacted in 2018, gives consumers "a private right of action against organizations that breach their duty to 'implement and maintain reasonable security procedures and practices.'"¹⁸³ Under the CCPA, consumers can take action in response to data breaches when regulators fail to do so.¹⁸⁴ The current U.S. framework is overburdened and strained by a high volume of breaches. Without the specific gatekeeping provisions found in the NIS Directive, the U.S. struggles to provide the remedies consumers seek. The CCPA places procedural justice directly in the consumer's hands, allowing them to pursue legal action and have their claims heard.¹⁸⁵ In allowing consumers to pursue their own claims, the CCPA provides the government with a "safety valve."¹⁸⁶

The CCPA defines personal data breaches as "any consumer whose nonencrypted or nonredacted personal information . . . is subject to an unauthorized access and exfiltration, theft, or disclosure" This definition encourages companies to routinely encrypt and redact personal information.¹⁸⁷ The CCPA enforces its provisions by awarding consumers with actual damages and aggressive penalties for breach starting "\$100-\$750 per person per incident."¹⁸⁸ The penalty structure of the CCPA, in combination with the U.S. class action law, deter companies from engaging in risky behavior with consumer data.¹⁸⁹

The CCPA employs both a "reasonable" and "appropriate" standard.¹⁹⁰ The application of this standard relied heavily on how neighboring states would rule within their jurisdictions.¹⁹¹ This approach allows companies to comply without overinvesting in safeguards.¹⁹² A company

182. Pehrsson, *supra* note 178, at 15.

183. *Id.* at 25.

184. *Id.*

185. *Id.*

186. *Id.*

187. *Id.* at 26.

188. Pehrsson, *supra* note 178, at 26.

189. *Id.* at 26–7.

190. *Id.* at 28.

191. *Id.*

192. *Id.*

need only undertake measures that they find reasonable and appropriate to protect the processing of data.¹⁹³ While penalties for failing to abide by the CCPA guidelines are steep, the costs of compliance are reasonable.

After the implementation of the CCPA in 2020 and subsequent success, data security experts predict that similar legislation will quickly proliferate to other states looking to bolster data protection and protect consumers.¹⁹⁴ California's strong stance on formulating consumer-based legislation has inevitably set the standard for cybersecurity in the U.S.

Conclusion

Most of the time, hackers take the path of least resistance by targeting weakened and vulnerable systems. The best way to do this is by taking unprotected information and targeting data that is not explicitly covered by U.S. law.¹⁹⁵ The U.S. government primarily focuses its cybersecurity efforts on protecting PII, leaving out non-PII that includes valuable information (corporate intellectual property and correspondence between high-level corporate officials).¹⁹⁶

The current patchwork U.S. cybersecurity framework takes an unbalanced and reactionary approach that focuses on data and not the "information system as a whole."¹⁹⁷ This approach leaves gray areas that allow hackers to engage in targeted destruction of non-PII data and DOS attacks without sending red flags to government authorities.¹⁹⁸ While the U.S. system is comprehensive, the system leads to confusion and frustration for businesses seeking to comply with various cybersecurity laws and regulations across the country.¹⁹⁹

While the U.S. performs well against other nations when it comes to cybersecurity (ranking second on the GCI), improvement is within close reach.²⁰⁰ The U.S. can effectively bolster its cybersecurity framework by mirroring the E.U.'s NIS Directive and working with states to adopt cybersecurity legislation similar to California's CCPA. Other measures that it could take – although not discussed in depth in this note – could also include expanding the role of CISA; and "establish[ing] a National Cyber Director to advise the U.S. president and coordinate national strategy on cyber issues."²⁰¹ Achieving a national cybersecurity regulatory framework will serve to combat the current reactionary and fragmented nature of the U.S. cybersecurity system.

193. *Id.* at 28–9.

194. Forbes Technology Council, *How Will California's Consumer Privacy Law Impact The Data Privacy Landscape?*, FORBES (Feb. 25, 2021), <https://www.forbes.com/sites/forbestechcouncil/2018/08/20/how-will-californias-consumer-privacy-law-impact-the-data-privacy-landscape/?sh=51d5bebde922>.

195. Andy Green, *Cybersecurity Laws Get Serious: EU's NIS Directive*, VARONIS (Feb. 21, 2021), <https://www.varonis.com/blog/cybersecurity-laws-get-serious-eus-nis-directive>.

196. *Id.*

197. *Id.*

198. *Id.*

199. Pehrsson, *supra* note 178, at 22–3.

200. *Id.*

201. Patrick Tucker, *More Industry Regulations Are Needed to Improve US Cybersecurity, Congressional Report Says*, DEFENSE ONE (Feb 20, 2021), <https://www.defenseone.com/technology/2020/03/more-industry-regulations-are-needed-improve-us-cybersecurity-congressional-report-says/163697>.

Fuld v. Palestine Liberation Org.

No. 20-CV-3374 (JMF), --- F.Supp.3d ----, 2022 WL 62088 (S.D.N.Y. Jan. 6, 2022)

The United States District Court for the Southern District of New York granted the Palestine Liberation Organization's motion to dismiss for lack of personal jurisdiction over Plaintiffs' claim under the Promoting Security and Justice for Victims of Terrorism Act because a "deemed consent" jurisdiction is not consistent with the requirements of due process. Congress cannot simply decree that any conduct, regardless of its connection to the United States, signals a party's intent to submit to jurisdiction in the United States.

I. Holding

Recently, in *Fuld v. Palestine Liberation Org.* in the United States District Court for the Southern District of New York, Plaintiffs asserted that there was personal jurisdiction over the Defendants, the Palestine Liberation Organization ("PLO") and the Palestinian Authority ("PA"), under the Promoting Security and Justice for Victims of Terrorism Act ("PSJVTA") because the Defendants could be "deemed to have consented to personal jurisdiction" by engaging in certain specified conduct, which included paying the families of terrorists who killed an American.¹ The Court disagreed and determined that such "deemed consent" jurisdiction was inconsistent with the Due Process Clause of the U.S. Constitution.² Judge Jesse M. Furman called such consent "a legislative sleight of hand" that "create[s] . . . jurisdiction out of whole cloth" and explained that "Congress cannot, consistent with the Constitution, simply decree that any conduct, without regard for its connections to the [U.S.] generally or to litigation in the [U.S.] specifically, signals a party's intent to submit to the jurisdiction of a [U.S.] court."³ Judge Furman granted the Defendants' motion to dismiss for lack of personal jurisdiction.⁴

II. Facts and Procedure**A. Background**

Plaintiffs are the wife and four children of Ari Fuld, an American citizen who was killed in the West Bank.⁵ The PA is the "interim governance authority for the Palestinian people in Gaza and the West Bank."⁶ The PLO is the UN-recognized representative of the Palestinian people.⁷

1. *Fuld v. Palestine Liberation Org.*, No. 20-CV-3374 (JMF), --- F.Supp.3d ----, 2022 WL 62088, at *1 (S.D.N.Y. Jan. 6, 2022).

2. *Id.*

3. *Id.*

4. *Id.*

5. *Id.* at *1.

6. *Id.*

7. *Id.*

On September 16, 2018, Ari Fuld was murdered by a Palestinian national, Khalil Yousef Ali Jabarin, “outside a mall in Gush Etzion, a settlement located in the West Bank.”⁸ Plaintiffs alleged Fuld was killed because he was a Jewish American.⁹ Rather than seeking relief from Jabarin, who was detained by the Israeli authorities, Plaintiffs sought damages from the PA and PLO because “they ‘encouraged, incentivized, and assisted’ the attack on Fuld.”¹⁰ Plaintiffs brought this suit “pursuant to the [Anti-Terrorism Act or] ATA, as amended by the PSJVTA.”¹¹

Plaintiffs alleged that “both prongs of the PSJVTA’s personal jurisdiction provisions [were] satisfied” because Defendants paid families of deceased terrorists who killed Americans and provided consular services and engaged with media in the U.S. after April 18, 2020.¹² Plaintiffs further argued that “after January 4, 2020, [d]efendants maintained offices in the [U.S.] that were not used exclusively for the purpose of conducting official [United Nations] business.”¹³ In response, defendant moved to “dismiss for lack of personal jurisdiction and for failure to state a claim.”¹⁴

B. Legal Standards Applicable to the Parties’ Motions

The standard for a Rule 12(b)(2) motion is that a plaintiff must show the Court has jurisdiction over the defendant.¹⁵ A plaintiff need only make “a *prima facie* showing that jurisdiction exists” when there has been no discovery or evidentiary hearing.¹⁶ In the present case, Plaintiffs’ showing must entail “legally sufficient allegations,” including “an averment of facts that, if credited[,] would suffice’ to establish that jurisdiction exists.”¹⁷ The Court must construe “all allegations . . . in the light most favorable to the plaintiff.”¹⁸

C. Legal Standard Under the PSJVTA

The purpose of the PSJVTA is to provide a civil cause of action for American “nationals harmed by an act of international terrorism committed by a foreign terrorist organization.”¹⁹ In order to achieve this, “it permits such [American] nationals to sue ‘any person who aids and abets, by knowingly providing substantial assistance, or who conspires [to commit] an act of international terrorism.’”²⁰

8. *Id.*

9. *Id.*

10. *Id.*

11. *Id.*

12. *Id.* at *3.

13. *Id.*

14. *Id.* at *4.

15. *Id.* (citing *DiStefano v. Carozzi N. Am., Inc.*, 286 F.3d 81, 84 (2d Cir. 2001)).

16. *Id.* (citing *Dorchester Fin. Sec., Inc. v. Banco BRJ, S.A.*, 722 F.3d 81, 84–85 (2d Cir. 2013)).

17. *Id.* (citing *Penguin Grp. (USA) Inc. v. Am. Buddha*, 609 F.3d 30, 35 (2d Cir. 2010)).

18. *Id.* (quoting *Whitaker v. Am. Telecasting, Inc.*, 261 F.3d 196, 208 (2d Cir. 2001)).

19. *Id.* at *2.

20. *Id.*

The PSJVTA is the Congressional response to repeated court decisions finding no personal jurisdiction to ATA claims.²¹ The PSJVTA provides that, as of April 18, 2020, a defendant who makes any payments to either someone imprisoned for an act of terrorism against American nationals or the family of someone who died while committing an act of terrorism against American nationals, “shall be deemed to have consented to personal jurisdiction’ in ATA cases . . . if such payment [were] made by reason of the death [or imprisonment] of such individual.”²² The PSJVTA also states a defendant who “‘establishes,’ ‘procures,’ or ‘continues to maintain any office, headquarters, premises, or other facilities or establishments in the [U.S.],’ or ‘conducts any activity while physically present [in] the [U.S.] on behalf of the PLO or the PA’ after January 4, 2020, will be considered to have consented to personal jurisdiction.”²³ In this case, Defendants did not dispute Plaintiffs’

III. Analysis

A. Personal Jurisdiction

Plaintiffs made no argument “for general or specific jurisdiction” because such arguments were foreclosed by the Second Circuit’s decision in *Waldman I v. Palestine Liberation Org.*, 835 F.3d 317, 322, 324 (2d Cir. 2016) (“*Waldman I*”), which held that the PLO and PA were neither “‘at home’ in the [U.S.] for purposes of general jurisdiction” nor engaged in tortious activities “sufficiently connected to the [U.S.] to provide specific personal jurisdiction.”²⁴ Instead, Plaintiffs rested their claim on “the third traditional basis for personal jurisdiction: consent.”²⁵ Plaintiffs argue that Defendants’ activities infer that they consented, expressly or impliedly, to U.S. jurisdiction.²⁶ The Court rejected this argument.

The Court explained that waiver of personal jurisdiction through consent will only satisfy the requirements of due process if it is “willful, thoughtful, and fair.”²⁷ Here, consent could not be inferred from the “martyr payments” to the families of terrorists because their lack of direct connection to the U.S. “would strain the idea of consent beyond its breaking point.”²⁸ Likewise, the offices and activities of the PLO in the U.S. are “too thin to support a meaningful inference of consent to jurisdiction in this country.”²⁹ Ultimately, neither Defendant’s conduct “even remotely signals approval or acceptance of the Court’s jurisdiction.”³⁰ The Court found

21. *Id.* at *1.

22. *Id.* at *3.

23. *Id.*

24. *Id.* at *5 (citing *Waldman I v. Palestine Liberation Org.*, 835 F.3d 317, 322, 324 (2d Cir. 2016)).

25. *Id.* at *6 (citations omitted).

26. *Id.*

27. *Id.*

28. *Id.* at *7.

29. *Id.*

30. *Id.*

that the “deemed consent” basis for jurisdiction codified in the PSJVTA “[m]easured against these standards . . . does not constitutionally provide for personal jurisdiction over Defendants in this case.”³¹

The Court found support for its ruling in the Supreme Court’s holding in *College Savings Bank v. Florida Prepaid Postsecondary Education Expense Board*, 527 U.S. 666 (1999). In that case, the Supreme Court found that a state could not be deemed to “have waived its Eleventh Amendment immunity from suit merely by engaging in conduct that violated federal law” because “there is little reason to assume actual consent based upon the State’s mere presence in a field subject to congressional regulation.”³² In *Fuld*, Judge Furman recognized the distinction between the Eleventh Amendment and the Due Process Clause.³³ However, he noted: “the principles underlying *College Savings Bank* are not specific to the Eleventh Amendment, but rather apply to constitutional rights broadly.”³⁴ The Supreme Court in *College Savings Bank* expressly noted “that constructive — *i.e.*, ‘deemed’ — consents were ‘simply unheard of in the context of other constitutionally protected privileges *Constructive consent is not a doctrine commonly associated with the surrender of constitutional rights.*”³⁵ Thus, the Court found “*College Savings Bank* [to] all but compel[] the conclusion that personal jurisdiction is lacking here” even though “Congress had ‘express[ed] unequivocally its intention that if either the PLO or PA ‘takes certain action it shall be deemed to have’ consented to suit in an American court.”³⁶

In addition to *College Savings Bank*, the Court followed Second Circuit precedent in *Brown v. Lockheed Martin Corp.* and *Chen v. Dunkin’ Brands*. In *Brown* specifically, the Second Circuit determined that “‘deemed consent’ jurisdiction is limited by the Due Process Clause and that allowing Congress by legislative fiat to simply ‘deem’ conduct that would otherwise not support personal jurisdiction in the United States to be ‘consent,’ as it tried to do here, would ‘rob[]’ the case law conditioning personal jurisdiction on sufficient contacts with the forum ‘of meaning by a back-door thief.’”³⁷

To counter this, Plaintiffs argued that “nothing more than fair notice and an opportunity to conform is required for ‘deemed consent’ to satisfy due process.”³⁸ The Court rejected this argument not just because it was contrary to *College Saving Bank* but because to hold that “fair notice and an opportunity to conform one’s behavior are the only requirements for ‘deemed consent’ jurisdiction to comport with due process would be to hold that personal jurisdiction is limited only by reach of the legislative imagination — which is to say, that there are no constitutional limits at all.”³⁹

31. *Id.*

32. *Id.* (quoting *College Savings Bank*, 527 U.S. at 680).

33. *Id.* at *8.

34. *Id.* at 7 (quoting *College Savings Bank*, 527 U.S. at 684) (emphasis added in *Fuld*).

35. *Id.*

36. *Id.* at *8 (quoting *College Savings Bank*, 527 U.S. at 680–81).

37. *Id.* (quoting *Brown v. Lockheed Martin Corp.*, 814 F.3d 619, 640 (2d Cir. 2016)).

38. *Id.* at *9.

39. *Id.*

B. Congress is Not Permitted to Circumvent Fundamental Constitutional Rights

By the PSJVTA, Congress declared that certain PLO and PA conduct could be deemed consented to personal jurisdiction even though “the Second and D.C. Circuits had held [such conduct] was insufficient to support personal jurisdiction in *Waldman I*.”⁴⁰ However, the Court concluded that Congress’s action does not “pass[] constitutional muster” because it would violate longstanding propositions about legislative power and would “leave Congress free to make any process ‘due process of law,’ by its mere will.”⁴¹ It would also “offend the fundamental principle that a statute ‘cannot create personal jurisdiction where the Constitution forbids it.’”⁴² The Court added that Congress’ deeming fair notice and an opportunity to choose to continue that conduct all that is required for “consent” to personal jurisdiction is comparable to saying that “rights underlying these doctrines are subject to mere legislative whim.”⁴³ Here, “a statute cannot itself ‘answer the constitutional question of whether due process is satisfied.’”⁴⁴

Plaintiffs failed to cite any significant cases outside of *Ins. Corp. of Ireland v. Compagnie des Bauxites de Guinee*, 456 U.S. 694, 703 (1982) (“*Bauxites*”) in defense.⁴⁵ However, the Court rejected *Bauxites* as merely standing “for the straightforward proposition that where a defendant voluntarily submits to the jurisdiction of a court for purposes of disputing jurisdiction and then violates orders with respect to jurisdictional discovery, it does not offend due process to deem the facts supporting personal jurisdiction to be established.”⁴⁶ Therefore, *Bauxites* supports the Court’s conclusion that personal jurisdiction cannot be exercised over a defendant because of “purported consent or otherwise, unless the defendant has sufficient ‘contacts, ties, or relations’ with the forum ‘such that the maintenance of the suit does not offend traditional notions of fair play and substantial justice.’”⁴⁷

C. Courts Do Not Have to Defer to Political Branches Over Matters of Foreign Affairs and National Security

Plaintiffs also claimed that “courts owe [deference] to the political branches with respect to matters of foreign affairs and national security.”⁴⁸ The Court dismissed this argument for several reasons.⁴⁹ First, the Court agreed that deference should be given to the political branches for “matters in light of their constitutionally derived powers and expertise” but found “concerns of national security and foreign relations . . . do not automatically trump the Court’s own obli-

40. *Id.* at *7.

41. *Id.* at *9.

42. *Id.* (citing *In re Terrorist Attacks on Sept. 11, 2001*, 538 F.3d 71, 80 (2d Cir. 2008)).

43. *Id.* at *10.

44. *Id.* at *9 (quoting *Waldman I*, 835 F.3d at 343).

45. *Id.* at *10.

46. *Id.* at *11 (citing *Compagnie des Bauxites de Guinee*, 456 U.S. at 703–05).

47. *Id.* (citing *Compagnie des Bauxites de Guinee*, 456 U.S. at 703–05).

48. *Id.*

49. *Id.* at *12.

gation to secure the protection that the Constitution grants to individuals.”⁵⁰ Referencing the constitutional limits on the treaty power, the Court held that since “the political branches cannot use the treaty power . . . to override an individual’s due process rights, they surely cannot do so here either.”⁵¹ Second, the Court did not find and Plaintiffs did not cite any authority that shows that the test for personal jurisdiction “varies by context or by the nature of a plaintiff’s claim.”⁵² Lastly, the Court determined that such an “‘expansive view’ of Congress’s authority to create personal jurisdiction where it otherwise would not exist, even if limited to the context of foreign affairs, would pay insufficient ‘heed to the risks to international comity.’”⁵³ Subjecting the Defendants to jurisdiction based on conduct that lacked direct contact or even a sufficient nexus with the U.S. does not follow “fair play and substantial justice,” which due process demands.⁵⁴

IV. Conclusion

The Court stressed that “a defendant’s knowing and voluntary consent is a valid basis to subject it to the jurisdiction of a court, but Congress cannot simply declare anything it wants to be consent.”⁵⁵ To acquiesce to “a legislative sleight of hand” would “let fiction get the better of fact and make a mockery of the Due Process Clause.”⁵⁶ However, the Court did not find “deemed consent” jurisdiction unconstitutional in all its forms.⁵⁷ That question is left unanswered.⁵⁸ The Court did note that the “provisions of the PSJVTA at issue push the concept of consent well beyond its breaking point and that the predicate conduct alleged here is not ‘of such a nature as to justify the fiction’ of consent.”⁵⁹ Therefore, the Court granted the Defendants’ motion and held that exercising jurisdiction would go beyond the limits prescribed by the Due Process Clause.⁶⁰

Owen Crowley

50. *Id.* at *11.

51. *Id.* at *12.

52. *Id.*

53. *Id.* (quoting *Daimler AG v. Bauman*, 571 U.S. 117, 141 (2014)).

54. *Id.* (quoting *Int’l Shoe Co. v. Washington*, 326 U.S. 310, 316 (1945)).

55. *Id.*

56. *Id.*

57. *Id.*

58. *Id.*

59. *Id.* (quoting *Int’l Shoe*, 326 U.S. at 318, 318).

60. *Id.* at *13.