

Article

Stumbling Towards Distributive Justice

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Abstract

The rapidly approaching end of the Kyoto Protocol and the vitriolic protests surrounding trade negotiations warm the heart of international law pessimists. Although shared systems for prosperity demand global solutions to shared risks, international law is derided for an inability to distribute the resources necessary to create global prosperity and manage global risks. This Article will demonstrate that such criticisms are misplaced. The protests, the stalled negotiations, and the solutions all emerge from a rich tradition of distribution of resources in international law—one that is poorly understood, unfairly ignored, and replete with useful principles, frameworks, and successes.

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Introduction

When Japan released nuclear wastewater into the Pacific, other nations stepped in to help stem the flow from the crippled reactors.¹ When the G20 addressed how to measure risk in the global financial system, it recommended technical assistance to countries with fragile financial monitoring.² States have been offering and demanding resources from each other since time immemorial, either as punishment for the unsuccessful use of force or as reward for successful conquest. As cooperation replaces outright coercion as an enforcer of globalization, collaboration spreads risks as fast as it shares prosperity. The international community is struggling to invest in global public goods, reduce shared threats, preserve critical assets, and respond to moral obligations to moderate the harshest inequities. At least some trans-border threats gain strength from systems of interconnection, such as air travel and global financial markets, that have created unprecedented wealth and a shared sense of community. Nations must meet these threats through collective action because they are unwilling to accept the alternative of stemming the flow of capital, goods, and people. Unfortunately, efforts to share risk and responsibility across borders have recently seemed to run aground.

Work on distributional decision-making in international law tends to address the distribution of resources between only a few countries, such as those that share cross-border hydrocarbon or water resources.³ Tentative models of international law condition distribution on social relationships among nations and legitimacy gained as part of a norm community,⁴ on the

¹ See Chizu Nomiya & Shinichi Saoshiro, *Japan seeks Russian help to end nuclear crisis*, REUTERS (Apr. 5, 2011, 03:44), <http://in.reuters.com/article/2011/04/04/idINIndia-56111120110404>; Eric Talmadge & Mari Yamaguchi, *US rushes freshwater to help Japan nuclear plant*, SEATTLE TIMES (Mar. 25, 2011, 03:42), http://seattletimes.nwsourc.com/html/nationworld/2014593408_apasjapanearthquake.html.

² See G20 WORKING GROUP ON ENHANCING SOUND REGULATION AND STRENGTHENING TRANSPARENCY, FINAL REPORT 45 (2009) available at rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/20_010409.pdf.

³ See Eve Vogel, *Regionalization and Democratization Through International Law: Intertwined Jurisdictions, Scales and Politics in The Columbia River Treaty*, 9 OR. REV. INT'L L. 337 (2007).

⁴ See Martha Finnemore & Kathryn Sikkink, *International Norm Dynamics and Political Change*, 52 INT'L ORG. 887 (1998); Kathryn Sikkink, *Human Rights, Principled Issue-Networks, and Sovereignty in Latin America*, 47 INT'L ORG. 411 (1993) (discussing norm communities and decreased salience of sovereignty).

opportunity to enshrine existing balances of power,⁵ or even on the need for cooperation.⁶ Writing in 1995, Thomas Franck commented on the motivation behind a newfound maturity of international law:

Another reason for the exponential growth in international law in recent years is a prismatic change in the way in which humanity perceives itself. The challenge of space exploration has joined with the depletion and degradation of the world's environment . . . to entice or compel individuals and governments to think in terms of our common destiny: to counter humanity as a single gifted but greedy species, sharing a common, finite, and endangered speck of the universe.⁷

This Article will demonstrate how, despite pessimism or silence from international law scholars, international law is already distributing resources among nations on a number of fronts. This distributive capacity of international law is so successful and is used for such essential functions that it has gone unnoticed. Moving away from the question of whether international law is “law” in favor of the question of what international law should do indicates the maturity of international law.⁸ The frameworks for distribution of resources have responded to each other over time, incorporating features that had staying power and rejecting others. Despite the effective success of distribution in international law and the rich intellectual history of the evolution of the associated frameworks, very little is understood about why or how international law achieves distribution of resources.

Within a country, reducing a collective risk, sharing national patrimony, or investing in public goods is by no means easy. However, the attempt at least benefits from a framework of debate—including notions of the minimum dignified existence of a citizen, the relative role of government and the private sector, cumulative responsibility for advantages or disadvantages passed on through generations—and from a community of accountability to carry out the resulting program. The outcome from these debates within a country is greater or lesser distribution of resources in the form of money, opportunity, or knowledge.

⁵ See INTERNATIONAL RELATIONS THEORY: DISCIPLINE AND DIVERSITY 59 (Tim Dunne et al., eds., 2d ed. 2010).

⁶ See ROBERT O. KEOHANE & JOSEPH S. NYE, POWER AND INTERDEPENDENCE: WORLD POLITICS IN TRANSITION 7 (1977) (noting that “cooperation alone holds the answer to world problems.”).

⁷ THOMAS FRANCK, FAIRNESS IN INTERNATIONAL LAW AND INSTITUTIONS 6 (1995).

⁸ *Id.* at 9.

It is even harder to imagine distribution of resources among nations; distribution of resources is not considered to be a strength of international law. At the heart of the hardest fights about the global response to shared risk and reward is the question of distribution. For example, who must pay for the relocation of citizens of drowning island nations? When distribution must happen across borders, the international community lacks even the framework of debate. Categories can get hopelessly muddled. Even responsibility for the next generation is hard to understand when the next generation of Americans may have been born in the developing countries that trans-border distribution seeks to assist. Eric Posner warns that:

[W]e should not be surprised by the weakness and imperfection of treaties—such as the Kyoto Protocol—or the weaker version of Kyoto to which the United States would agree. Treaties, unlike domestic law, must not only be welfare-maximizing; they must also be Pareto superior. The more states that are involved, and the more heterogeneous their positions, the weaker the treaties will be We should rarely observe treaties that redistribute wealth from one state to another.⁹

Roberto Unger explains that the need to separate the market rules and arrangements guiding individual initiative from those governing inequalities has brought the law “up against a limit, of efficacy as well as of insight, that it has yet to overcome.”¹⁰ Another skeptic writes that “[a]llocation is a Gordian knot. One can devise clever ways to untie parts of the problem, but only by entangling others.”¹¹

Line drawing exercises that are by no means simple in a domestic context become intractable when the lines govern the relationship between nations. How would one divide the haves from the have-nots, when both groups exchange members so rapidly? Even before populating such categories, critics counter that international law lacks a coherent theory of justice with which to direct the flow of resources. Common international law mechanisms are based on simpler exertions, such as prohibiting

⁹ Eric A. Posner, *International Law: A Welfarist Approach*, 73 U. CHI. L. REV. 487, 528-529 (2006). Posner also argues that states are under no legal obligation to cooperate, although they might want to, in order to create global public goods. *Id.* at 522.

¹⁰ ROBERTO MANGABEIRA UNGER, *FREE TRADE REIMAGINED: THE WORLD DIVISION OF LABOR AND THE METHOD OF ECONOMICS* 93 (2007).

¹¹ DAVID G. VICTOR, *THE COLLAPSE OF THE KYOTO PROTOCOL AND THE STRUGGLE TO SLOW GLOBAL WARMING* 53 (2001).

dangerous acts,¹² regulating risky activities,¹³ or compensating for past wrongs.¹⁴ Other political, practical, and cognitive challenges are certainly stumbling blocks to distribution.¹⁵ However, this Article will argue that the prevailing skepticism about the ability of international law to distribute hundreds of billions of dollars in costs and benefits among states is an unfounded impediment to the design of distributional systems on the scale needed to address global threats.

Part I of this Article outlines the complex web of global risks and opportunities, which are multiplied by the substantive needs and demands for participation of myriad parties. It describes the stunted distributive efforts thus far achieved through international law, and explains how the lack of understanding of how international law achieves distribution of resources is the primary impediment to deeper collective action. Part II surveys a surprisingly rich field of distributive achievements in international law. It analyzes how these frameworks draw on distinct kinds of justifications: compensation for past wrongs, necessity, investment in global public goods, and the common heritage of mankind. It also uncovers how distributive frameworks based on compensation and necessity are uncontested in principle, but difficult to implement. Frameworks designed for investment in global public goods are effective over the long term if distribution is simple and direct, but complexities in the formula—such as taxonomies of countries, or unclear domestic bargaining positions—can overwhelm the investment rationale. Suggestions of distribution to reflect the common heritage of mankind prompt vociferous resistance from developed countries, which may nevertheless treat resources as if they are in trust.

¹² See Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction, *opened for signature* Dec. 3, 1997, 2056 U.N.T.S. 211; Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, *opened for signature* Jan. 13, 1993, 1974 U.N.T.S. 45; Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, *opened for signature* Apr. 10, 1972, 1015 U.N.T.S. 163.

¹³ See Convention on the Preservation of Marine Pollution by Dumping of Waste and Other Matter, Dec. 29, 1972, 1046 U.N.T.S. 120.

¹⁴ See *infra*, text accompanying notes 87-94 on the Iran-United States Claims Tribunal.

¹⁵ In the climate change context, see, for example, Daniel Abebe & Jonathan S. Masur, *International Agreements, Internal Heterogeneity, and Climate Change: The "Two Chinas" Problem*, 50 VA. J. INT'L L. 325, 329-30 (2010) (discussing China's reluctance to sign onto a global climate change agreement, due to internal social and political dynamics—greater emissions are to be expected from Western China, which is much less developed than Eastern China and is a source of social unrest because of this); Rachel Brewster, *Stepping Stone Or Stumbling Block: Incrementalism And National Climate Change Legislation*, 28 YALE L. & POL'Y REV. 245, 247-49 (2010) (arguing that incremental national legislation may hinder rather than help development of a global climate change framework); Jedediah Purdy, *The Politics of Nature: Climate Change, Environmental Law, and Democracy*, 119 YALE L.J. 1122, 1135 (2010) (discussing difficulties in understanding risks, especially concerning a catastrophic process that is "diffuse, hard to envision, and delayed in time").

Part III elicits lessons from the survey of distributive frameworks to articulate patterns of distribution in international law. Part III hypothesizes that compensation for wrongs and moral obligations both successfully motivate distribution in international law. So too does an investment orientation, as long as the goal is clear and simply managed. The Conclusion confirms that designers of distributive frameworks incorporate prior reactions, both for and against, into subsequent iterations. States also react to distributive frameworks not only for what they mean for the goal at hand, but for the precedent they set on distribution in international law in general. Given common goals, common opportunities, moral outrage, or individual responsibility, international law demonstrates a resilient ability to distribute resources across borders.

I. A Sieve and a Shield: The Problem of Resources and Borders

The movement of resources across borders is not a new phenomenon. The permeability of borders, and the nature of the risks and benefits that pass through them, create practical challenges to a sovereign's struggle for the well-being of its citizens and an urgent need for a method of distribution by which international law may respond to trans-border challenges. This Part will explain how the current impetus for the distribution of resources arises from a more complex web of threats and participants than any historical framework has been called on to address. Lacking a practical framework for implementation, scale, or a legitimating theory, international law has not yet adapted to meet the distribution challenge imposed by globalized threats. This Part ends by describing how the lack of a legitimating theory of distribution is the cause of the intransigence in responding to globalized threats.

A. *Complex Web of Parties and Threats*

The challenge of distribution of resources across borders draws its urgency from increased threats to well-being and livelihood: disease, armed conflict, resource depletion, and environmental destruction that all cross borders with impunity. The complexity of addressing global threats is multiplied by the increased political influence of nations emerging from under the foreign policy black-out curtain of colonial powers. The complexity of demands for participation from developing nations and the urgency of global threats match the growth enjoyed from globalization like the teeth of a zipper.

Almost every sphere of human existence is threatened by a force that crosses borders. Diseases once found in the jungles of Central Africa

arrive in the United States.¹⁶ Zebra mussels arrive in ship ballasts and decimate native species in the Great Lakes.¹⁷ Amazonian farmers burn the last repositories of rare plants and animals in order to graze cattle.¹⁸ The collapse of Iceland's banks prompts the United Kingdom to use anti-terrorism laws to seize their assets,¹⁹ perhaps fearing a national security crisis arising from social unrest due to lost savings. The threats from climate change alone include rising sea levels, intensifying weather events, declining forests and increasing desertification, loss of ecosystems and wildlife, drought and famine, poor health, and climate change refugees.²⁰ The perfection of one form of exploitation—such as hydraulic fracturing of natural gas—may hasten the end of such practices and the livelihoods that depend on them.²¹

In the face of trans-border collective action problems, more nations are demanding a say in their resolution. “The need for broad participation” raised by developing nations changes both the content of the distributive frameworks and the process of agreeing to them.²² When greater weight is given to the substantive needs of developing countries, the contents of proposed systems are measured against the redress they provide for historical claims for equity and justice. The nature of these demands is incredibly diverse, because developing nations are divided across a dizzying variety of spectra: “poor and rich states, poor and rich persons, parsimonious and spendthrift consumers,” and concern for present and future generations.²³

Demands for participation can be equally pressing. When climate change negotiators in Copenhagen broke into a smaller group of twenty-

¹⁶ Michael Specter, *The Doomsday Strain*, NEW YORKER (Dec. 20, 2010), http://www.newyorker.com/reporting/2010/12/20/101220fa_fact_specter (“the health risks caused by hunting [monkeys or apes] are enormous—not just for the Africans who kill and eat them but for billions of others throughout the world. If not for the consumption of bushmeat, AIDS would never have spread so insidiously across the planet. That pandemic, the most lethal of modern times, began nearly a century ago, in Cameroon”).

¹⁷ U.S. ENVTL. PROT. AGENCY, *Invasive Species*, <http://www.epa.gov/glnpo/invasive/> (last updated Nov. 20, 2009).

¹⁸ APHRODITE SMAGADI, *MEDICINAL BIOPROSPECTING: POLICY OPTIONS FOR ACCESS AND BENEFIT-SHARING* 38 (2009) (commenting on the recognition of “genetic resources as economically valuable assets” under threat from population growth”).

¹⁹ See *Iceland to repay £2bn UK savings*, BBC NEWS, June 6, 2009, <http://news.bbc.co.uk/2/hi/business/8086997.stm> (“Britain used anti-terrorism laws to freeze the assets of Icelandic banks, which had collapsed in the wake of financial crisis.”).

²⁰ CLIMATE CHANGE AND THE LAW 20-33 (Chris Wold et. al eds., 2009).

²¹ RONALD WRIGHT, *A SHORT HISTORY OF PROGRESS* 39 (2004) (writing about hunting in the Upper Paleolithic period, Ronald Wright notes “[t]he perfection of hunting spelled the end of hunting as a way of life.”).

²² Eric A. Posner & Cass R. Sunstein, *Climate Change Justice*, 96 GEO. L.J. 1565, 1575 (2008).

²³ FRANCK, *supra* note 7, at 353.

eight nations in order to draft an Accord,²⁴ the Conference of the Parties responded by merely “taking note” of the Accord, perhaps in protest to the procedural slight.²⁵ In the absence of a global mechanism, local or regional initiatives are the source of carbon reduction commitments.²⁶ These days, developing nations effectively insert demands for moral and practical consideration into negotiations on global threats. Combined with the increased diversity and power of these threats, it is not hard to see why climate change negotiations have broken down.

B. Stalled Distribution Efforts

Despite widespread understanding of the risks posed by global threats such as epidemics or systematic financial risks, as well as the dependence of global prosperity on interconnected systems, recent efforts to distribute resources to reduce risks and protect the drivers of well-being have stopped far short of their goals. Most recently, negotiators who hoped to craft the next chapter to the Kyoto Protocol (which expires in 2012) went home to face a volley of commentary on just how much they had failed. Other long-term projects, such as global trade talks and the ratification of the International Seed Treaty or the Convention on the Law of the Sea, have also lost momentum.

As the end of Kyoto’s commitment period approached, NGOs, ministers, and eventually heads of state gathered to resolve the fate of the Protocol. The Copenhagen Conference, with 40,000 attendees, was one of the largest environmental gatherings in history. With one hundred heads of states in attendance, “Hopenhagen” resulted not in a general legal agreement, but an Accord of which the Conference “took note.”²⁷ The Accord included “a long-term goal of limiting climate change to no more than 2° C; systems of ‘pledge and review’ for both developed and developing country mitigation commitments or actions; and significant new financial resources.”²⁸ The Accord “was reached among 28 Parties to the

²⁴ See Lavanya Rajamani, *The Making And Unmaking Of The Copenhagen Accord*, 59 INT’L & COMP. L. Q. 824, 825 (2010).

²⁵ Daniel Bodansky, *The Copenhagen Climate Change Conference: A Post-Mortem*, 104 AM. J. INT’L L. 230, 231 (2010).

²⁶ See Kristina Robinson, *Chicago Climate Exchange to Cease Operations*, TRIPLEPUNDIT (Nov. 25, 2010), <http://www.triplepundit.com/2010/11/chicago-climate-exchange-cease-operations> (commenting that Europe and California are the locations where carbon trading is active).

²⁷ Bodansky, *supra* note 25.

²⁸ *Id.* at 1.

FCCC, including all major emitters and economies, as well as those representing the most vulnerable and least developed.”²⁹

Nations at the subsequent Cancun Conference approved the financing target of \$100 billion for developing nations along with a plan that would protect forests and develop methods to verify emissions reductions.³⁰ Every country except Bolivia agreed to this proposal.³¹ Climate change negotiators looked forward to Durban, South Africa, in 2011, for the final chance to extend the Kyoto Protocol before it expires in 2012. The market for carbon reduction credits is already shrinking in the face of uncertainty about the next round of emissions reductions,³² and the window for achieving low-cost carbon abatement is closing rapidly.³³ Negotiators approached the conference in Durban without a resolution, let alone a road map towards resolution.

The stalemate in Cancun came on the heels of similar speed bumps in implementing two specific framework agreements—the International Seed Treaty and the Convention on the Law of the Sea—and a deep freeze in negotiations on the world trade system. The United States, in particular, has not signed the International Seed Treaty or the Convention on the Law of the Sea due to concerns about distributive justice, despite having taken an active role in the design of both frameworks.³⁴ However, the United States has been advocating for the advance of the Doha Development Agenda, which replaced the Uruguay Round of global trade talks. The meeting of GATT members in 1982, which launched the Uruguay Round of negotiations, was “widely regarded as a failure.”³⁵ In the early 1990s, trade talks “lurched between impending failure, to predictions of imminent

²⁹ Rajamani, *supra* note 24, at 825. Much is not specified in the Accord: “[t]he Accord neither quantifies the ‘deep cuts’ needed to reach the 2 degree C goal nor indicates how the burden will be shared between States. It does not specify a benchmark from which the 2 degree C increase is to be judged (as for instance ‘from pre-industrial levels’), or prescribe a specified peaking year or time frame, leaving these instead to be determined by States.” *Id.* at 827.

³⁰ Alex Morales et al., *Global Warming Deal Decades Away as ‘Dysfunctional’ U.S. Delays Commitment*, BLOOMBERG, Dec. 13, 2010, available at <http://www.bloomberg.com/news/2010-12-13/global-warming-deal-decades-away-as-dysfunctional-u-s-delays-commitment.html>.

³¹ Louise Gray, *Cancun climate change summit: Bolivians dance to a different beat, but fail to derail the talks*, TELEGRAPH, Dec. 12, 2010, available at <http://www.telegraph.co.uk/earth/environment/climatechange/8197539/Cancun-climate-change-summit-Bolivians-dance-to-a-different-beat-but-fail-to-derail-the-talks.html>.

³² Morales, *supra* note 30.

³³ MCKINSEY & CO., *IMPACT OF THE ECONOMIC CRISIS ON CARBON ECONOMICS* 11, Ex. 9 (2010) (noting that beginning abatement actions in 2020 would make it challenging to limit global warming to 3 degrees Celsius).

³⁴ See *infra* text accompanying notes 204-208.

³⁵ WORLD TRADE ORGANIZATION, *The Uruguay Round*, http://www.wto.org/english/thewto_e/whatis_e/tif_e/fact5_e.htm (last visited Apr. 16, 2011) (noting that the talks were supposed to extend the trading system to trade in services, intellectual property, textiles, and agriculture).

success.”³⁶ Talks in the Doha Development Agenda have struggled to reach agreement. A global trade optimist describes how negotiations have “careened between retrenchments, setbacks, and failures since their launch in November 2001.”³⁷ Topics that prompt truly bitter wrangling, such as the relationship between trade and investment, have been dropped from the Doha Agenda altogether.³⁸

C. *The Impact of a Missing Theory of Distribution*

Many forces caused the timid, yet controversial proposals to replace the Kyoto Protocol, the downward spiral of global trade talks, and the stilted progress towards protecting biological diversity on the high seas. The most important cause is the lack of a theory of distribution to guide the negotiations and solutions: “[t]he Kyoto Protocol’s failure can be traced in no small measure to the lack of real agreement on burden sharing or who should pay for emissions controls and who should receive the benefits.”³⁹ These debates are rooted in deeply-held beliefs about equity and distributional justice.⁴⁰ International law scholars often discuss distributive justice in the context of other taxonomies to understand the question of how to equitably allocate resources. These taxonomies include corrective justice,⁴¹ corrective equity, broadly conceived equity, and common heritage equity.⁴² They may be organized by ‘do no harm,’⁴³ ‘share the common heritage of mankind,’⁴⁴ ‘polluter pays,’⁴⁵ ‘victim pays—as the primary

³⁶ *Id.*

³⁷ Richard Baldwin, *Global trade talks: Doha is doable this year*, E. ASIA FORUM (Feb. 1, 2011), <http://www.eastasiaforum.org/2011/02/01/global-trade-talks-doha-is-doable-this-year/>.

³⁸ The World Trade Organization defines “relationship between trade and investment” as the “need to balance the interests of countries where foreign investment originates and where it is invested, countries’ right to regulate investment, development, public interest and individual countries’ specific circumstances.” WORLD TRADE ORGANIZATION, *The Doha Agenda*, http://www.wto.org/english/thewto_e/whatis_e/tif_e/doha1_e.htm#singapore (last visited Apr. 16, 2011). Especially in the global trade context, re-examining the role of law in distribution is prompted partly by a failure of neoliberalism. A role for law in distribution is needed to improve the infrastructure of markets, correct market failures, provide social goods, and include the rule of law in the definition of development. THE NEW LAW AND ECONOMIC DEVELOPMENT: A CRITICAL APPRAISAL 10-11 (David M. Trubek & Alvaros Santos eds., 2006).

³⁹ Daniel C. Esty, *Breaking the Environmental Law Logjam: The International Dimension*, 17 N.Y.U. ENVTL. L.J. 836, 852 (2008).

⁴⁰ *E.g.*, Posner & Sunstein, *supra* note 22, at 1592 (arguing that “the climate change problem poorly fits the corrective justice model, because the consequence of tort-like thinking would be to force many people who have not acted wrongfully to provide a remedy to many people who have not been victimized.”).

⁴¹ *See id.* at 1572.

⁴² FRANCK, *supra* note 7, at 57.

⁴³ *See id.* at 357.

⁴⁴ *See id.* at 358.

⁴⁵ *Id.* at 361.

beneficiary,⁴⁶ or based on ability to pay.⁴⁷ However, no consistent theory or school of distributive justice guides negotiations towards global solutions.

The failure to renegotiate the Kyoto Protocol demonstrates the lack of a theory of distribution in international law. As soon as the ink was dry on the Kyoto Protocol, it became apparent that the negotiated division of countries into Annex I and non-Annex I only set the stage for further battles over moral responsibility and financial liability, and could not be understood as proof that countries had reached a consensus on allocation.⁴⁸ The starting point of Kyoto was highly skewed: the United States emits 24.5 metric tons of CO₂ per capita, while India and China emit 1.9 and 3.9 respectively.⁴⁹ Although the West is responsible for the vast majority of cumulative emissions, China and the developing world are catching up. China has surpassed the United States as the greatest annual emitter.⁵⁰ On top of this shifting foundation, the Kyoto Protocol overlaid property rights in the form of permits.⁵¹ The monetization of permits created value of about \$2 trillion, and the political and economic consequences of the allocation of that value became apparent.⁵² One Kyoto skeptic argued that “[i]n a single act, the Kyoto session created a highly ambitious agreement that requires a completely novel form of international financing to succeed, and no consensus on how to implement that scheme.”⁵³ He predicts that Kyoto will prove to be an aberration, “not proof that it is feasible to hand out and secure assets worth trillions of dollars under international law.”⁵⁴

⁴⁶ *Id.* at 361. For example, a traditional market model would call for higher prices to be paid per unit (say clean water) for initial units based on their higher value to the user. Douglas A. Kysar, *Sustainable Development and Private Global Governance*, 83 TEX. L. REV. 2109, 2120-31 (2005).

⁴⁷ FRANCK, *supra* note 7, at 368.

⁴⁸ VICTOR, *supra* note 11, at 25. Victor adds that the United States immediately began pressing for meaningful emissions reductions from developing countries; Senate resolutions in 1997 and 1998 called for specific commitments, and U.S. diplomats pressed for binding commitments from developing countries. *Id.* at 34.

⁴⁹ CLIMATE CHANGE AND THE LAW, *supra* note 20, at 135.

⁵⁰ *China overtakes U.S. in greenhouse gas emissions*, N.Y. TIMES (June 20, 2007), <http://www.nytimes.com/2007/06/20/business/worldbusiness/20iht-emit.1.6227564.html>

⁵¹ VICTOR, *supra* note 11, at 29.

⁵² *Id.* at 50-51.

⁵³ *Id.* at 29.

⁵⁴ *Id.* Victor is skeptical about many aspects of international law. He argues that countries with skilled negotiators, such as Russia and Ukraine, get a better deal in their base years. *Id.* at 30. Distribution schemes would require long-term contracts with developing countries, which are unenforceable in international law. *Id.* at 38-39. Also, it is not possible to predict abatement costs and future emissions to allocate permits “exactly.” *Id.* at 51. Eric Posner argues that countries might abide by long term obligations not because of obligation, but because of incentives: “states should cooperate with each other in order to produce supranational (regional or global) public goods such as climate control and trade. There is no such obligation to cooperate because states have strong nonlegal incentives to cooperate, but there is an important regime governing the creation, interpretation, and enforcement of treaties.” Posner, *supra* note 9, at 522. An agreement on distribution of permits, for example, would

Even without such skepticism, it is clear that Kyoto attempted to distribute value across borders without a sufficiently rigorous theory to justify this distribution.

Posner and Sunstein have attempted to import a tort-based model of climate change liability in order to remedy this lack of a theory of distributive justice. They argue that “the climate change problem poorly fits the corrective justice model, because the consequence of tort-like thinking would be to force many people who have not acted wrongfully to provide a remedy to many people who have not been victimized.”⁵⁵ Posner and Sunstein argue that climate change justice is rooted in corrective justice, which is understood to be reparations for past harm, and they raise questions of causality, of standing, and of the relative contributions of one household or the United States as a whole.⁵⁶ They argue against collective responsibility imputed to Americans as a class.⁵⁷ Unfortunately, as Posner and Sunstein themselves recognize, their tort analogy for corrective justice, even if technically correct in its mapping of questions of causality and group responsibility, does not reflect the current debate on climate change. Moreover, their suggestion is unlikely to resolve deeply divergent views of equity and distributional justice, regarding climate change or anything else, perhaps because it captures little of the ethical or moral arguments raised by a response to shared threats.⁵⁸

Whether the problem is climate change, global trade, the loss of biodiversity, or loss of life to global pandemics, the solution required will be far more complex than bilateral resource sharing mechanisms in terms of geographic, industrial, and jurisdictional scope.⁵⁹ Efforts to transplant

also require an agreement on the role of international law and its relation to the underlying goals of the international framework. *See* THE NEW LAW AND ECONOMIC DEVELOPMENT, *supra* note 38, at 9-10.

⁵⁵ Posner & Sunstein, *supra* note 22, at 1592.

⁵⁶ *Id.* at 1592-1600.

⁵⁷ *Id.* at 1593. The climate change problem, they argue, also fits poorly into traditional understandings of distributive justice. Payments for carbon emission reduction are hardly justified by distributive justice as other forms of transfers might help poor people more, help the current poor more the future poor, or avoid the drawback that the price of carbon reduction may fall disproportionately on the United States poor. *Id.* at 1583-86.

⁵⁸ In the domestic context, the tort analogy has gained more traction. The Supreme Court recently heard arguments on whether “companies accused of emitting greenhouse gases can be held liable under public nuisance laws.” Gil Keteltas, *Supreme Court Grants Cert in Connecticut v. AEP*, GLOBAL CLIMATE L. BLOG (Dec. 6, 2010), <http://www.globalclimatelaw.com/2010/12/articles/climate-change-litigation/supreme-court-grants-cert-in-connecticut-v-aep/>. The Court will examine the Second Circuit’s holding that the nuisance claims are not barred by the political question doctrine, among other defenses. *See Connecticut v. Amer. Elec. Power Co.*, 582 F.3d 309 (2d Cir. 2009). In contrast, Franck emphasizes that assignment of liability for international environmental harm is both a moral and an economic decision. *See* FRANCK, *supra* note 7, at 354.

⁵⁹ *See, e.g.*, Vogel, *supra* note 3, at 340 (noting the “concurrent rise of both international-scale autocracy and regional-scale empowerment and democratization.”); *id.* at 341 (discussing law, jurisdiction, geographic scale and democratization).

distributive frameworks from domestic law have been less than satisfying. Any number of arguments could be made about why these transplants have been rejected, such as the lack of consensus, or even a framework for consensus. However, the bitter debates about culpability and liability for global risks are their own best evidence of a missing theory of distribution in international law. As the survey of distributive frameworks in Part II reveals, the proper role of international law in distributing risks and rewards among nations has been of prime concern in negotiations; aversion to the distributive nature of various agreements has motivated the next iteration of global response.

D. A Note on Measurement

Before outlining the components of a theory of distribution and their application to international law, it is important to recognize that any theory of distribution must include a position on what measures are to be weighed in assessing the relative advantages conveyed by each theory.⁶⁰ Does a theory weigh income? Wealth? Longevity? The rule of law?⁶¹ What is the unit of analysis? Is it an individual, a family, or a village? Gross National Income is a common proxy for well-being around the world.⁶² It may be supplemented by assessments of life expectancy,⁶³ gender equality,⁶⁴ political inclusion,⁶⁵ and the like.⁶⁶ Amartya Sen argues for a measure of distributional equity based on opportunity as the freedom to achieve reasoned ends—the capability to do things that one has reason to value—rather than an assessment of primary goods, which are means at

⁶⁰ See AMARTYA SEN, *THE IDEA OF JUSTICE* 231 (2009).

⁶¹ THE NEW LAW AND ECONOMIC DEVELOPMENT, *supra* note 38, at 9.

⁶² See The World Bank, *How We Classify Countries*, available at <http://data.worldbank.org/about/country-classifications> (last visited Feb. 26, 2011) (“For operational and analytical purposes, the World Bank’s main criterion for classifying economies is gross national income (GNI) per capita.”).

⁶³ See CIA, The World Factbook, *Country Comparison: Life Expectancy at Birth*, available at <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2102rank.html> (last visited Feb. 26, 2011).

⁶⁴ See World Economic Forum, *Global Gender Gap*, (2010) available at <http://www.weforum.org/issues/global-gender-gap> (measuring gender equality by economic participation and opportunity, educational attainment, health and survival, and political attainment).

⁶⁵ See CHANGING PATHS: INTERNATIONAL DEVELOPMENT AND THE NEW POLITICS OF INCLUSION 1 (Peter P. Houtzager & Mick Moore eds., 2003).

⁶⁶ The new 2010 Human Development Index uses a composite of three factors: health (life expectancy at birth), knowledge (years of schooling) and income (purchasing power adjusted Gross National Income). See United Nations Development Program, *Human Development Index Frequently Asked Questions*, (2010), available at http://hdr.undp.org/en/media/HDR_2010_HDI_FAQs.pdf.

best.⁶⁷ The selection of criteria and information determines the deficiencies that are deemed worthy of remedy.

A measurement of advantage often focuses on what Sen would call the opportunity aspects of freedom, rather than the process aspects.⁶⁸ Participation in the discussions that lead to redistributive frameworks is one measure of advantage. However, this Article focuses on how to justify the outcome of distributive arrangements and the relative opportunities that they create, rather than the means by which they were designed. Sen calls this agnosticism towards means a narrow understanding of opportunity, the product of a system he calls the “culmination outcome”, or what one person receives in a distributive framework.⁶⁹ Sen argues that, instead of considering freedom of choice to be unimportant, one should look to a “comprehensive outcome,” which includes the ways in which a person reaches the culmination outcome.⁷⁰ However, a narrow focus on outcome corresponds with Franck’s priorities in an assessment of fairness. He writes that

[t]he fairness of international law . . . will be judged, first by the degree to which the rules satisfy the participants’ expectations of justifiable distribution of costs and benefits, and secondly by the extent to which the rules are made and applied in accordance with what the participants perceive as right process.⁷¹

This Article does not take a position on the proper measure of advantage. Rather, it recognizes that regardless of whether one measures by Bhutan’s Gross National Happiness⁷² or by access to electricity,⁷³ the choice of categories to measure will be dispositive for decisions about how to distribute.

⁶⁷ SEN, *supra* note 60, at 234. Sen goes on to argue that this is also true in the context of environmental sustainability, where we should focus on how the environment enables people to live the lives they value. *Id.* at 248. Franck volunteers that the purposes of international environmental law are maximum sustainable development, redressing imbalances, and preserving and extending the good life. FRANCK, *supra* note 7, at 364.

⁶⁸ See SEN, *supra* note 60, at 228-29.

⁶⁹ *Id.* at 215.

⁷⁰ *Id.* at 230.

⁷¹ See FRANCK, *supra* note 7, at 7. For a discussion of the second factor—legitimacy as procedural justice, and its role in determining the fairness of an allocative regime—see *id.* at 25-26.

⁷² See Andrew C. Revkin, *A New Measure of Well-being from a Happy Little Kingdom*, N.Y. TIMES, Oct. 4, 2005.

⁷³ See Samar Elsayed, *Energy Access for Development*, WORLD RES. INST. (May 12, 2005, 17:05 PM), available at <http://earthtrends.wri.org/updates/node/339>.

II. Mapping Current Frameworks

According to some scholars, the weakness or imperfection of redistributive treaties should be expected, but this expectation is not a complete or accurate description of the work being done by the distributive function of international law.⁷⁴ The rapidly approaching end of the Kyoto Protocol and the vitriolic protests surrounding trade negotiations may warm the heart of international law pessimists. However, the protests, the stalled negotiations, the damage, and the potential solutions all emerge from a rich tradition of distribution of resources in international law. This tradition is poorly understood, unfairly ignored, and replete with useful principles, frameworks, and successes.

A survey of frameworks for the distribution of resources through international law will shed some light on the distributive function of international law.⁷⁵ These frameworks move resources between states to compensate for wrongs (via claims tribunals and diplomatic espousal), to meet an urgent need, to invest in the international system, and to recognize common heritage. Some frameworks are motivated by two or more of these principles. It may be surprising that so many resources are redistributed every day via international legal frameworks. The fights about responsibility, culpability, and ability in the context of negotiations on climate change or other challenges help to clarify the as-yet ambiguous norms and practices guiding distribution in international law. Perhaps overlooked in these heated debates is a tradition of distribution of resources through international law that offers at least some reasons for optimism. The following survey describes these distributive frameworks and traces how they have been constructed in dialogue with one another.

⁷⁴ Broadly conceived, the environment, trade, and development are common targets of distributive frameworks. See FRANCK, *supra* note 7, at 351. Unger expands that “arguments dealing with the perverse distributive effects of free trade in a particular situation [include] both distribution among sectors of the economy and distribution among classes of society.” UNGER, *supra* note 10, at 11. Unger organizes traditional objections to free trade into two categories: arguments for restraints on trade, and arguments based on distributive effects. *Id.* at 10-11. On distributive justice and trade, see also ALBINO BERRERA, GLOBALIZATION AND ECONOMIC ETHICS: DISTRIBUTIVE JUSTICE IN THE KNOWLEDGE ECONOMY (2007) (organizing arguments for distributive justice according to criteria of efficiency, need, and entitlement); ETHAN B. KAPSTEIN, ECONOMIC JUSTICE IN AN UNFAIR WORLD: TOWARD A LEVEL PLAYING FIELD 60 (2006) (“it appears that ideas of fairness, or of trade as a system of mutual advantage, have played a role in shaping the international trade regime, even if less completely than one would wish if that arrangement were to be accepted as being just.”).

⁷⁵ International legal frameworks, much like domestic legal systems, have distributional effects. See, e.g., David Kennedy, *The Rule of Law, Political Choices, and Development Common Sense*, in THE NEW LAW AND ECONOMIC DEVELOPMENT, *supra* note 38, at 95 (on the distributional consequences of legal systems, often described more clearly with economic rationale). This is true even though development experts might like to think their recommendations, and the distributional consequences, were not political choices, but rather imperatives of their expertise. *Id.* at 97.

International law distributes resources through a variety of frameworks—some novel, such as the International Seed Treaty, and some, such as the Universal Postal Union, so well-established and effective that it is hard to imagine the world without them. Compensation for wrongs, articulated through diplomatic espousal⁷⁶ or claims tribunals, resembles compensation payments familiar from national systems. Certain distributive frameworks justify themselves out of necessity, and respond to exigencies such as the HIV/AIDS crisis or the perceived ‘odious debts’ of highly indebted poor countries. Investments in postal systems, telecommunications, biological diversity, and arms control provide global public goods—the infrastructure of the global system. Finally, some frameworks call for a distribution of resources in favor of developing nations in recognition of the ‘common heritage of mankind.’ As complex as each of these is, some frameworks embody more than one governing principle. Over the past hundred years, the global community has experimented with myriad frameworks for distribution of resources. More recent attempts demonstrate admirable ambition, and have incited seemingly intractable challenges to their theoretical underpinnings and practical application.

A. *Compensation*

Distribution occurs through international law to compensate for harm inflicted on private property rights.⁷⁷ This compensation may come in the form of payments or restoration of property to an individual investor, and is often collected through means of diplomatic espousal. Although the amount in question may be hotly contested, the liability of states for some measure of compensation for harm to private property remains a time-tested pillar of distribution in international law.

For at least the past hundred years, the United States has supported the principle that a state, on behalf of nationals, “can exercise diplomatic protection on their behalf when they have suffered direct losses.”⁷⁸ In 2007 the Department of State “followed” 363 cases in which U.S. citizens had

⁷⁶ Diplomatic espousal is the mechanism by which a state persuades another state to provide compensation for a harm suffered by one of its nationals. *See* RESTATEMENT (THIRD) OF THE FOREIGN RELATIONS LAW OF THE UNITED STATES § 902(2) (1987).

⁷⁷ This discussion does not touch on reparations exchanged between states in recognition of violations of public international law, or to amend for widespread losses in warfare. *See* ISTVAN CASARHELYI, RESTITUTION IN INTERNATIONAL LAW 35 (1964) (describing how Germany and her allies paid reparations to repair the losses caused by the war unleashed by them).

⁷⁸ 2007 DIGEST OF UNITED STATES PRACTICE IN INTERNATIONAL LAW § 8, at 419.

requested diplomatic assistance with investment disputes,⁷⁹ and the State Department office that handles investment claims and disputes is the largest office in the Department of State's Office of the Legal Adviser.⁸⁰ Diplomatic espousal is based on the principle that "the state whose nationals are the owners of the shares of a foreign corporation may interpose on their behalf in case the corporation suffers wrong at the hands of a foreign state when those nationals have no remedy except through the intervention of their own government."⁸¹ Although countries might dispute the merits of the claims espoused through diplomatic means,⁸² there is little controversy about the right of a government to request compensation for harm to private property of their nationals.

Although a victorious state used to enjoy the spoils of war,⁸³ that ability is constrained nowadays by treaty and by customary international law. The Hague Convention IV of 1907 articulated the legal obligation of restitution of private property seized in war.⁸⁴ After World War I, Germany and her allies were obliged to restore private property damaged due to discriminatory measures.⁸⁵ The treaties that ended World War II included distinct categories of claims: restoration of private property and reparations to states due to responsibility for war.⁸⁶

After the Iranian Revolution, Iran and the United States, negotiating through Algeria, agreed on a mechanism to adjudicate claims arising from losses to private property when those losses were attributable to the Iranian Government.⁸⁷ The claims arrangement consisted of a Security Account out of which U.S. claimants would be paid and a Claims Tribunal to adjudicate those claims.⁸⁸

Although the need for some form of compensation for wrongs was not in dispute, the extent of the distribution required by the compensation norm has been hotly contested. The "traditional standard" of a state's

⁷⁹ *Hearing of the Comm. on Foreign Affairs*, Serial No. 110-222, at 13 (July 17, 2008) (statement of David R. Nelson, U.S. Department of State).

⁸⁰ *See* The Office of the Assistant Legal Adviser for International Claims and Investment Disputes (L/CID), U.S. DEPT. OF STATE, <http://www.state.gov/s/l/c3433.htm> (last visited Sept 26, 2010).

⁸¹ 5 GREEN HAYWORD HACKWORTH, DIGEST OF INTERNATIONAL LAW § 6 at 841 (1943).

⁸² *See*, for example, fights over "permanent sovereignty over natural resources." 1975 DIGEST OF UNITED STATES PRACTICE IN INTERNATIONAL LAW § ***, at 489.

⁸³ CASARHELYI, *supra* note 77, at 29.

⁸⁴ *Id.* at 30.

⁸⁵ *Id.* at 35. These obligations are distinct from the reparations due to the victorious states as a result of the war.

⁸⁶ *Id.* at 45.

⁸⁷ *See* RAHMATULLAH KHAN, THE IRAN-UNITED STATES CLAIMS TRIBUNAL: CONTROVERSIES, CASES AND CONTRIBUTION 157 (1990) (excluded from the mandate were claims by the hostages, or acts not carried out by the Government).

⁸⁸ *See* THE IRAN-UNITED STATES CLAIMS TRIBUNAL: ITS CONTRIBUTION TO THE LAW OF STATE RESPONSIBILITY 11-12 (Richard B. Lillich et al. eds., 1998).

obligation was to provide “prompt, adequate, and effective” compensation” after expropriation or nationalization.⁸⁹ By the launch of the Iran-U.S. Claims Tribunal, however, that standard of compensation was under attack.⁹⁰ The U.N. Declaration on Permanent Sovereignty over Natural Resources of 1962 talked about “appropriate compensation,” rather than “full compensation,” in accordance with domestic and international law.⁹¹ The U.N. Charter of Economic Rights and Duties of States of 1974 dropped the reference to international law and only mentioned “appropriate compensation” in light of domestic law.⁹² The Iran-U.S. Claims Tribunal is credited with reinforcing the principle of valuation as a going concern,⁹³ even in such a contentious dispute, the obligation of a state to compensate for wrongs was unchallenged.⁹⁴

B. Necessity

The principle of necessity motivates distribution of resources for old arrangements, such as sovereign debt and debt relief, and for novel arrangements, such as access to essential medicines.⁹⁵ When faced with stark, alarming circumstances of human suffering, necessity motivates a rebalancing of resources to achieve morally acceptable outcomes. Posner, almost in surprise, recognizes that “many elements of international law reflect altruistic concern for the well-being of people living across borders.”⁹⁶ The motivation of this distribution may be exacerbated by the odiousness of the origins of suffering—such as debts incurred by dictators for personal, rather than public, benefit—and may be mitigated somewhat by efficiency concerns in implementation.

1. Sovereign Debt and Sovereign Investments

⁸⁹ David P. Stewart, *Compensation and Valuation Issues*, in THE IRAN-UNITED STATES CLAIMS TRIBUNAL, *supra* note 888, at 327.

⁹⁰ See KHAN, *supra* note 87, at 218 (Iran arguing for “net book value” without potential for future profits); *id.* at 231 (claimants wanting “as good an economic position as it was before the expropriation”); Stewart, *supra* note 89, at 325.

⁹¹ Stewart, *supra* note 89, at 330.

⁹² *Id.* at 331.

⁹³ KHAN, *supra* note 87, at 218.

⁹⁴ At most, Iran argued that, as the nationalization was legal, it was only liable for “net book value” as compensation, not future profits. *Id.* at 231.

⁹⁵ See DOHA DECLARATION ON THE TRIPS AGREEMENT AND PUBLIC HEALTH ¶¶ 4-6 (Nov. 2001), available at <http://www.who.int/medicines/areas/policy/tripshealth.pdf> (on compulsory licenses for essential medicines during national emergencies or in circumstances of extreme urgency).

⁹⁶ Posner, *supra* note 9, at 521.

The practice of state-to-state lending is not at all new, although it has changed in form and in extent over the past hundred years. States take on debt in exchange for foreign reserves with which to meet their domestic priorities, such as building infrastructure (under an ideal conception), to wage war, or to line the pockets of government officials (under an unfortunately common origin of sovereign debt obligations). Although the restructuring of sovereign debt is a more recent addition to distribution under international law than compensation for wrongs, it similarly relies on arguments of moral force.

Sovereign debt is an interesting example of redistribution, as “[d]ebt has been the largest source of foreign capital to developing countries in the past 50 years.”⁹⁷ In the 1920s, sovereign debt primarily took the form of bonds.⁹⁸ By the 1970s and 1980s, Western banks, looking for a profitable return on their extensive deposits from oil exporters, lent to sovereign borrowers without “normal cautionary inquiries.”⁹⁹ Following this exuberance, syndicated loans were again replaced by bonds, due to the inability of developing countries to stay current on their extensive debt burdens.¹⁰⁰ Lenders conventionally restructured sovereign debt “by rearranging amortization schedules as well as writing off the debt principal.”¹⁰¹ However, the remedy of “providing debt service relief through a combination of rescheduling the principal and compulsory new money infusions ha[d] been virtually exhausted for many debtor countries,” meaning that the principals of the loans themselves were under threat.¹⁰²

As debt burdens mounted towards the turn of the millennium, a campaign—started by Christian communities and embraced by a broad international coalition—called for debt relief for the poorest countries.¹⁰³ The result of this remarkably successful movement was debt relief commitments from the World Bank, IMF, and various countries.¹⁰⁴ The United States House of Representatives passed the Debt Relief for Poverty Reduction Act, tying debt relief to reforms, poverty reduction, and sustainable development.¹⁰⁵ Commentators borrowed heavily from Old

⁹⁷ RODRIGO OLIVARES-CAMINAL, *LEGAL ASPECTS OF SOVEREIGN DEBT RESTRUCTURING* 105 (2009).

⁹⁸ *Id.*

⁹⁹ *See* AUGUST REINISCH, *STATE RESPONSIBILITY FOR DEBTS* 9 (1995).

¹⁰⁰ *See* OLIVARES-CAMINAL, *supra* note 977, at 105. Moreover, Reinisch explains that this debt crisis can be traced to oil price shocks, the poor state of the world economy, a sharp increase in interest rates in the 1980s, and capital flight by developing country elites. *See* REINISCH, *supra* note 99, at 8-11.

¹⁰¹ OLIVARES-CAMINAL, *supra* note 977, at 106.

¹⁰² *Id.*

¹⁰³ *See* Yale School of Management, *The Campaign in the U.S.*,

<http://cases.som.yale.edu/jubilee/index.php?page=7&subMenu=> (last visited May 29, 2011).

¹⁰⁴ *See* OLIVARES-CAMINAL, *supra* note 977, at 159 (on the World Bank and IMF Highly Indebted Poor Countries initiative).

¹⁰⁵ Debt Relief for Poverty Reduction Act of 1999, H.R. 1095, H.R. REP. NO. 106-483 (1999).

Testament concepts of restoration and a fresh start.¹⁰⁶ In addition to the religious connotation, part of the motivation for debt relief was a reaction against “odious debts.”¹⁰⁷ The idea of odious debts was originally a means for repudiating debt under circumstances of state succession, when the debt was incurred by a “despotic” government and citizens had not benefited from the loans.¹⁰⁸ The idea of odious debts has been expanded to include “debts from an odious regime,”¹⁰⁹ or even “illegitimate debts,” which are incurred by non-democratic, corrupt governments against the interests of the people who must pay them back.¹¹⁰ If sovereign debts have been one of the largest sources of foreign capital for developing countries, debt relief was one of the most successful redistributive efforts in recent memory.¹¹¹ It is all the more surprising that the debt relief movement, which was almost entirely justified as a moral or religious obligation on the part of developed countries, was so successful, given resistance to previous distributive efforts based on arguments for the common heritage of mankind.¹¹²

2. Access to Essential Medicines

Although most pharmaceutical products were not designed with the needs of poor people in mind, existing medicines could prevent some of the eighteen million deaths a year from causes such as nutritional defects, communicable diseases, and maternal and perinatal conditions.¹¹³ The fact that generic manufacturers could make these medicines affordable, but are prevented from doing so by intellectual property regimes,¹¹⁴ has prompted

¹⁰⁶ *Debt Relief for Poverty Reduction Act: Hearing on H.R. 1095 Before the H. Comm. on Banking and Financial Services*, 106th Cong. 2 (1999) (statement of James A. Leach, Chairman).

¹⁰⁷ See OLIVARES-CAMINAL, *supra* note 977, at 169.

¹⁰⁸ See Odette Lienau, *Who Is the "Sovereign" in Sovereign Debt?: Reinterpreting A Rule-of-Law Framework from the Early Twentieth Century*, 33 YALE J. INT'L L. 63, 65 (2008).

¹⁰⁹ See OLIVARES-CAMINAL, *supra* note 977, at 172.

¹¹⁰ See *id.* at 183; Joseph Kahn, *Leaders in Congress Agree to Debt Relief for Poor Nations*, N.Y.

TIMES, Oct. 18, 2000 (“Leaders of developing nations have been pressing for donor nations to forgive past debts, arguing that many of the debts were incurred by earlier -- and often corrupt -- governments that misused aid.”).

¹¹¹ See Joshua William Busby, *Bono Made Jesse Helms Cry: Jubilee 2000, Debt Relief, and Moral Action in International Politics*, 51 INT'L STUD. Q. 247, 248 (2007) (“some states acted contrary to their narrow material interests, apparently at the behest of a transnational advocacy group Two economists called the campaign ‘by far the most successful industrial-country movement aimed at combating world poverty for many years, perhaps in all recorded history’”).

¹¹² See *discussion infra*, Section III.D.

¹¹³ Thomas Pogge et al., *Access to Essential Medicines: Public Health and International Law*, in INCENTIVES FOR GLOBAL PUBLIC HEALTH: PATENT LAW AND ACCESS TO ESSENTIAL MEDICINES 4-5 (Thomas Pogge et al. eds., 2010) [hereinafter INCENTIVES].

¹¹⁴ Effectively, the grace period during which developing countries can get cheaper generics without violating TRIPS obligations on patent licenses has been extended to January, 2016. See Andrew D.

concerted calls for a rebalancing of international intellectual property law away from developed country drug companies and in favor of developing country poor people.

Developing countries originally agreed to abide by the rigorous protections of the Trade-Related Aspects of Intellectual Property Rights (“TRIPS”) in order “to gain concessions from rich [countries] in other areas of economic activity (or for greater aid).”¹¹⁵ Article 31 of TRIPS allows a country, without the patent holder’s consent, to manufacture or import a medicine, as long as the rights holder is paid adequate compensation and the use is predominantly for the domestic market. The developing country is also required to try to obtain a voluntary license, except in extreme emergencies.¹¹⁶ This provision is not nearly as generous as it seems, as most poor countries lack manufacturing capabilities and would have to import generics. In order for the generics to be truly low cost, they would need to be manufactured under compulsory license, in, for example, Canada. But in order for Canada to obtain that compulsory license, the medicine must be intended for Canada’s domestic market; this creates a Catch-22 which renders the entire system absurd.¹¹⁷

Responding to the pressures to eliminate this absurdity, the WTO in August 2003 decided that any member country could export medicines subject to a compulsory license, but with some protections.¹¹⁸ This agreement, incorporated into TRIPS, was only supported by 20 countries and the EU.¹¹⁹ It has been criticized as ineffective and many drug-exporting countries have not passed implementing legislation on compulsory licenses.¹²⁰ The first, and so far only, export of drugs under compulsory license took place from Canada to Rwanda in September 2008.¹²¹ Although halting and modest in its achievements to date, the access to essential medicines regime, motivated by urgent need in developing countries, represents an international legal framework to distribute the gains from intellectual property in favor of developing countries.

Mitchell & Tania Voon, *The TRIPS Waiver as a Recognition of Public Health Concerns in the WTO*, in INCENTIVES, *supra* note 113, at 62. However, prior to TRIPS the US had put pressure on developing countries to improve IP regimes, under threat of WTO sanctions. *See* APHRODITE SMAGADI, MEDICINAL BIOPROSPECTING: POLICY OPTIONS FOR ACCESS AND BENEFIT SHARING 100 (2009).

¹¹⁵ Elizabeth Siew-Kuan Ng, *Global Health and Development: Patents and Public Interest*, in INCENTIVES, *supra* note 1133, at 104.

¹¹⁶ Mitchell & Voon, *supra* note 1144, at 60.

¹¹⁷ *Id.* at 61.

¹¹⁸ INCENTIVES, *supra* note 1133, at 11.

¹¹⁹ *Id.* at 12.

¹²⁰ *Id.*

¹²¹ Mitchell & Voon, *supra* note 1144, at 56.

C. Investments in Global Public Goods

Among the oldest distributive frameworks in international law are the ones designed to provide global public goods. The Universal Postal Union, one of the oldest international institutions, has achieved its goal of enabling global postal communication with such efficacy over the past hundred years that it is often overlooked as an example of distribution in international law. Additionally, international efforts to combat small arms violence have distributed significant resources to vulnerable countries. However, newer investments in global public goods, such as the preservation of biological diversity in general, or seeds in particular, may be short of the resources required to carry out their mandates and are somewhat more fraught with disputes. The Convention on Biological Diversity organizes resources and responsibilities in bilateral arrangements between host countries and investors. Responding perhaps to the fifteen years of work it took the Working Group of the Convention on Biological Diversity to issue guidelines on access and benefits sharing, the International Seed treaty instead employs a common fund out of which benefits will be shared.

1. Universal Postal Union

The Universal Postal Union (“UPU”) is one of the oldest international institutions and a longstanding mechanism for distribution in international law. It was established by the Treaty of Berne on October 9, 1874, and entered into force on July 1, 1875.¹²² The UPU was designed to improve the efficiency and lower the cost of postal communications. Previously, one would have had to affix domestic postage, transit fees, and terminal dues for the destination country, calculated based on different currencies and units of weight.¹²³ The UPU introduced three substantial innovations: (1) single postal territory and freedom of transit; (2) universal service; and (3) a unified system for postal charges, transit charges, and terminal dues.¹²⁴

The UPU enables international mail flows by shifting postal revenues from developed countries to developing ones. The UPU separates developed and developing countries into two systems. The target system covers international mail flows between developed countries, and the transition system covers “international mail flows to, from and between

¹²² Mira Burri, Working Paper, International Regulation of Postal Communications (Jan. 22, 2008), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1271786.

¹²³ *Id.* at 2.

¹²⁴ *Id.* ¶¶ 11-18.

developing countries, following the classification of the United Nations Development Programme.”¹²⁵ Developing countries receive preferential rates under this system.¹²⁶

In 2004, the UPU Congress agreed to design a system whereby the countries in the transition system could join the target system. It also vastly complicated the methodology for calculating preferential terminal dues.¹²⁷ Proposals offer a complex formula for setting terminal dues based on gross national income, per letter delivery cost, macroeconomics, and a country's status as a small-island developing state or landlocked developing state (if applicable).¹²⁸ At about the same time as the Kyoto Protocol was heavily criticized¹²⁹ for imposing obligations based on a hard line between developing or developed countries,¹³⁰ the UPU was also eschewing binary categories to drive distribution.

2. Arms Control and Security

The United Nations Programme of Action (“PoA”) is the organizing framework for small arms and light weapons (“SALW”) assistance. The plague of SALW destabilizes fragile states, emboldens drug dealers and terrorists, and threatens the lives of soldiers and police trying to enforce order. SALW pass from conflict to conflict without losing their deadly accuracy; working rifles from World War I have been seized from the Afghan Taliban. In order to reduce the threat from SALW, international assistance is part of all international and most regional small arms and light weapons policy frameworks.¹³¹ The PoA asks that states “seriously consider rendering assistance, including technical and financial assistance where needed, such as small arms funds.”¹³² From 2001 through

¹²⁵ *Id.* ¶ 18.

¹²⁶ *Id.*

¹²⁷ Under the current terminal dues system: Least developed countries (LDCs) receive 16.5% of their inward [terminal dues] from all other classes of countries. TRAC 1 countries (former DCs) pay 16.5% to LDCs and receive 8% from industrialized countries (ICs). Net contributor countries (NCCs) pay 16.5% to LDCs and receive 1% from ICs. ICs receive no payments but pay 1% to NCCs, 8% to DCs and 16.5% to LDCs.

UNIVERSAL POSTAL UNION, THE UPU GLOBAL TERMINAL DUES SYSTEM PROPOSAL, Berne, ¶ 2 (21-22 Jan. 2008) [hereinafter TERMINAL DUES PROPOSAL].

¹²⁸ UNIVERSAL POSTAL UNION, COUNTRY CLASSIFICATION METHODOLOGY FOR THE FUTURE TERMINAL DUES SYSTEM, CONGRÈS–Doc 19.Rev 1. Annexe 1, 24th Congress.

¹²⁹ *See supra*, text accompanying note 48.

¹³⁰ Albeit phrased as “Annex I” or “non-Annex I.” *See infra*, text accompanying note 213.

¹³¹ KELLY MAZE, UNITED NATIONS INSTITUTE FOR DISARMAMENT RESEARCH, SEARCHING FOR AID EFFECTIVENESS IN SMALL ARMS ASSISTANCE 7 (2010).

¹³² *Id.* at 8 (quoting the PoA § 3 ¶ b).

2005, “states and organizations provided approximately [\$660] million of SALW assistance.”¹³³

3. Convention on Biological Diversity

The Convention on Biological Diversity (“CBD”) of 1992 was intended to preserve biological diversity, most of which is found in developing countries, so that it may be used for food and medicinal purposes by rich and poor countries alike. Without the CBD, intellectual property regimes grant temporary exclusivity over biological resources to whomever can isolate and purify them, which is most likely not the developing countries.¹³⁴ This imbalance in access to biological diversity and ability to profit motivates the innovative benefits-sharing mechanism of the CBD.

The CBD’s goals are “conservation, sustainable use and equitable sharing of benefits, part of which is appropriate access and appropriate technology transfer.”¹³⁵ Article 3 emphasizes sovereign rights over natural resources within a jurisdiction, a provision designed specifically to dispel “any vestige of the idea of biological diversity as the common heritage of mankind.”¹³⁶ Article 15 requires biodiversity-rich countries to facilitate access to genetic resources. Article 16 provides a reward of technology transfer in consideration for this access, and “Articles 17 to 19 obligate parties to facilitate the exchange of information, promote technological and scientific cooperation, and provide for the treatment of biotechnology and distribution of benefits.”¹³⁷ Article 19, in particular, “clearly announces that in exchange for access to its biodiversity, the developing world will receive a fair and equitable portion of the benefits that the North yields from their use.”¹³⁸

Early implementation of the access and benefits-sharing provisions was not encouraging. Costa Rica was the first country to exchange access to biodiversity for investment in conservation: a “debt for nature” swap in

¹³³ *Id.* at 20.

¹³⁴ See United Nations Framework Convention on Biological Diversity art. 3, Jun. 5, 1992, 31 I.L.M. 818; Aphrodite Smagadi, *Analysis of the Objectives of the Convention on Biological Diversity: Their Interrelation and Implementation Guidance for Access and Benefit Sharing*, 31 COLUM. J. ENVTL. L. 243, 244-46, 275, 281 (2006) (noting that the question of equitable sharing of the benefits of biological diversity parallels the debate on distributive claims of developing countries for maritime resources. Furthermore, countries are free under the CBD to interpret access and benefit sharing; countries manifest concepts of equity based on procedural, retributive, and distributive principles).

¹³⁵ See SMAGADI, *supra* note 1144, at 39.

¹³⁶ FIONA MCCONNELL, *THE BIODIVERSITY CONVENTION: A NEGOTIATING HISTORY* 72 (1996).

¹³⁷ See SMAGADI, *supra* note 1144, at 40.

¹³⁸ *Id.*

1991 between Merck and a national conservation organization, INBIO.¹³⁹ INBIO negotiated fourteen agreements until, in 1998, a new “Law of Biodiversity” signalled that the regime “is to be more restrictive and controlling of the process of negotiating access and benefits.”¹⁴⁰ Mexico signed four agreements, three of which “faced political challenge, legal uncertainties, and termination before accomplishment.”¹⁴¹ The one completed project was not renewed “due to the unclear regulatory power of the national [access and benefits sharing] framework.”¹⁴²

Fleshing out the practical application of the benefits sharing provision of the CBD took fifteen years and nine meetings of a dedicated Working Group.¹⁴³ The outcome of this work was presented in October 2010 to the Conference of Parties in Nagoya, Japan. The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising From Their Utilization envisions bilateral exchanges on “mutually agreed terms” of access to resources for monetary and non-monetary benefits.¹⁴⁴ The Protocol emphasizes consideration of women and indigenous communities in decision-making and sharing of benefits under these arrangements. It provides no more guidance as to how such “mutually agreed terms” are to be determined.

4. International Seed Treaty

The International Treaty on Plant Genetic Resources (“Seed Treaty”) entered into force on June 29, 2004 and sought to “ensure conservation and sustainable management of plant genetic resources for food and agriculture, as well as the fair and equitable sharing of benefits arising from their use.”¹⁴⁵ It replaced the International Undertaking on Plant Genetic Resources of 1983, which stated that all plant germplasm was the common heritage of mankind.¹⁴⁶ Like the CBD, the Seed Treaty

¹³⁹ Stephen R. Brush & Santiago Carrizosa, *Implementation Pathways*, in ACCESSING BIODIVERSITY AND SHARING THE BENEFITS: LESSONS FROM IMPLEMENTING THE CONVENTION ON BIOLOGICAL DIVERSITY, IUCN ENVIRONMENTAL POLICY AND LAW PAPER No. 54, at 68 (Santiago Carrizosa et al. eds., 1994).

¹⁴⁰ *Id.* at 69.

¹⁴¹ *Id.* at 71.

¹⁴² *Id.* at 72.

¹⁴³ Working Group on Access and Benefits Sharing, <http://www.cbd.int/abs/wgabs/> (last updated Dec. 9, 2010).

¹⁴⁴ Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising From Their Utilization art. 5(1).

¹⁴⁵ See SMAGADI, *supra* note 1144, at 36.

¹⁴⁶ *Id.* at 34.

trades compensation for efforts to conserve and manage seed stocks.¹⁴⁷
The Seed Treaty

covers all genetic material for food and agriculture by specifically putting in place a multilateral system to facilitate access to 64 essential crops and their varieties. Parties deal directly with the system and not with each other; and benefit-sharing arrangements are possible only in the context of the genetic resources listed in the multilateral system.¹⁴⁸

In terms of benefits sharing, it “calls for those parties that use material accessed from the multilateral system and create commercial value from the resource to pay an ‘equitable share’ of the benefits.”¹⁴⁹ These benefits are administered through a common fund, via a Governing Body.¹⁵⁰ The Seed Treaty appears to be trying to avoid the transaction costs inherent in the bilateral relationships envisaged by the CBD, but has not done nearly as much work as the CBD on the attempt to articulate what an ‘equitable share’ means.¹⁵¹

D. Common heritage of mankind

The concept of the “common heritage of mankind” (“CHM”) has been called “one of the most extraordinary developments in recent intellectual history.”¹⁵² At its core, CHM seeks to remedy the disparities between developed and developing nations through equitable sharing of resources.¹⁵³ The common heritage of mankind builds on the concept of *res nullius*—territory under no one’s control, but amenable to appropriation—and *res communis*—a source of resources which may not be appropriated, although the resources themselves may be.¹⁵⁴ CMH adds *to res communis* the notion of redistribution—a sharing of the “product resulting from the use of the common.”¹⁵⁵ Resources subject to equitable

¹⁴⁷ See *id.* at 65.

¹⁴⁸ *Id.* at 97.

¹⁴⁹ *Id.* at 98.

¹⁵⁰ See *id.*

¹⁵¹ See *infra* subsection II.C.3.

¹⁵² KEMAL BASLAR, THE CONCEPT OF THE COMMON HERITAGE OF MANKIND IN INTERNATIONAL LAW 7 (1998).

¹⁵³ *Id.* at 96-97.

¹⁵⁴ EMILIO J. SAHURIE, THE INTERNATIONAL LAW OF ANTARCTICA 368-369 (1992).

¹⁵⁵ *Id.* at 369; see also BASLAR, *supra* note 152, at 43 (on benefits sharing as an addition to *res communis*).

sharing include material and tangible benefits, as well as knowledge and technology.¹⁵⁶ At the beginning, equitable sharing had only been employed in the context of exploitation of resources;¹⁵⁷ the “huge financial and technological sacrifices” required to protect and conserve CHM have added burden-sharing to the common heritage framework.¹⁵⁸

The concept of CHM was first espoused in a tentative fashion in the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (“Outer Space Treaty”).¹⁵⁹ It was sent to the forefront in the 1979 Agreement Governing the Activities of the States on the Moon and other Celestial Bodies (“Moon Treaty”).¹⁶⁰ The treatment of common resources has been articulated in the most detail, and made subject to the most resistance, in negotiations over the 1982 Law of the Sea Convention.¹⁶¹

After the euphoria of the New International Economic Order (“NIEO”) faded, the demands for equitable sharing of common resources have quieted. CHM was specifically rejected in both the CBD of 1992 and the Seed Treaty of 2004.¹⁶² Indeed, these international legal frameworks, although arguably drawn from a shared concern with biodiversity as a common heritage, may have responded to the resistance to the concept of CHM. States Parties to the Antarctica Treaty System, in order to fend off a push in the 1980s to extend the concept of CHM to Antarctica, may have preserved their control over their treaties by acting as though Antarctica *was* being held in common, albeit without admitting as much.

1. Outer Space and Moon Treaties

The Outer Space Treaty was opened for signature less than six years after the Soviet Union put a man into space, and less than ten years after the launch of Sputnik. One hundred nations, including the United

¹⁵⁶ BASLAR, *supra* note 1522, at 98.

¹⁵⁷ *Id.* at 99.

¹⁵⁸ *Id.* at 100.

¹⁵⁹ Treaty on Principles Governing the Activity of States in the Exploration and Use of Outer Space Including the Moon and Other Celestial Bodies art. 3, Jan. 27, 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205.

¹⁶⁰ Agreement Governing Activities of States on the Moon and Other Celestial Bodies, GA Res. 34/68, UN GAOR, Supp. No. 46, U.N. Doc. A34/46 (1979).

¹⁶¹ United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 3. Also, in 1982 Malaysia and other developing nations called for the concept of CHM to be applied in Antarctica. *See infra* text accompanying notes 188-190.

¹⁶² *See infra* text accompanying notes 136 (CBD) and 146 (Seed Treaty).

States and all other spacefaring nations, have ratified the treaty.¹⁶³ The treaty requires that the

exploration and use of outer space . . . be carried out for the benefit and interests of all countries . . . and shall be the province of all mankind.” Article I further provides that “[o]uter space shall be free for exploration and use by all states without discrimination of any kind, on a basis of equality and in accordance with international law” Under Article II, “[o]uter space . . . is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.” These are the so-called “common interest,” “freedom” and “non-appropriation” principles.¹⁶⁴

Among these principles, the primary goal “was to preclude any claims of sovereignty in outer space and on celestial bodies.”¹⁶⁵

As activities in space become more privately-run, commercial endeavours, rather than nationalist demonstrations of scientific prowess, the interpretation of the common interest and non-appropriation clauses of the Outer Space Treaty have become more salient.¹⁶⁶ Non-spacefaring nations argue that any benefits from space should be equitably distributed, while spacefaring nations counter that “the phrase merely speaks to the optimism inherent in space exploration and places no limitations on them whatsoever.”¹⁶⁷ Along the same lines, non-spacefaring nations argue that any mining of outer space would violate the non-appropriation principle.¹⁶⁸ As private enterprises contemplate profit-making in space, scholars debate whether the non-appropriation principle only prohibits national appropriation (leaving private ownership alone),¹⁶⁹ or whether the freedom

¹⁶³ See U.N. Office for Outer Space Affairs, *United Nations Treaties and Principles on Outer Space and Other Related General Assembly Resolutions*, add. at 8-16, U.N. Doc. ST/SPACE/11/Rev.1/Add.1/Rev.1 (Jan. 1, 2007) [hereinafter *Outer Space*].

¹⁶⁴ Captain Michael R. Hoversten, *U.S. National Security And Government Regulation Of Commercial Remote Sensing From Outer Space*, 50 A.F. L. REV. 253, 261 (2001).

¹⁶⁵ Adam G. Quinn, Note, *The New Age Of Space Law: The Outer Space Treaty And The Weaponization Of Space*, 17 MINN. J. INT'L L. 475, 480 (2008).

¹⁶⁶ See e.g., Jonathan Thomas, Note, *Privatization Of Space Ventures: Proposing A Proven Regulatory Theory For Future Extraterrestrial Appropriation*, 1 INT'L L. & MGMT. REV. 191 (2005) (on roadblocks established by current treaties on privatization of outer space ventures).

¹⁶⁷ Quinn, *supra* note 1655, at 480.

¹⁶⁸ *Id.* at 481.

¹⁶⁹ Zach Meyer, *Private Commercialization of Space in an International Regime: A Proposal for A Space District*, 30 NW. J. INT'L L. & BUS. 241, 252 (2010).

principle would preclude the right to exclude others through any sort of private property rights.¹⁷⁰

The Moon Treaty has none of the ambiguity of the Outer Space Treaty. It has also been ratified by only thirteen nations, none of which currently have the capability of space travel.¹⁷¹ The Moon Treaty

establishes that all resources outside the earth are the “common heritage of mankind” and that no entity, either public or private can exclusively own any space resource, and that there must be “equitable sharing” by all state parties in the benefits derived from space resources, taking into consideration the needs of developing countries Although the Moon Treaty allows parties to retain ownership of the equipment, vehicles and installations . . . there is no right to exclude because Article XV requires that all vehicles, installations and equipment shall be open to use by all other parties.¹⁷²

Developing nations argued that access to Moon resources should be approved by a majority, with each nation having one vote.¹⁷³ Baslar writes that “it would not be an exaggeration to equate the common heritage of mankind with the whole of the [Moon Treaty] itself.”¹⁷⁴ He adds that “the [Moon Treaty] was prepared during the heady period of the NIEO when a clear Third World majority at the United Nations was thought to be creating an ‘OPEC-like monopoly’ over the resources of the moon.”¹⁷⁵

The United States responded to this attempt by calling it “international socialism controlled by the Third World.”¹⁷⁶ Companies took out newspaper ads calling it a “Third-World drive to frustrate America’s hard-won technological supremacy.”¹⁷⁷ The United States was especially adverse to elements of the treaty that were hostile to U.S. private enterprise, such as the provision that lunar facilities would be open to

¹⁷⁰ David Collins, *Efficient Allocation of Real Property Rights on the Planet Mars*, 14 B.U. J. SCI. & TECH. L. 201, 204 (2008).

¹⁷¹ See Outer Space, *supra* note 163 (France has signed but not ratified the Moon Treaty).

¹⁷² Collins, *supra* note 1700, at 204-5.

¹⁷³ BASLAR, *supra* note 1522, at 164.

¹⁷⁴ *Id.* at 161.

¹⁷⁵ *Id.* at 164-65. Much like the Law of the Sea Convention, developing country mineral exporters were trying to head off a situation where minerals were supplied from the moon or other celestial bodies, worsening their international bargaining power.

¹⁷⁶ *Id.* at 161.

¹⁷⁷ *Id.* at 164.

inspection by any government that wished.¹⁷⁸ They accurately, although with disdain, characterized the treaty as a “Third World demand for massive redistribution of wealth so as ultimately to equate the economic position of the two hemispheres.”¹⁷⁹ Given the marked difference in support for the Outer Space Treaty and the Moon Treaty, and their textual differences, it is probably a stretch to read CHM into the Outer Space Treaty. More interesting for the purposes of understanding the distributive function of international law is the vociferous opposition to any obligation imposed on developed countries by the CHM framework.

2. Antarctic Treaty System

The Antarctic treaty regime represents a powerful and somewhat under-appreciated accomplishment of peace-making in international law, and the sharing of resources in particular. The aspiration that Antarctica not be a source of international discord was a very weighty goal in the late 1950s.¹⁸⁰ Despite ambiguities in treaty documents, it enabled thirty years of successful cooperation in scientific research, while wars were fought by the same parties elsewhere.¹⁸¹ Britain and Argentina negotiated in 1982 in good faith over Antarctica while on the brink of war in the Falklands.¹⁸² Both the United States and Russia committed to conducting no military actions in Antarctica, which effected a complete demilitarisation of sizable territory of military value during the Cold War.¹⁸³

The Antarctic treaty regime is comprised of four treaties: (1) the 1959 Antarctic Treaty covering general prohibition of military activities and nuclear dumping;¹⁸⁴ (2) the 1964 Brussels Agreed Measures for the Conservation of Antarctic Fauna and Flora;¹⁸⁵ (3) the 1972 Convention for the Conservation of Antarctic Seals; and (4) the 1980 Convention of Antarctic Marine Living Resources.¹⁸⁶ The Antarctic treaty regime does

¹⁷⁸ *Id.* at 162; *see also* Quinn, *supra* note 1655, at 482-3 (“The Moon Treaty’s primary goal was to unambiguously deny property rights in outer space to both sovereign nations and private actors”).

¹⁷⁹ BASLAR, *supra* note 1522, at 165.

¹⁸⁰ Christopher D. Beeby, *The Antarctic Treaty System: Goals, Performance, and Impact*, in THE ANTARCTIC TREATY SYSTEM IN WORLD POLITICS 4, 5 (Arnfinn Jørgensen-Dahl & Willy Østrem eds., 1991).

¹⁸¹ Joe Verhoeven, *General Introduction*, in THE ANTARCTIC ENVIRONMENT AND INTERNATIONAL LAW 11, 11 (Joe Verhoeven et al. eds., 1992).

¹⁸² Beeby, *supra* note 1800, at 4.

¹⁸³ *Id.* at 5-6.

¹⁸⁴ Antarctic Treaty arts. 1,5, Dec. 1, 1959, 12 U.S.T. 794, 402 U.N.T.S. 71.

¹⁸⁵ Agreed Measures for the Conservation of Antarctic Fauna and Flora, June 2, 1964, 17 U.S.T. 991.

¹⁸⁶ Conference on the Convention of Antarctic Marine Living Resources, July, 1980, 19 I.L.M. 841 (1980). A fifth treaty, the Wellington Convention on the Regulation of Antarctic Mineral Resource Activities, was designed to govern mineral exploitation. *See* Antarctic Treaty Special Consultative Meeting on Antarctic Mineral Resources: Final Act and Convention on the Regulation of Antarctic

not seek to resolve the multiple overlapping claims to sovereignty over Antarctic territory.¹⁸⁷

Malaysia, working in the United Nations General Assembly in 1982, extended the idea of the CHM, drawn from the Law of the Sea, to Antarctica.¹⁸⁸ It complained that an exclusive club of twenty-five countries was deciding the fate of Antarctica—a territory that should be organized for the benefit of all.¹⁸⁹ Resisting the notion of global governance, the parties to the Antarctica Treaty System worked for decades to get Antarctica off the United Nations agenda. Much of the criticism faded away after the Wellington Convention was abandoned.¹⁹⁰ Despite rejecting in principle the concept that Antarctica should be governed in common or that its resources should be shared among countries without regard to technical ability or a sovereign claim, parties to the Antarctic Treaty System appear to have effectively organized themselves almost as stewards of a global trust. Even if conservation measures are not as effective as could be hoped, parties have avoided—at least on land—appropriating resources to themselves.

3. Law of the Sea

The law of the sea has traditionally been understood as a tension between the rights of coastal states to exploit natural resources off their shores and the right of maritime states to freedom of navigation. But newly decolonized countries shifted the debate from one limiting the expansion of national jurisdiction in order to protect freedom of navigation, to one about how the seas could be utilized “for the economic benefit of the international community as a whole” by means of “exploitation of the submarine wealth on an equal footing.”¹⁹¹ The Law of the Sea agreement to share the resources of the seabed was “tremendous and unparalleled.”¹⁹²

Mineral Resource Activities, May, 1988, 27 I.L.M. 868 (1988). In the face of strong protests, the Wellington Convention was stillborn, as it was immediately rejected by the same countries that had just negotiated it and who now claimed a desire to radically protect the environment. See Verhoeven, *supra* note 1811, at 12.

¹⁸⁷ Beeby, *supra* note 1800, at 5.

¹⁸⁸ Rajmah Hussain, *The Antarctic: Common Heritage of Mankind?*, in THE ANTARCTIC ENVIRONMENT AND INTERNATIONAL LAW, *supra* note Error! Bookmark not defined.81, at 89.

¹⁸⁹ *Id.* at 91.

¹⁹⁰ Marie Jacobsson, *The Antarctic Treaty System: Legal and Environmental Issues—Future Challenges for the Antarctic Treaty System*, in ANTARCTICA: LEGAL AND ENVIRONMENT CHALLENGES FOR THE FUTURE 1, 3 (Gillian Triggs & Anna Riddell eds., 2007).

¹⁹¹ Christos L. Rozakis, *Compromises of States Interests and Their Repercussions Upon the Rules on the Delimitation of the Continental Shelf*, in THE NEW LAW OF THE SEA 155, 165 (Christos L. Rozakis & Constatine A. Stephanou eds., 1983).

¹⁹² SAHURIE, *supra* note 1544, at 387.

The goal was to limit the “selfish expansion of the national jurisdiction”¹⁹³ and to support the interest of the least developed states to participate in deep-sea resources.¹⁹⁴ The Law of the Sea was partly negotiated in reaction to the status quo in Antarctica: “common ownership entails the rejection of the Antarctica pattern,” which was perceived as an oligarchy of financially and technologically advanced states.¹⁹⁵

The negotiations on how to distribute sea-bed resources were driven by familiar land-based concerns. Mineral-exporting developing nations were very worried about a loss of export earnings, due to a fall in price from minerals extracted in deep sea areas instead of purchased from them.¹⁹⁶ In negotiating the United Nations Convention on the Law of the Sea (“UNCLOS”), such mineral-exporting nations were joined by other developing countries in an expression of solidarity.¹⁹⁷ Nepal and other landlocked states proposed a Common Heritage Fund drawn from profits on exploitations of the Exclusive Economic Zone; however, this proposal was not adopted.¹⁹⁸ As a result, UNCLOS arranges production by an annual ceiling, and gives the International Sea-bed Authority “the duty to come to the aid of developing countries whose economies would be seriously harmed by activities in the Area.”¹⁹⁹ UNCLOS’s Article 82 provides for payments from state to state arising from economic exploitation in the high seas:

The coastal State shall make payments or contributions in kind in respect of the exploitation of the non-living resources of the continental shelf beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured.²⁰⁰

¹⁹³ Rozakis, *supra* note 1911, at 166.

¹⁹⁴ *Id.* at 167.

¹⁹⁵ Rene-Jean Dupuy, *The Notion of Common Heritage of Mankind Applied to the Seabed*, in THE NEW LAW OF THE SEA, *supra* note 1911, at 199, 201. Sahurie, writing in 1992, appears incredulous:

[s]mall states could not have realistically hoped for a new international economic order by merely relying on the establishment of common “ownership” of resources they are unable to exploit by themselves; nor can they hope to share the gains in those “commons” unless they yield benefits to those with technological and financial capabilities.

But that is exactly what they hoped for. SAHURIE, *supra* note 1544, at 371.

¹⁹⁶ Dupuy, *supra* note 195, at 205.

¹⁹⁷ Constantine A Stephanou, *A European Perception of the Attitude of the United States at the Final Stages of UNCLoS III With Respect to the Exploitation of the Deep Sea-Bed*, in THE NEW LAW OF THE SEA, *supra* note 191, at 259, 260.

¹⁹⁸ DONALD R. ROTHWELL & TIM STEPHENS, THE INTERNATIONAL LAW OF THE SEA 201 (2010).

¹⁹⁹ Stephanou, *supra* note 197, at 261.

²⁰⁰ United Nations Convention on the Law of the Sea art. 82(1), Dec. 10, 1982, 21 I.L.M. 1261, 1833 U.N.T.S. 397 (1982) (Payments and contributions with respect to the exploitation of the continental shelf beyond 200 nautical miles).

The Convention specifies the amount of contribution:

The payments and contributions shall be made annually with respect to all production at a site after the first five years of production at that site. For the sixth year, the rate of payment or contribution shall be 1 per cent of the value or volume of production at the site. The rate shall increase by 1 per cent for each subsequent year until the twelfth year and shall remain at 7 per cent thereafter. Production does not include resources used in connection with exploitation.²⁰¹

The method of sharing these contributions is left to equity, interests, and needs:

The payments or contributions shall be made through the Authority, which shall distribute them to States Parties to this Convention, on the basis of equitable sharing criteria, taking into account the interests and needs of developing States, particularly the least developed and the land-locked among them.²⁰²

Not only does UNCLOS provide for benefits sharing, but it creates a multinational company called the Enterprise in order to engage in deep seabed mining. It requires transfer to the Enterprise

on fair and reasonable commercial terms and conditions, the technology that is owned by him or which he is entitled to use by virtue of a license. In the event of his not being authorised to grant sub-licenses, he undertakes to obtain this right It should, furthermore, be noted here that penalties and forfeitures are provided for, in case the contractor refuses to carry out the above mentioned commitments.²⁰³

²⁰¹ *Id.* art. 82(2).

²⁰² *Id.* art. 82(4).

²⁰³ Stephanou, *supra* note 197, at 264.

The Nixon administration agreed to such compromises under pressure from the Department of Defense to protect US Navy access to international straits:

The Department of Defense assessed the price of securing naval mobility to be concessions on the deep-seabed interests of the Third World The deep seabed was seen as a bargaining chip that would facilitate a quid pro quo between the maritime powers and the Third World.²⁰⁴

The developing nations hoped that such “a strong seabed authority would provide a precedent for peacefully and cooperatively dealing with common areas and resources in the future.”²⁰⁵

This compromise was too much for the Reagan administration, which valued coastal interests such as fishing and oil drilling above all.²⁰⁶ Even though all the changes requested by the Reagan administration (having to do with technology transfer and a U.S. veto power) were negotiated and signed by most states in 1994, the U.S. still has not signed UNCLOS.²⁰⁷ Just as developing nations were rejecting the exclusive nature of the Antarctic Treaty System, the United States thought that UNCLOS was an “international socialist cartel” and worried about its precedent for Antarctica and for outer space.²⁰⁸

E. More than one governing principle

1. Kyoto Protocol

The Kyoto Protocol was opened for signature in December 1997, and came into force in 2005. As of January 2009, 184 countries had ratified the Protocol.²⁰⁹ It was the culmination of negotiations that began with a World Climate Conference in 1979.²¹⁰ Kyoto articulates the principle of “common but differentiated responsibility” and notes that “specific needs of developing countries should be given full

²⁰⁴ STEVEN R. DAVID & PETER DIGESER, *THE UNITED STATES AND THE LAW OF THE SEA TREATY* 15 (1990).

²⁰⁵ *See id.* at 26.

²⁰⁶ *See id.* at 10-12.

²⁰⁷ SCOTT G. BORGERSON, *THE NATIONAL INTEREST AND THE LAW OF THE SEA* 11-12 (2009).

²⁰⁸ SAHURIE, *supra* note 1544, at 389.

²⁰⁹ *See* UNFCCC, *Kyoto Protocol Status of Ratification*, Jan. 14, 2009, http://unfccc.int/files/kyoto_protocol/status_of_ratification/application/pdf/kp_ratification.pdf.

²¹⁰ *See* HEIKI SCHRODER, *NEGOTIATING THE KYOTO PROTOCOL: AN ANALYSIS OF NEGOTIATION DYNAMICS IN INTERNATIONAL NEGOTIATIONS* 14 (2001).

consideration.”²¹¹ It reflected the dual governing principles of reducing future harm and compensating developing countries for the vulnerability to which developed countries’ emissions had subjected them.²¹² Building on these guiding principles, the Kyoto Protocol operates by requiring certain countries to reduce their emissions, and articulates the mechanisms of doing so.

The manifestation of the common but differentiated responsibilities is the requirement that the thirty-nine developed countries listed in Annex I reduce their greenhouse gas emissions by at least five percent below 1990 levels.²¹³ The categories of Annex I and non-Annex I acknowledge accountability for harmful emissions in the past rather than the ability to reduce future world emissions. The “Annex I list includes poorer countries, the non-Annex I list include richer countries,”²¹⁴ and the relative contributions of each category moves closer to each other every year. The categories reflect, therefore, a compensation motivation for distribution.

The Kyoto Protocol also includes flexibility mechanisms to achieve emissions reductions, such as emissions trading (trading between developed countries); joint implementation (transferring emissions allowances between developed countries); and a Clean Development Mechanism (“CDM”) (allowing participants to achieve part of their obligations through projects in developing countries).²¹⁵ The flexibility mechanisms reflect a growing faith in market-based solutions for collective action problems, including “limited government and strong property rights.”²¹⁶ The CDM, in particular, was a compromise in response to a

²¹¹ *Id.* at 21.

²¹² Joyeeta Gupta, *Developing Countries and the Post-Kyoto Regime: Breaking the Tragic Lock-in of Waiting for Each Other’s Strategy*, in *THE KYOTO PROTOCOL AND BEYOND: LEGAL AND POLICY CHALLENGES OF CLIMATE CHANGE* 161, 165 (W.Th. Douma et al. eds., 2007) (developing countries are less resilient to dangers from climate change).

²¹³ SCHRODER, *supra* note 210, at 64. Some countries had stronger targets. The EU has to reduce by 8%, the United States by 7 %, Japan by 6%. *Id.* There were other proposals that veered more strongly from the status quo. *See, e.g.*, MAYER HILLMAN ET AL., *THE SUICIDAL PLANET: HOW TO PREVENT GLOBAL CLIMATE CATASTROPHE* 194, 194 (2007) (advocating personal carbon allowances of equal carbon allocation for all people, with only rare exceptions).

²¹⁴ Gupta, *supra* note 212, at 163. Gupta adds that developing countries “prioritize, at least rhetorically, poverty reduction,” and emphasize their lack of resources. *Id.* at 165.

²¹⁵ Saleemul Huq & Hannah Reid, *Benefit Sharing Under the Clean Development Mechanism*, in *LEGAL ASPECTS OF IMPLEMENTING THE KYOTO PROTOCOL MECHANISMS: MAKING KYOTO WORK* 230 (David Freestone & Charlotte Streck, eds., 2005).

²¹⁶ Kysar, *supra* note 46, at 2116 (arguing that market liberalism and sustainable development are fundamentally in tension). Despite this faith in market-based solutions, the Kyoto Protocol does not operate by means of the simplest and most robust market intervention—a carbon tax—even though experts believe that such a tax would be the most efficient carbon mitigation scheme. *See e.g.*, Reuven S. Avi-Yonah & David M. Uhlmann, *Combating Global Climate Change: Why A Carbon Tax Is A Better Response To Global Warming Than Cap And Trade*, PUB. L. & LEG. THEORY WORKING PAPER SERIES, WORKING PAPER NO. 117, March 2008 (Revised Jan. 2009) (discussing why a carbon tax is a better solution than a cap and trade system, due to simplicity, ease of enforcement, among other

Brazilian proposal for financial penalties for failure to meet Kyoto obligations. Through negotiation, “the idea of a penalty on governments was transformed into a mechanism for investment by companies.”²¹⁷

The negotiating challenges of Kyoto are hard to overstate. In addition to the chilling effect of the lack of U.S. participation since 1997,²¹⁸ the challenges included consistent divisions between North and South negotiating blocs and among the G-77, such as divisions between low-lying states and oil-producing states.²¹⁹ The preparation in developing countries for negotiating sessions was limited by “ideological vacillation, their relative lack of scientific information . . . , the lack of public and political interest in climate change-related issues, and the inability to go beyond simple, rhetorical demands This tends to lead to a hollow mandate for negotiating purposes.”²²⁰

The Kyoto Protocol is a uniquely ambitious project, as it “affects choices of national economic policy and the lifestyle of citizens The overall economic impact of these measures . . . is enormous.”²²¹ In an effort to match the complexity of causation with flexible solutions, it facilitates reductions and sequestration at the lowest cost, in a framework imported from the American experience in acid rain permit trading.²²² Earlier international environmental law frameworks imported liability models, based on the loss of ability to exploit transboundary resources,²²³ or models based on principles of nuisance.²²⁴ Multilateral frameworks employed rules to reduce harm, either by mandating technological improvements, in the case of the move to double-hulled tankers, or by combining this mandate with assistance to developing countries, in the case

factors). This faith in market-based solutions is in contrast to attempts not long before to address developing country vulnerabilities through price floors and other protections. See John Ravenhill, *What is to be done for Third World commodity exporters? An evaluation of the STABEX scheme*, 38 INT’L ORG. 537, 538 (1984) (discussing how negotiations on protecting non-oil exporting Third World countries moved from price-setting mechanisms to a compensatory financing scheme).

²¹⁷ SCHRODER, *supra* note 2110, at 71.

²¹⁸ Gupta, *supra* note 2122, at 161.

²¹⁹ CLIMATE CHANGE AND THE LAW, *supra* note 20, at 135.

²²⁰ *Id.* at 163. Other negotiating challenges included: debates on free market promotion versus environmental restraints on production; different treaties and bodies on climate change, some with conflicting goals; multilateral negotiations and unilateral negotiations initiated by the United States, creating confusion; negotiations held in “multiple non-plenary sessions”; and poorly organized coalitions within the developing world. *Id.*

²²¹ Michael Bothe, *The Kyoto Protocol as a Pioneer Among the Multilateral Environmental Agreements*, in THE KYOTO PROTOCOL AND BEYOND: LEGAL AND POLICY CHALLENGES OF CLIMATE CHANGE 241, 242 (W.Th. Douma et al. eds., 2007).

²²² *Id.* at 244.

²²³ Thomas A. Reynolds, *Delimitation, Exploitation, And Allocation Of Transboundary Oil & Gas Deposits Between Nation-States*, 1 ILSA J. INT’L & COMP. L. 135, 164 (1995).

²²⁴ See *Trail Smelter Arbitration (U.S. v. Can.)*, 3 R.I.A.A. 1905, 1963-81 (Perm. Ct. Arb. 1941) (on cross-border pollution arising in a Canadian smelter).

of the Montreal Protocol on CFCs.²²⁵ The Kyoto Protocol reflects both the principle of compensation for past wrongs, as well as a finely granulated model to invest in global climate protection.

III. Patterns of Distribution in International Law

Despite the charge that distribution between nations is not a strength of international law, global frameworks distribute resources in powerful, albeit unnoticed, ways. The success of this distribution depends not on the topic at hand, but on the motivating principle behind the distributive framework. Distribution based on the principles of compensation for past harm or investment in public goods is time-tested and uncontroversial. Distribution based on necessity is a newer entrant to the field, but succeeds due to moral force. Despite decades of pressure and a variety of attempts, the common heritage of mankind has been rejected as an organizing principle of distribution in international law, although states appear to respect it in practice, at least for low-value resources.

As the Iran-U.S. Claims Tribunal demonstrates, the norm of compensation for harm to private property is sufficiently well established to undergird distribution of resources even between the most ardent enemies. The measure of liability is hotly contested, as is the relative ability of a country to change protections for private property within its borders. Even as the measure of damages or attribution of liability changes, nations feel confident asking for and expecting compensation for harm to private property.

Less well known than compensation, and yet more powerfully integrated into the globalized economy, are distribution frameworks that invest in global public goods. Whether keeping the mail moving or stopping the flow of small arms, international law effectively distributes resources in order to achieve a specific, shared goal. In these frameworks there is a clear need on the part of developed countries, and little discussion of the question of liability. The debate is purely one of how to achieve a simple goal rather than one of corrective justice, and classifications based on considerations of anything other than effectiveness muddy the clarity of the investment motivation.

Distribution based on necessity is a new facet of the distributional function of international law. Distinct from charity, such as the outpouring of support that might follow a natural disaster, international law distributes

²²⁵ The Montreal Protocol on CFCs included a Multilateral Fund for ozone depletion which "compensates developing countries for the 'agreed incremental costs' of projects that replace ozone-depleting substances . . . To date, about \$1 billion has been committed to projects to cut ozone-depleting substances." VICTOR, *supra* note 11, at 37.

the outcome of requests (or demands) for commitments to remedy an unfair status quo. The campaign for sovereign debt relief demonstrates that the ability to alleviate suffering motivates distribution, as long as a precise and powerful campaign can engage domestic constituencies. A similar campaign for access to essential medicines has had a modest impact to date, as the principle of necessity resulted in the redistribution of intellectual property rights and revenue to developing countries through an international legal framework.²²⁶

The concept of common ownership, or the common heritage of mankind, emerged in the Cold War era when developing countries were flexing new-found power. They sought to corral previously unclaimed resources in space, the moon, the high seas, and Antarctica. This effort has been roundly rejected by the nations that are currently able to exploit opportunities in these new frontiers. The Outer Space Treaty, signed by over a hundred countries, aims to preclude claims of sovereignty and requires that activities in outer space be organized for the common benefit and interest of all. The Moon Treaty, ratified by thirteen non-spacefaring nations, calls for the equitable sharing of resources based on the common heritage of mankind. Although the parties to the Antarctic Treaty System worked for years to fend off pressure to organize the Antarctic under common ownership, when pressed, they shelved a framework that would have allowed for mining in the Antarctic. The ardent exposition of the common heritage of mankind finally drew the United States out of the Convention on the Law of the Sea. However, the United States, along with the United Kingdom, Russia, Germany, France, and Italy, provided for some percentage of deep sea mining revenues to be shared with developing nations.²²⁷ This forbearance may be tested as resources in new frontiers become more valuable.²²⁸

International law distributes resources for compensation as an investment in public goods and due to necessity, while it founders with frameworks that draw on the common heritage of mankind or on more than one norm. Arguably, the Kyoto Protocol could have been justified as compensation for past harm, given the incontrovertible responsibility of developed nations for cumulative greenhouse gas emissions. It could also have been explained as an investment in a global public good, given the

²²⁶ See generally Amy Kapczynski, *The Access to Knowledge Mobilization and the New Politics of Intellectual Property*, 117 YALE L.J. 804 (2008) (describing the 'access to knowledge' challenge to the traditional intellectual property system).

²²⁷ See BASLAR, *supra* note 1522, at 214. The United States' fund was enacted in 1980 and is codified at 30 U.S.C. § 1472 (2006).

²²⁸ The common heritage of the seas was never tested, as deep sea mining never became profitable. In comparison, revenue from fishing on the high seas has never been shared through some sort of equitable mechanism.

shared reliance on the ecological status quo. However, Kyoto combined differential responsibilities based on past contribution with a variety of efficiency mechanisms based on a shared investment framework. Inconsistencies between a country's responsibility under the principle of liability and its ability to invest in a shared goal—in the case of China—or between its responsibility and its vulnerability to the chaos caused by such greenhouse gases—in the case of the United States—drove a wedge through the Kyoto Protocol.²²⁹

Conclusion

The breadth of areas for which international law redistributes resources should put to rest the question of whether “[w]e should rarely observe treaties that redistribute wealth from one state to another.”²³⁰ Indeed, we frequently observe treaties of this nature. By offering a description of the state of distribution in international law, this Article has attempted to counter the presumption that such distribution does not happen. In addition, this Article posits an explanation of why distribution occurs without contest in some areas, and only in the face of great opposition in others. It aims to help international law practitioners understand the implications of the way that distributive frameworks are designed on the likely success of the treaty, particularly in terms of motivating principles.

One lesson of this survey of distribution in international law is that models of distribution oriented towards one goal are judged by what they mean for distribution in general. Developing countries hoped that the Moon Treaty would be a template for a massive distribution of wealth, and the United States worried about what the Law of the Sea meant as precedent for Antarctica, outer space, and the moon. In reacting so strongly against distribution based on the common heritage of mankind, the United States operated under the assumption that distribution under international law was possible and the United States needed to be protected from what it saw as ‘international socialism.’

Another lesson from this survey is that distributive frameworks learn from each other. The Antarctic Treaty System responded with apprehension to the movement towards a common heritage of mankind expressed in the Law of the Sea. The Moon Treaty tried to overcome the lack of recognition of the common heritage of mankind in both the Outer

²²⁹ See Posner & Sunstein, *supra* note 22, at 1567-68 (analyzing climate change through a lens of corrective and distributional justice).

²³⁰ Posner, *supra* note 9.

Space treaty and the Antarctica Treaties. The CBD and the Seed Treaty rejected the notion of common heritage, focusing instead on common opportunity, and the Seed Treaty avoided the bilateral arrangements of the CBD. Far from being a rare occurrence, distribution under international law is indispensable to the practical and moral fabric of a globalized world. As long as the call for distribution justifies itself by one principle of compensation, investment, or necessity, it can be expected to do the work of international law in maintaining the world public order.

