Regulatory Reform under Conditions of Regime Complexity

Weak Actors and Institutional Opportunity Structures in the Global Governance of Intellectual Property

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AIDS	Acquired immune deficiency syndrome
BIRPI	United International Bureaux for the Protection of Intellectual Property
BRICS	Brazil, Russia, India, China, and South Africa
CBD	Convention on Biological Diversity
CGIAR	Consultative Group on International Agricultural Research
DNA	Deoxyribonucleic acid
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross domestic product
HIV	Human immunodeficiency virus infection
IBPGR	International Board for Plant Genetic Resources
ILO	International Labour Organization
NGO	Nongovernmental organization
OECD	Organisation for Economic Co-operation and Development
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
UCC	Universal Copyright Convention
UK	United Kingdom
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDO	United Nations Industrial Development Organization
UPOV	International Union for the Protection of New Varieties of Plants
U.S.	United States of America
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

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In the course of the transition from the industrial to the knowledge economy, the legal construct of intellectual property has gained considerably in significance. Since the mid-20th century, countries of the Global North have successfully pushed for authoritative standards of protection at the international level. International treaties, including the Agreement on Trade-related Aspects of Intellectual Property (TRIPS) have caused controversy, as they restrict the accessibility of essential knowledge goods. In recent years, however, coalitions of countries from the Global South and NGOs have been able to influence international rulemaking in a number of cases. How were these materially weaker actors able to achieve change?

Drawing on a wealth of empirical material, my dissertation studies this question from a comparative perspective. In a first case study, I analyze the conflict over access to printed material for people who are blind, visually, or otherwise print-disabled. While a first reform attempt in the 1970s and 80s failed to produce a significant outcome, a second one was far more successful. In 2013, the World Intellectual Property Organization adopted the Marrakesh Agreement, which, against the opposition of developed countries and rights holders, established legally binding limitations and exceptions for the benefit of people with disabilities. In a second case study, I look at the conflict over access to crop seeds for smallholder farmers. As in the first case study, in the 1980s, an initial reform attempt was unsuccessful. A second one, however, in 2001, resulted in the conclusion of the far-reaching International Treaty for Plant Genetic Resources for Food and Agriculture. Explanatory factors highlighted by the literature, such as the actor constellation, are largely constant across both cases. What then explains the greater success of later reform attempts?

I argue that shifts in the institutional contexts of the governance areas have created opportunities for weaker actors. Combining insights from the literature on regime complexity and historical institutionalist theorizing, I show that competitive relationships among international institutions open up the opportunity structure for challengers of the regulatory status quo. Conversely, a fragmentation of the institutional context leads to a closure of the opportunity structure, as it exacerbates broad mobilization and sustained collective action.

My thesis makes a contribution to discussions in International Political Economy on the international regulation of markets. It also contributes to the debate in International Relations on regime complexity.

Im Zuge des Wandels von der industriellen zur wissensbasierten Ökonomie hat das Rechtskonstrukt des geistigen Eigentums erheblich an Bedeutung gewonnen. Seit Mitte des 20. Jahrhunderts wurden auf Drängen der Staaten des Globalen Nordens auf internationaler Ebene zunehmend verbindliche Schutzstandards vereinbart. Im Zuge der fortschreitenden Regulierung haben Übereinkommen wie das über handelsbezogene Aspekte der Rechte des geistigen Eigentums (TRIPS) heftige Kontroversen ausgelöst, da diese Einschränkungen für die Zugänglichkeit essenzieller Wissensgüter mit sich bringen. Allerdings waren in der jüngeren Vergangenheit Koalitionen aus Staaten des Globalen Südens und zivilgesellschaftlicher Organisationen in einer Reihe von Fällen in der Lage, internationale Regeln in ihrem Sinne zu beeinflussen. Wie konnten sich diese materiell schwächeren Akteure durchsetzen?

Meine Dissertation nutzt eine breite empirische Grundlage, um diese Frage aus vergleichender Perspektive zu untersuchen. In zwei Themenfeldern betrachte ich jeweils die Reformbemühungen schwächerer Akteure über Zeit. Zunächst untersuche ich den Konflikt um Zugang zu urheberrechtlich geschützten Druckerzeugnissen für Menschen mit Sehbehinderungen und anderen Leseeinschränkungen. Während ein erster Reformversuch in den 1970er und 80er Jahren nur eine unverbindliche Empfehlung hervorbrachte, war ein zweiter Versuch weit erfolgreicher. Der 2013 von der Weltorganisation für geistiges Eigentum beschlossene Vertrag von Marrakesch etablierte gegen den anfänglichen Widerstand der Industriestaaten und Rechteinhabern eine verbindliche Schrankenregel. In einer zweiten Fallstudie untersuche ich den Konflikt um Zugang zu Saatgut insbesondere für Kleinbauern. Auch hier scheiterte ein erster Reformversuch in den 1980er Jahren weitgehend, während ein späterer im Jahr 2001 den weitreichenderen Internationalen Vertrag über pflanzengenetische Ressourcen für Ernährung Landwirtschaft hervorbrachte. Von der Literatur betonte Erklärungsfaktoren wie die Akteurskonstellation sind über beide Fälle weitgehend konstant. Was erklärt also den größeren Erfolg der späteren Reformbemühungen?

Das zentrale Argument der Arbeit ist, dass Veränderungen in den institutionellen Kontexten der Governance-Felder Möglichkeiten für schwächere Akteure eröffnet haben. Unter Bezug auf die Literatur zu Regimekomplexität und den historischen Institutionalismus zeige ich, dass wettbewerbsförmige Interaktion zwischen internationalen Institutionen Herausforderern Opportunitätsstrukturen eröffnet. Umgekehrt führt die

Fragmentierung institutioneller Kontexte zu einer Schließung der Opportunitätsstruktur für schwächere Akteure, da dies eine breite Mobilisierung und kollektives Handeln erschwert.

Meine Arbeit knüpft an der Diskussion über die internationale Regulierung von Märkten in der Internationalen Politischen Ökonomie an. Darüber hinaus leistet sie einen Beitrag zur Debatte über Regimekomplexität in den Internationalen Beziehungen.

1 Introduction

Marrakesh has hosted two of the most significant international conferences on intellectual property rights in recent memory. In April 1994, the representatives of 123 governments gathered in the Moroccan city to put pen on paper on the agreement establishing the World Trade Organization (WTO). The deal not only transformed the multilateral trade. It also included the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). For the first time in history, TRIPS established mandatory minimum standards of protection and provided an enforcement mechanism through the WTO Dispute Settlement Body.

In June 2013, a World Intellectual Property Organization (WIPO) diplomatic conference in Marrakesh concluded with the signature of another momentous treaty on intellectual property rights. Ironically, the second time was much different. According to VanGrasstek (2013, 72), the 1994 conference "was more of a signing ceremony." In 2013, it took another ten days of hard-fought bargaining among the delegations on site (Saez 2013f). More importantly, the outcome of that second Marrakesh conference, the Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled (*Print Treaty*), broke with the path of ratcheting up the level of international intellectual property protection for which the first Marrakesh conference had laid the groundwork (Sell 2010a). The *Print Treaty*, in another first, set a mandatory standard for exceptions, facilitating access to knowledge instead of restricting it.

Prior to the *Print Treaty*, only a few international intellectual property standards emphasized flexibilities for users of knowledge. The 2001 International Treaty on Plant Genetic Resources for Food and Agriculture (*Seed Treaty*) similarly limits private ownership of knowledge by codifying farmers' rights. Member states may allow smallholder farmers to save, use, and exchange farm-saved seed. This is an essential practice in traditional agriculture but is seen as problematic by producers of proprietary crop seeds. Compared with the exception in the *Print Treaty*, however, the *Seed Treaty's* farmers' exemption is more of a broader legal principle, corresponding to a softer form of legalization.

Nonetheless, both the *Print Treaty* and the *Seed Treaty* stand out as reform outcomes in the international regulation of intellectual property. These regulatory outcomes require explanation, considering that in both cases earlier reform attempts had failed and that they run contrary to the trend towards more stringent standards of protection. What is more, in

both of these cases, the materially most powerful actors, including the EU, the U.S., and knowledge-producing industries, strongly opposed regulatory reform. The groups of reform advocates, by contrast, were made up of materially weak actors, including developing countries and civil society organizations.

This raises the central question of this book: *What explains regulatory reform, particularly in cases where reformists are materially weaker than their status quo-oriented counter-parts?* I address this question by construing a novel perspective on international standard setting. Specifically, I suggest that the presence of alternative forums for rulemaking and the inconsistency of existing rules in a governance area create an opportunity structure for challengers of the regulatory status quo and facilitate reform.

This argument starts from the observation that "regime complexity," generally understood as functional overlap among international institutions in an issue area, allows change agents to pursue strategies of institutional choice (Alter and Meunier 2009; Raustiala and Victor 2004). Under conditions of regime complexity, actors who are dissatisfied with the status quo may attempt to make their demands in a rulemaking venue that they expect to be most responsive to their demands (Helfer 2004b; Morse and Keohane 2014). This assessment is widely shared among practitioners. In the case of the *Print Treaty*, a strategist from the civil society campaign noted in an interview:

> We understood that if it is really about creating binding international rules on copyright that WIPO was an important forum. […] And in principle while WIPO was captured by rights' holders, how it is structured, it is more open to civil society input than WTO. It is just that civil society was not taking advantage of this.[1]

While the literature on regime complexity provides a starting point for analysis, a number of follow-up question ensue: What precisely makes some forums more responsive than others? How can challengers of the regulatory status quo take advantage of favorable conditions? And what explains variation between outcomes, such as the *Print Treaty* and the *Seed Treaty*? In the remainder of this book, I seek to answer these questions by applying insights from historical institutionalist theorizing to the study of regime complexity.

In this chapter, I give an outline of the book and preview some of its core arguments. First, I delineate the conflict over international intellectual property standards and show why this

[1] Interview with Deputy Director of the Information Program at the Open Society Foundations (8 June 2016).

topic matters. Second, I demonstrate that existing theories of international regulation are unable to explain the outcomes of the cases studied in this book. Third, I introduce a theory of institutional opportunity structures as an alternative explanatory approach. Fourth, I present my methods. Fifth, I discuss some of the practical and theoretical implications of my argument. Sixth and finally, I briefly sketch the following chapters.

1.1 What is at Stake?

International intellectual property regulation has been a contentious issue throughout the 20th century. The reasons for this are straightforward. Intellectual property rights govern access to knowledge. Knowledge is not only an increasingly economic input factor, many knowledge-intensive goods, such as crop seeds, educational materials, and medicines, make the difference between life and death or at least a good or bad livelihood. Conflicts over the appropriate level of intellectual property protection mirror the socio-economic and political divide between the Global North and the Global South and have an important development dimension. For the economically and technologically most advanced nations, notably the U.S., Japan, and a number of European countries, stringent intellectual property rights are a priority, as they seek to protect the investments in research and development of their knowledge-producing industries. Developing countries, by contrast, have historically relied on strategies of imitation to "catch up" economically with developed countries (Abramovitz 1986). Consequently, they favor more flexible and less stringent standards in order to facilitate the diffusion of technology.

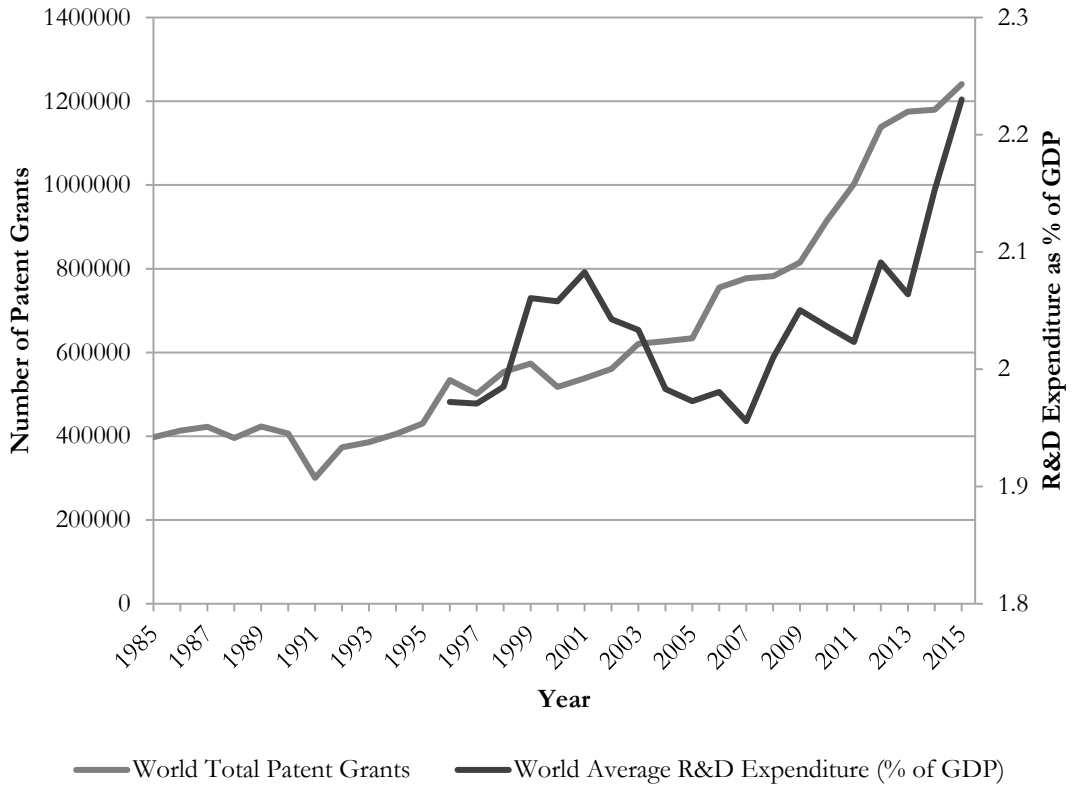
Historically, this regulatory conflict has favored developed countries and business interests (see Sell 2003). At the end of the 19th century, some of the most advanced industrial nations of that time created the first multilateral intellectual property standards primarily in an effort to facilitate trade in technology and creative works among themselves. The 1883 Paris Convention for the Protection of Industrial Property and the 1886 Berne Convention for the Protection of Literary and Artistic Works were also used to diffuse intellectual property rights internationally. From 1893 onwards, these treaties were administered by a joint secretariat, an international organization based in Berne, the United International Bureaux for the Protection of Intellectual Property (BIRPI), which in 1967 became WIPO. Infamously, several colonial powers used the BIRPI to coerce some of their colonies and territories into joining the Paris and Berne Conventions. After decolonization, some of the newly independent countries challenged the existing international framework for intellectual property protection. They demanded revisions to existing standards and attempted to involve other international institutions with a more development-oriented mission in rule-

making on intellectual property, most notably the United Nations Conference on Trade and Development (UNCTAD) and the United Nations Educational, Scientific and Cultural Organization (UNESCO). However, the expansion of proprietary standards continued unceasingly, culminating in the adoption of TRIPS in 1994, the most far-reaching and comprehensive standard for intellectual property protection as of yet.

In recent years, conflicts over intellectual property regulation and access to knowledge have intensified. This is due in no small part to the increasing economic importance of knowledge, particularly following the rise of information and communication technology in the 1990s. Today, knowledge is a more important production factor than physical inputs and natural resources (Eimer 2010, 130–31). Knowledge has always been a particularly dynamic production factor. Technological change, the innovation of goods, services, and production processes, as well as cultural production have been crucial drivers of socio-economic and political development throughout history. Yet as industrial nations transition to knowledge economies, they display "an accelerated pace of technological and scientific advance" (Powell and Snellman 2004, 201). By extension, innovation rates have become a key determinant of competitive advantage in the world economy, widening the gap between net exporters and net importers of knowledge.

This conflict also has a more paradigmatic dimension, which, however, is closely linked to its material dimension. The philosophy behind intellectual property rights is based on the idea of a balance between the private interests of creators and inventors and the public interest in access to knowledge. In theory, intellectual property rights function as a powerful incentive structure. Copyrights and patents grant a temporary monopoly, allowing for the extraction of monetary benefit and stimulating further creative and innovative activity. In other words, intellectual property rights constitute a market for knowledge, as they transform knowledge into an object of economic exchange that is primarily defined by its commercial value (Werle and Troy 2012, 155–56). Since the emergence of intellectual property rights in their modern form in the 18th century, this market has expanded to cover more and more areas of knowledge and information. Following the creation of the first international intellectual property standards at the end of the 19th century, it has also expanded geographically into a globally integrated market (May 2009, 11–12).

Figure 1.1: Total Patent Grants and Average Research and Development Expenditures as Percent of GDP Worldwide, 1985-2015



Sources: Author's illustration based on data by UNESCO (2018) and WIPO (2018).

Figure 1.1 illustrates this development. The diagram maps the number of patents granted globally per year against the world average expenditures on research and development as a percentage of GDP. As can be seen, while the commodification of knowledge represents a secular trend, it has reached new heights in the 2000s. Expenditures on research and development have experienced a brief dip in the early 2000s but have risen again, reaching a new high of 2.23 percent of GDP in 2015. The number of worldwide patent grants has increased continuously over time and has more than tripled between 1985 and 2015 (from 397,580 to 1,241,000). Both indicators continue to show significant disparities between high-income countries on the one hand and low- and middle-income countries on the other (this is not depicted).

A variety of stakeholders contests the advancing commodification of knowledge. These actors criticize the extension of private ownership and the market as an inadequate instrument for the allocation of essential knowledge goods. Developing countries have called for technology transfer from the center to the periphery since the time of decolonization. Economic development, they argue, cannot be achieved through competition with the countries at the technological frontier (Sell 1998, 42). In recent years, consumers and users of

knowledge in both the developed and the developing world have also voiced their concern over market failures with regard to the availability of essential knowledge goods. Like developing countries, these actors have demanded greater public access to knowledge in order to improve the provision of public goods, including food security, education, and public health.

In sum, the stakes involved in the international regulation of intellectual property rights are substantial. Standards of intellectual property protection determine how international markets for knowledge work and have significant distributional consequences for a range of public and private actors.

1.2 The Puzzle

Considering the stakes involved, outcomes of regulatory reform, including the *Print Treaty* and the *Seed Treaty*, are puzzling from the perspective of conventional accounts of international regulation. Existing theories in International Political Economy stress the importance of material capabilities. They explain regulatory outcomes as a function of the distribution of power and preferences among stakeholders. Statist approaches, the most prominent being Drezner's (2007) modified realist account, argue that the larger and more diverse the internal market of a national economy, the larger its bearing on international standards. When "the great powers," the EU and the U.S., agree on a regulatory outcome, this will usually result in the creation of a universally accepted and effective standard. When they disagree with a regulatory proposal, Drezner (2007, chap. 2) predicts that there will be no standard or an unenforceable "sham standard" at best. In both cases studied here, regulatory outcomes are at odds with the initial preferences of the great powers. In fact, in both cases, the EU and the U.S. have opposed and agitated against regulatory reform throughout the negotiations. While the success of reform varies between the two cases, both go beyond sham standards.

Statist approaches suffer from an important limitation. They regard regulatory conflicts as a clash of national systems of regulation. According to this view, states seek to "upload" their national rules to the international level in order to avoid the adjustment costs of switching to another state's set of rules (Börzel 2002; Büthe and Mattli 2011). This literature proceeds from the assumption of a clear divide between domestic and international politics. Processes of preference formation take place at the domestic level whereas regulatory bargaining involves states and other actors that represent discrete jurisdictions (see Farrell and Newman 2015). The discussion in the previous section paints a more complex picture.

While we can distinguish roughly between actors favoring stringent standards and actors favoring less stringent standards and greater flexibilities, the dividing line is not congruent with state borders. Instead, in both cases, developing countries have formed transnational reform coalitions with civil society actors from around the world, including from the Global North.

Another important literature highlights the material capabilities of firms. Transnational corporations command significant resources, including capital, employment, natural resources, and knowledge, which they can use to exert pressure on decision-makers (Mattli and Woods 2009a). Moreover, they can leverage their expertise to get access to policymakers and regulatory fora and gain disproportionate influence on rulemaking processes, particularly in issue areas that are both highly complex and subject to little public scrutiny (Culpepper 2011; Underhill and Zhang 2008). These characteristics clearly apply to knowledge-producing industries and intellectual property regulation, which, despite its distributional consequences, generally flies below the radar of public attention due to its legal-technical nature.

Material capabilities have great merit in explaining regulatory outcomes and there are good empirical reasons to focus on this factor, as the great powers and producers of knowledge historically have dominated the international regulation of intellectual property rights (Drahos 2002; May 2009; Okediji 2003; Sell 2003). Yet the regulatory outcomes of the cases studied deviate from what statist and business power approaches would expect. Here, transnational coalitions of weak actors—developing countries and transnational civil society—have been able to influence outcomes and achieve regulatory reform.

Constructivist approaches in the International Relations literature point to ideas as an alternative explanation for policy change. A first strand of the literature sets out the principled authority of transnational advocacy networks as a driver for reform (Keck and Sikkink 1998). Transnational advocacy networks are cross-border coalitions of non-state actors, including activists, civil society organizations, and social movements. They are bound together by shared values and promote these norms and principled beliefs in an attempt to influence powerful states and international organizations and change international rules. This usually involves the strategic framing of an issue as problematic in such a way as to raise awareness and advance a specific policy solution (Joachim 2003). When a transnational advocacy network is able to generate public outrage, this will pressure its target actors to enact reform.

This argument has been successfully applied to cases of international economic regulation, including in intellectual property rights (Sell and Prakash 2004). At the turn of the millennium, the campaign for access to medicines was able to link the HIV/AIDS crisis in a number of developing countries to international standards of intellectual property protection. By framing intellectual property rights as a barrier to the treatment of the poor—in other words, as a life and death matter—the activists delegitimized the claims of the great powers and the pharmaceutical industry. This convinced the WTO member states to adopt flexibilities to TRIPS in order to promote public health concerns (Odell and Sell 2006). The transnational advocacy network approach is a valuable corrective to the materialist rationalist canon of theories of international regulation. However, it hits the wall in cases of reform when an issue attracts little or no public attention as in the cases studied.

A second strand of the constructivist literature focuses on the role of knowledge and experts. Due to the technical and legal dimensions of many regulatory issues, expertise is an important power resource in international standard setting. At a more fundamental level, the literature on epistemic communities argues that policy adjustment among states, including regulatory coordination, is often attributable to the consensus-building efforts of transnational networks of experts (Haas 1992). Particularly in issue areas that display high levels of complexity and uncertainty, other actors are incentivized to defer to epistemic communities as authoritative sources of information. In these cases, the advice of epistemic communities may reduce uncertainty, foster consensus about what constitutes the optimal policy solution, and, in doing so, facilitate coordination.

A number of studies have identified epistemic communities as drivers of regulatory coordination, most prominently in areas of technological change, such as e-commerce or internet privacy (Farrell 2003; Newman 2008a). In the field of intellectual property rights regulation, an epistemic community of legal experts has for a long time contributed to the consolidation of the maximalist agenda of developed countries and knowledge-producing industries (Drahos 2000). In recent years, an emergent epistemic community of critical academics, particularly legal scholars, has advocated greater access to knowledge (Dobusch and Quack 2010, 2013). However, the emergence of this epistemic community is the expression of a schism among intellectual property experts. Instead of fostering consensus, these experts are actively promoting dissent among rule-makers (Morin 2014). This also applies to the cases studied in this book. Here, different legal experts often held opposite views on how to promote the availability of essential knowledge goods and supported mutually exclusive regulatory proposals. Consequently, the causal mechanism suggested by the epistemic

community approach does not provide a sufficient explanation for the outcomes of the cases studied. While both the transnational advocacy network and the epistemic community approaches identify important actors, they fall short of explaining how these actors achieved their goals.

In sum, existing theories of international regulation struggle to account for the reform outcomes studied in this book. Consequently, I consider alternative factors and causal mechanisms to explain the influence of weaker actors on regulatory outcomes.

1.3 The Argument in Brief

Considering existing approaches' difficulties in explaining the outcomes of the *Print Treaty* and the *Seed Treaty*, what, then, explains the move from rules that privilege narrow interests to rules that represent the preferences of losers under the regulatory status quo? To unravel this puzzle and explain outcomes of regulatory reform, I focus on a variable that is given short shrift by most existing approaches of international regulation, the institutional context, in which regulatory processes take place. For this purpose, I develop a novel analytical framework of international regulatory politics, the *institutional opportunity approach*, drawing on insights from historical institutionalist theorizing and the literature on regime complexity in International Relations. My approach is exploratory. In the cases studied in this book, earlier attempts at reform have failed. While the configuration of actors in terms of the distribution of preferences and power is relatively constant across cases, there are marked shifts in the institutional contexts, in which these regulatory disputes take place. Thus, I identify these changes, specifically increasing competition among the elemental institutions in a governance area, that open up the opportunity structure for weaker actors to engage in sustained collective action and shift regulatory outcomes according to their preferences. Moreover, I establish the causal mechanisms that link changes in institutional context to opportunity structures and outcomes of regulatory reform.

Most existing approaches are designed for comparative statics-based analyses and thus neglect the sequential nature of regulation that is key to any processual understanding of politics (Lall 2012, 615–16). My argument necessitates a more dynamic perspective on the regulatory process than suggested by these approaches, as I argue that changes in institutional contexts have enabled pro-reform actors. To that effect, I propose a number of refinements to existing approaches, drawing on the historical institutionalist literature in Comparative Politics, International Relations, and International Political Economy (see Fioretos 2011a, 2017; Hanrieder 2015a; Pierson 2004; Rixen, Viola, and Zürn 2016). Historical insti-

tutionalism offers three major advantages. First, historical institutionalism puts special emphasis on the dimension of time in politics. More specifically, it provides an analytical toolkit to account for the sequential nature of regulatory processes (Farrell and Newman 2010; Newman 2016). Second, it takes institutions seriously as distributional instruments that often allocate important resources unequally among stakeholders (Mahoney and Thelen 2010, 8). This understanding of institutions as arenas for bargaining directs our attention to the coalitional dynamics between actors with distinct preferences (Hall 2010, 2016). Third, historical institutionalist scholarship conceives institutions as embedded in broader institutional contexts and takes into account the complex interactions among rules and rulemaking venues (Pierson and Skocpol 2002, 707–8).

How do institutional contexts vary in the first place? Most conventional approaches from International Political Economy focus on the characteristics of a single, focal institution. This conceptualization, however, is too narrow. It neglects that institutions have proliferated in practically all areas of global governance (Raustiala 2013). While it is remarkable that the number of regulatory fora is multiplying, it is much less clear how this affects regulatory politics. On the one hand, regime complexity creates scope for strategic behavior (Alter and Meunier 2009; Raustiala and Victor 2004). The presence of alternative fora in an issue area allows actors who are dissatisfied with an institution to contest the status quo by attempting to shift the regulatory conflict to a venue that they expect to be more responsive to their demands (De Bièvre and Thomann 2010; M. L. Busch 2007; Helfer 2004b; Morse and Keohane 2014). On the other hand, the proliferation of international institutions may also undermine their core function of serving as focal points for international cooperation, making power-based outcomes more likely (Benvenisti and Downs 2007; Drezner 2009; Gómez-Mera 2015).

Applying insights from historical institutionalist theorizing allows me to disentangle the effects of regime complexity on weaker actors. The institutional opportunity approach posits that different forms of institutional complexity produce varying opportunity structures for weaker actors demanding regulatory reform ("challengers"). Importantly, open opportunity structures do not translate directly into outcomes. They provide favorable conditions for challengers, enabling them to form broad pro-change coalitions, overcome the opposition of powerful beneficiaries of the status quo ("incumbents"), and shift outcomes according to their preferences (McAdam 1996).

Summarized briefly, the institutional opportunity approach advances two institutional context-based arguments, focusing on two dimensions of institutional context, which serve to explain the openness or closure of opportunity structures for challengers. The first dimension focuses on the mode of interaction among the elemental institutions of a configuration, differentiating between more coordinated complexes on the one hand and more competitive ones on the other. This dimension accounts for the extent to which challengers can engage in strategies of institutional selection, such as forum shopping, and the extent to which challengers can tinker with the existing framework of rules. With regard to interaction, the institutional opportunity approach advances two hypotheses:

- The greater the intersections among the elemental institutions of a governance area, the greater are the possibilities for forum shopping. Institutional overlap allows challengers to select a forum to advance their preferences based on their expectations of how responsive it will be to their demands.
- The more the principles and rules of the institutions in a governance area are in conflict, the more degrees of freedom have challengers to advance their own interpretation. The inconsistence of existing substantive rules und underlying principles provides change agents with room to develop a reform proposal that achieves political support in at least one regulatory forum.

The second dimension focuses on the differentiation of an institutional complex, differentiating between more integrated complexes on the one hand and more fragmented complexes on the other. It accounts for the extent to which challengers can mobilize a critical mass of allies and engage in sustained collective action and the extent to which incumbents can react to challengers' strategies of institutional selection. With regard to expansion, the institutional opportunity approach, again, advances two hypotheses:

- The greater the diversity of institutions in a governance area, the more difficult it becomes for challengers to mobilize allies. In governance areas where institutions address a multitude of sub-issues, potential allies are often embedded in different fora, lacking the capabilities to contribute in a different setting.
- The greater the number of institutions in a governance area, the more difficult becomes for challengers to sustain collective action. In contexts of high institutional density, challengers are required to keep track of developments that span a variety of institutions. Weaker actors, however, lack the necessary resources to engage in such chessboard politics.

In sum, I argue that, given there is demand for reform, more competitive institutional contexts are conducive to reform attempts. More fragmented contexts, by contrast, cause a closure of the institutional opportunity structure and should limit the potential for substantial reform.

1.4 Research Design

I primarily use qualitative methods to develop and test the argument for institutional opportunity structures. The analysis is exploratory. I aim to explain a number of deviant cases and develop a novel explanation. The cases selected are deviant in that they demonstrate surprising values on the dependent variable (outcomes of regulatory reform) relative to conventional theories of international regulation. Common social science wisdom cautions against the selection of cases on the dependent variable, as this may introduce bias and skew the estimated causal effect of an independent variable on the outcome (G. King, Keohane, and Verba 1994). I mitigate these problems by choosing both positive and negative cases. Moreover, I am mostly interested in changes in outcomes. Thus, in order to maximize the internal validity of my research, I employ process tracing to establish a causal pathway between independent and dependent variables (Beach and Pedersen 2013; Bennett and Checkel 2015b; George and Bennett 2005).

The analysis relies on a combination of two logics of causation. The first part of the analysis is based on the comparative logic of causation, drawing inferences from the covariation of independent and dependent variables. The central hypothesis is that variation in institutional context accounts for variation in regulatory outcomes. I assess this claim through a controlled paired comparison of two cases of regulatory conflict. By looking at within-case changes in institutional contexts, I establish a correlation between increases in institutional supply and successful reform attempts. I also compare these highly similar cases of regulatory conflicts to show that cross-case variation in the type of institutional supply accounts for cross-case variation in the magnitude of reform. The second part of the analysis is based on a causal process-based logic of causation. Using process tracing, I establish a causal chain between the independent and the dependent variables. For this purpose, I develop hypotheses about the causal mechanisms that link institutional context and regulatory reform in the analytical framework. I also generate observable implications that I can test the theoretical argument against in the empirical part of the book.

Reconstructing a causal sequence requires process-related evidence, which is often hard to get by and seldom complete (George and Bennett 2005, 94–98). I seek to improve the reli-

ability and overall quality of my data by triangulating a plethora of publicly available primary and secondary sources, including but not limited to minutes of international meetings, protocols of parliamentary committees and debates, communications of government officials, policy papers by interest groups and NGOs, and the legal academic literature. As the cases studied have been subject to only little media coverage by regular news outlets, I also rely on beat reporting, particularly by Intellectual Property Watch and the Earth Negotiations Bulletin. Additionally, I have conducted around 35 expert interviews between 2015 and 2016 with representatives of government delegations, international organizations, interest groups, and NGOs. Lastly, although quantitative methods are of limited use for a causal mechanism-based approach, I use some descriptive statistics to illustrate long-term developments.

Limitations arise with regard to the generalizability of the argument. The selection of deviant cases puts the brakes on how far the arguments in this book can travel. Cases of regulatory reform by weaker actors are evidently atypical and not representative of the wider population of cases of regulatory coordination in economic governance. However, deviant case studies point to weak spots in existing theories and allow for the identification of causal factors that explain other deviant cases in similar populations of cases (Gerring 2007, 105–6). Finally, the case studies yield insights on regime complexity and institutional interaction that reach beyond the scope of this book.

1.5 Contribution to the Literature

This book makes three contributions to the International Relations and International Political Economy literatures. The first contribution is empirical. Intellectual property regulation is a highly relevant issue in today's economy that intersects with many other issue areas of public concern, such as agriculture, education, and public health. Yet it is still considered a relatively arcane subject that is best left to lawyers and is studied by only a handful of political scientists. So far, both cases studied have received little to no attention by the International Relations and International Political Economy community. Drawing on a wealth of empirical material, this book provides a comprehensive account of how regulatory reform unfolded in these cases and attempts to stimulate further research on international intellectual property regulation.

The second contribution targets the International Political Economy audience. The discipline has addressed questions of international regulation since the early 2000s. Even the first contributions to this field of research have highlighted that standard setting—

including in technical issue areas—is a political matter and has distributional consequences for rule-takers (Mattli and Büthe 2003). However, with some notable exceptions (Mattli and Woods 2009a; Newman 2008b), this literature has overlooked the social effects of standards. By centering on adjustment costs, it has turned a blind eye on some of the more complex normative questions relating to how varying regulatory outcomes affect the provision of public goods and the enjoyment of rights.

Accounts of international regulation have also neglected the question of how losers under a regulatory status quo can influence outcomes according to their preferences (see however Kastner 2014). There are good reasons for this lack of attention. Particularly in the case of technical regulations, once actors have implemented a new standard, switching again makes little sense. By selecting deviant cases, I seek to fill a gap in the theorizing about international regulation. In other words, my aim is to complement existent research instead of contradicting it. Identifying conditions that provide opportunities for proponents of reform, by implication, sharpens our understanding of the conditions that consolidate regulatory capture (Lall 2012). These insights are particularly important in issue areas that affect the wider public in notable ways, such as intellectual property rights but also finance or food safety for instance.

Lastly, the book contributes to the recent debate in International Political Economy on the importance of transnational relations for regulatory politics in an increasingly interdependent world economy (Farrell and Newman 2014, 2015, 2016; Lütz 2011). I show that, in addition to transnational coalitions of firms, more disparate coalitions, such as the ones studied here between developing country governments and civil society organizations, under specific conditions matter for the explanation of regulatory outcomes.

The third contribution is directed towards the International Relations audience. At a more general level, the book seeks to advance our understanding of how international institutions interact and what strategic options this generates for various groups of actors. My argument draws on the historical institutionalist literature in Comparative Politics, which identifies different interaction effects among institutions as sources of stability and change (Pierson 2004). The implication is that we need to understand institutions, whether domestic or international, in their broader contexts. Depending on how the elemental pieces of an institutional configuration fit together, this may solidify the position of those who seek to protect the status quo or create openings—opportunity structures—for challengers. These findings have implications for how to think about a number of research questions related

to institutional proliferation and regime complexity (Raustiala 2013). Recent contributions to the International Relations and International Political Economy literatures emphasize the potential of historical institutionalism for explaining phenomena of institutional complexity (Fioretos 2011b; Rixen and Viola 2016; Zürn 2016). However, little empirical work has been conducted to support this claim (see however Jupille, Mattli, and Snidal 2013). Much of the literature on regime complexity has focused on how institutional overlap affects the prospect for rule-based global governance (Benvenisti and Downs 2007; Drezner 2013) or international cooperation more generally (Gehring and Faude 2014). While some scholars ague that strategies of institutional selection, such as forum shopping and regime shifting, can also be used by weaker actors (Helfer 2004b; Morse and Keohane 2014), they fail to specify the conditions under which they are more likely to be successful. This book addresses this gap by conceptualizing variation in international institutional contexts and identifying causal mechanisms that link institutional conditions to change.

Finally, the findings in this book may prove interesting for practitioners in international economic governance. Understanding why reform attempts have been more or less effective in different issue areas due to differences in their governance architectures may help reform advocates to choose the most promising strategies under the given circumstances. What will transpire from the analysis is that there is a great degree of variation in the institutional contexts, in which standards are made—even within one field, such as intellectual property rights—and that these require varied approaches. The book may also be insightful for government officials and practitioners of international law and help to differentiate between problematic forms of institutional interaction that require "interplay management" (Stokke and Oberthür 2011) and instances of "norm collisions" (Fischer-Lescano and Teubner 2006) that are practically unavoidable and may even have productive consequences.

1.6 Plan of the Book

Following this introductory chapter, I summarize the regulatory conflict and identify cases of regulatory reform. In Chapter 2, *The International Political Economy of Intellectual Property Rights*, I begin by providing an overview of the philosophy behind intellectual property rights and a historical perspective on the evolution of international standards of intellectual property protection. I proceed by conceptualizing and operationalizing the dependent variable in order to define the universe of cases of reform attempts and select cases for analysis.

Chapter 3, *State of the Art*, situates my analysis within the larger literature on international regulation. In so doing, I demonstrate that existing scholarship does not sufficiently explain the selected cases because of its neglect of the international institutional context in which regulation takes place. First, I focus on explanations that stress material capabilities, realism and business power approaches. Second, I focus on ideational explanations, transnational advocacy network and epistemic community approaches. Third and finally, I introduce the literature on regime complexity in International Relations, arguing that existing contributions are inconclusive with regard to the *Print Treaty* and the *Seed Treaty*. The in-depth discussion of rival explanations in this chapter also serves the purpose of uncovering additional observable implications of these theories to point out differences from my own approach and allow me to better test their predictions in the empirical part of this book (see Dür 2007, 191–92).

In Chapter 4, *The Institutional Opportunity Approach*, I develop the key theoretical argument of this book. In a first step, I lay out in detail the analytical framework and specify what institutional configurations produce opportunity structures for challengers of the regulatory status quo. Subsequently, I establish the causal pathways by which varying conditions lead to varying regulatory outcomes.

The following two chapters form the empirical core of the book. In Chapters 5 and 6, I consider the theoretical arguments that I have previously developed in two paired comparisons of cases of regulatory reform. The case studies are the outcome of an iterative process of going back and forth between theory and data. They illustrate, test, and refine the arguments for institutional opportunity structures.

In Chapter 5, *Copyright and Access to Printed Material*, I study two episodes of regulatory conflict over limitations and exceptions to copyright for people with visual and other print disabilities. I find that the institutional context of international copyright regulation has shifted from a division of labor between WIPO and UNESCO to a more contested relationship between WIPO and WTO. When challengers brought the issue up for the first time at the end of the 1970s, international copyright law was designed in such a way as to pull members of the relatively lax UNESCO Universal Copyright Convention (UCC), mostly developing countries, towards the more stringent WIPO Berne Convention. This institutional configuration left little room for the adoption of far-reaching reform. Consequently, an initial attempt to reform copyright regulation failed, resulting only in the adoption of the unspecific and nonbinding 1982 Model Provisions Concerning the Access by

Handicapped Persons to the Works Protected by Copyright (*Model Provisions*). TRIPS effectively spelled the death of the UCC and called into question WIPO's rulemaking authority in the issue area. This in turn allowed challengers to shift WIPO's agenda towards copyright flexibilities. In the 2000s, a new challenger coalition successfully leveraged WIPO's status as a specialized agency of the UN to push through with regulatory reform, resulting in the adoption of the *Print Treaty*. I show through process tracing how changes in institutional supply created an opportunity structure for change agents by weakening the incumbents' coalition and providing favorable conditions for sustained demand for reform.

Chapter 6, *Plant Variety Protection and Access to Seeds*, is an inquiry into two episodes of regulatory conflict over the intellectual property protection of plant genetic resources. Similar to the first case study, initial demands for change only resulted in an outcome of minor reform, the 1983 FAO International Undertaking on Plant Genetic Resources (*Seed Undertaking*). While the outcome reflected the radical position of developing countries that all plant genetic resources should be governed by the common heritage principle, in other words, accessible to everyone, the treaty was also unspecific, not legally binding, and outright rejected by a number of major developed countries. In 2001, a number of members of the FAO adopted the *Seed Treaty*, which codified a farmers' exception for proprietary crop seeds and obtained broader approval than the Undertaking. Yet as opposed to the *Print Treaty*, it lacks explicit legal bindingness. What explains this variation? Like in the first case, I find compelling evidence that increasing institutional competition in the issue area has enabled proponents of reform to select a responsive forum. Due to the proliferation of institutions in the issue area, institutional competition increased, which allowed change agents to advance an alternative regulatory agenda. However, the governance arrangement had also become increasingly fragmented, which made it difficult for change agents to engage in sustained collective action. Because of that, change agents formed more of an alliance of convenience, which often lacked the broad support that the pro-change coalition in the *Print Treaty* case enjoyed.

Finally, in Chapter 8, *Conclusions*, I summarize the findings of this book. I debate the generalizability of these findings and discuss the broader theoretical implications in light of a number of debates concerned with economic governance and the politics of regulation, transnational coalitions, international law, and regime complexity.

2 The International Political Economy of Intellectual Property

In global economic governance, as Büthe and Mattli (2011, 42) note, "the economic and sociopolitical stakes are real and often high." International intellectual property regulation is no exception. Intellectual property rights govern access to knowledge. They limit who may commercialize a product based on a new idea. Hence, they have important implications for the availability and cost of essential knowledge goods that are traded on the marketplace, such as crop seeds, educational materials, and medicines. This entails distributional conflicts within and across societies.

Despite what is at stake, international intellectual property regulation is dominated by what Culpepper (2011) calls "quiet politics." Shielded from the public eye, highly organized business interest groups dominate the outcomes of regulatory bargaining. Similar to other areas of international economic regulation, legal-technical jargon couches the distributional consequences of intellectual property standards and actors' bargaining capabilities are asymmetrical to begin with (Mattli and Büthe 2003). Consequently, outcomes in international intellectual property regulation often reflect the preferences of the materially most powerful actors, developed countries and knowledge-producing industries (Sell 2003). Only recently have materially weaker actors, including developing countries and civil society organizations, been able to shift regulatory outcomes in their favor in a number of cases, improving public access to knowledge. What explains the influence of weaker actors on outcomes in these cases and more broadly in international economic regulation?

Answering this question is the goal of this book. In this chapter, I begin this process by discussing how intellectual property rights work and how they affect different social groups. This allows me to derive the regulatory preferences of these groups, differentiating between those who favor stringent standards of protection and those who advocate greater flexibilities. Moreover, this permits me to identify cases that deviate from the pattern of power politics described above.

In the next section, I give an overview of the economic and philosophical underpinnings of intellectual property rights. In the second section, I sketch the interests of different actors regarding intellectual property. In the third section, I conceptualize the dependent variable of my study, outcomes of regulatory reform. In the fourth section, I apply my conceptualization to define the universe of cases and identify cases of regulatory reform in interna-

tional intellectual property regulation. In the fifth section, I select cases for in-depth analysis and discuss methods. In the seventh and final section, I conclude.

2.1 Intellectual Property and the Idea of a Balance

What is the rationale for intellectual property rights? Standard economic thinking is based on an incentive-based theory of intellectual property. This theory argues that the state should reward creators and inventors by conferring ownership on them for their ideas in order to stimulate further creative and inventive activity.

In economic terms, knowledge is a public good. It is non-rival and non-excludable. In contrast to most tangible goods, one person's use of a particular piece of knowledge does not impede another person's simultaneous use of that same knowledge. If an inventor comes up with a novel or improved production process and imparted her knowledge to somebody else, the other person's use of that process would not per se compromise the inventor's utility of the idea. To the contrary, both would be able to use their resources more efficiently. In the absence of an intellectual property regime, the inventor would also be unable to prevent the other person from further sharing her knowledge. This would compromise on her ability to extract monetary gain from her invention, as she would surrender her competitive edge over others. According to the incentive theory, rational agents would then lack the stimulus to engage in costly creative or inventive activity and knowledge goods would be underproduced. Assigning property rights creates legal excludability for knowledge goods and makes them artificially scarce. As Burk (2012, 401) puts it, "[t]he intellectual property right, in effect, places a legal fence around goods that cannot be physically fenced off." In principle, this allows creators and inventors to demand payment for their ideas on the marketplace, recover the costs for research and development, and generate profits, which they can reinvest (Landes and Posner 2003, chap. 1; May and Sell 2006, 5–7). Although empirical data on the effectiveness of intellectual property remain scant, the incentive theory is widely accepted among economists and Western policymakers and intellectual property rights are seen as laying the foundations for well-functioning markets and furthering societal welfare.

Artificial scarcity, however, creates the risk of market failure. On economic grounds, allowing a creator or inventor to set prices artificially and determine the output of production will price some potential customers of the good out of the market and cause deadweight losses. The social costs are considerable. Depending on the knowledge good in question, being able to afford it can make the difference between life and death, particularly in the

case of medicines. Although effects are less dramatic for other knowledge goods, such as schoolbooks, not having access to them excludes those affected from equal social participation (see Sunder 2012). Philosophically, intellectual property rights thus build on the idea of a balance between the private interests of creators and inventors and the public interest in the availability of essential knowledge and information goods at reasonable prices.

Societies have struck this balance differently at different points in time, starting with the preliminary question of what kinds of knowledge and information, if any, should be considered property. Historically, on both sides of the Atlantic, free traders initially blocked attempts to introduce intellectual property rights, as they saw them as protectionist (Machlup and Penrose 1950; May 2007, 15–16). This stands in stark contrast to today's debates, where it is generally liberals who advocate intellectual property rights (see however Bhagwati 2004, 182–83). Today, practically all countries grant three types of intellectual property rights for different knowledge and information goods, copyrights for creative works, patents for inventions, and trademarks for brand names and symbols of recognition.[2] What is more, due to the increasing importance of knowledge as an economic input factor, most countries have continuously expanded intellectual property protection over the course of the 20th century.[3] Table 2.1 illustrates this development, using the example of U.S. copyright law.

Conflicts on the balance between private and public concentrate on two core aspects. The first is the temporal limitation of intellectual property rights. Once the term of protection for a piece of knowledge expires, it becomes part of the public domain. This accounts for the incremental nature of innovation. As creative and innovative activity draws on existing knowledge, the intellectual public domain "is a source of vital inputs into the creation of subsequent intellectual property" (Posner 2005, 60). The temporal limitation is also to ensure a competitive market. Intellectual property rights confer monopolies on their owners. Their temporary nature incentivizes owners to bring the protected goods on the market in a timely manner and at reasonable prices. While the terms of protection have generally increased over time for all kinds of knowledge goods in most countries, the debates on what constitutes an appropriate duration continue.

[2] Trademarks work differently than copyright and patents and are not of concern in this book. Practically all stakeholders agree that trademarks provide an important information function to consumers, allowing them to make efficient decisions about what they are buying. For this reason, trademarks are not subject to the same controversy as copyright and patents (F. M. Abbott, Cottier, and Gurry 2019, 471).

[3] See Coriat and Weinstein (2011) on the wider range of transformations in capitalist market economies that have led to an expansion of intellectual property rights.

Table 2.1: Expansion of Protection in U.S. Copyright Law over Time

Law	Term of Protection	Other Notable Changes
1790 Copyright Act	14 years with the right to renew for one additional 14-year term if author is still alive (maximum of 28 years)	
1831 Copyright Act	28 years plus one renewal term of 14 years (maximum of 42 years)	Inclusion of musical compositions (reproductions of compositions in printed form)
1909 Copyright Act	28 years plus one renewal term of 28 years (maximum of 56 years)	Compulsory license allowing anyone to make mechanical reproductions of a musical composition (phonorecords)
1962-1974 Interim Renewal Acts	Works in their renewal terms as of September 19, 1962 would not expire before December 31, 1976	
1976 Copyright Act	50 years after the author's death	Definition of "works of authorship;" definition of exclusive rights; codification of the "fair use" doctrine, an open-ended system of limitations and exceptions
1992 Copyright Renewal Act	Requirement of renewal registration is removed for works copyrighted between January 1, 1964 and December 31, 1977	
1998 Copyright Term Extension Act	70 years post mortem; term for works published before January 1, 1978 was increased by 20 years to a total of 95 years	
1998 Digital Millennium Copyright Act		Criminalization of production and dissemination of technology intended to circumvent access control

Sources: Table compiled based on Bracha (2008b, 2008a), Copyright Office (2010, 2011), and Rudd (1971).

With regard to the international regulation of intellectual property, TRIPS stipulates a minimum term of protection of twenty years for patents and fifty years after the death of the author for copyright.[4] These numbers are not currently subject to negotiations. Yet there is conflict on related instruments, such as test data-exclusivity periods for pharmaceutical drugs. The protection of clinical trial data, for instance, makes it more difficult for competitors to develop generic drugs, which are less costly and thus more accessible to less well-funded users. In sum, protection terms and related instruments are among the most important determinants of price formation in markets for knowledge and information goods.

[4] The terms of protection for copyright vary for different categories of creative goods. The number given here applies to literary and artistic works but differs for anonymous works, cinematographic works, photographs and works of applied art, as well as performances and phonograms.

Long protection terms correspond to an expansion of the monopoly privilege, decreasing the risks for creators and innovators but increasing the risk of market failure.

This leads to a second instrument that is intended to ensure a balance between private and public interests. Intellectual property laws usually contain flexibilities to facilitate the provision of public goods where the market fails to make essential knowledge goods available to everybody who needs them. Monopoly-priced medicines, seeds, and schoolbooks are often unaffordable for the socially disadvantaged, particularly at the beginning of their product life cycles. In order to avoid negative externalities for policy areas, such as agriculture, education, and public health, limitations and exceptions define cases, in which protected goods can be used without the authorization of the right holder. While international intellectual property standards determine what kinds of limitations and exceptions are acceptable, the depth and scope of flexibilities vary considerably from country to country. So-called compulsory licenses for patented medicines, for instance, have been a contentious point since the controversy over access to HIV/AIDS drugs at the turn of the millennium. International intellectual property regulation under certain conditions permits governments to issue compulsory licenses for knowledge goods against compensation for the right holder. Compulsory licenses allow third parties within this jurisdiction to reproduce the good in question and make it available within specified parameters. Some uses are even permissible without compensation. In copyright, facts and the news of the day are excluded from copyright protection and may be shared publicly to accommodate the public interest in freedom of speech.

Even if one does not fully accept the premises of incentive theory, the image of a balance between private and public interests is a useful abstraction to think about the social purpose of intellectual property rights. Yet, as opposed to what mainstream economists and many lawyers might argue, calibrating the balance is not just a question of applying economic theory.[5] Intellectual property rulemaking raises a host of normative questions, for which optimal solutions are hard to come by. As a result, international intellectual property regulation is subject to intense political conflict between a multiplicity of actors with different material interests and principled ideas. In this book, I focus on these kinds of conflicts. Who wants what precisely and why? In the following section, I elaborate on the regulatory

[5] This view has been advocated by proponents of the law and economics approach (for an application to intellectual property law, see Posner 2002, 2005), which has risen to prominence in recent years the U.S. in particular (Ash, Chen, and Naidu 2019). This approach has drawn criticism from opponents of neoclassical economics and from within the legal community. What matters most in this context is that economic arguments are often framed as objective and used to delegitimize alternative proposals in both domestic and international regulatory disputes on intellectual property matters.

preferences of different actors, including states, civil society, and firms, and give an outline of the divisions between these actors.

2.2 Conflicts in Intellectual Property Regulation

Actors' preferences vis-à-vis intellectual property rights range from stringent protection to very little or no protection. Intellectual property maximalists usually argue that stringent intellectual property standards strengthen international markets for knowledge and that the market is the best mechanism to allocate knowledge and knowledge goods. Intellectual property minimalists, by contrast, advocate flexibilities and public intervention (Sell 2010a). While actors may take varying positions on different issues, this axis allows for a first classification. I proceed by discussing three conflicts that are crucial to understanding what sides actors take in international intellectual property regulation.

2.2.1 The North-South Divide

International rulemaking on intellectual property has been and continues to be defined by conflict between developed and developing countries. This is a common thread in the literature on global economic governance (e.g. Drezner 2007, 40–41). Countries at early stages of development tend to favor lax international standards, since their competitive advantage relies on low-cost production. Stringent regulation increases costs for domestic producers and forces them to redirect scarce resources to monitoring compliance and enforcement. As a country's median income increases, so the argument goes, its citizens will ask for stricter social regulation and become supportive of stringent international standards.

This economic reasoning is largely applicable to the international regulation of intellectual property rights. Knowledge is an important determinant of economic development. Developing countries have fewer resources and lower capacities to engage in innovative activity (Mansfield 1994; Maskus 1998b). For this reason, these countries have historically relied on technological imitation to promote economic "catching-up" (Vaitsos 1972). Not only are innovation-based strategies of development more difficult and more costly than imitation-based strategies, raising the level of intellectual property protection for developing countries also creates adjustment costs in terms of implementing and enforcing these rules (Helpman 1993). Maskus (1998a, 192–93) shows that a country's stringency of intellectual property legislation and effectiveness of enforcement are strongly associated with its per capita income. Developing countries, thus, usually grant lower levels of protection and devote fewer resources to the enforcement of intellectual property rights. As net-importers of knowledge, they favor laxer standards that facilitate technology transfer and allow them to

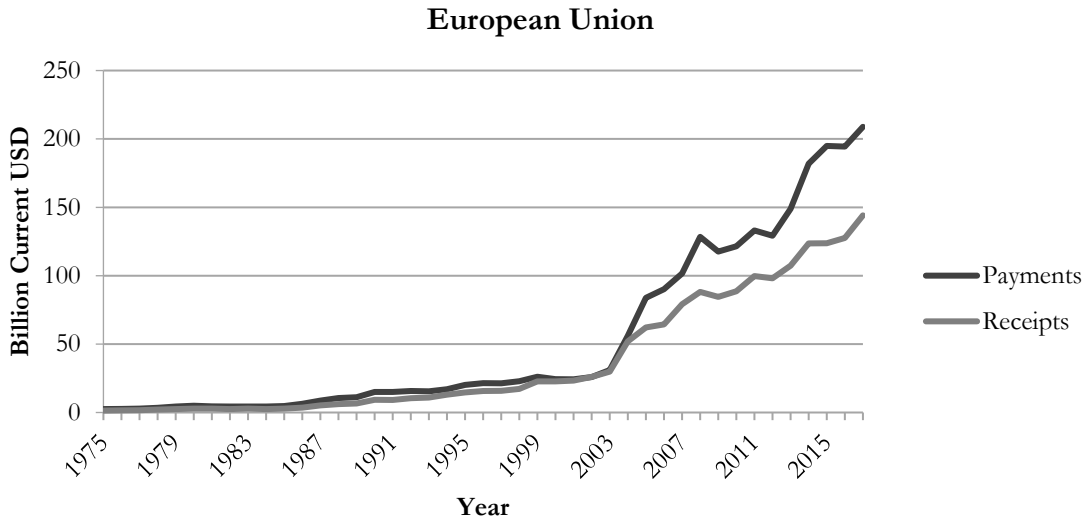
close the technological gap. Developed countries with significant research and development expenditures, by contrast, have stricter domestic intellectual property regulations in place already (Ginarte and Park 1997). As exporters of knowledge, they generally favor more stringent international intellectual property standards (Muzaka 2013b). Strictly speaking, only the U.S. runs a balance of payments surplus with regard to licensing fees whereas other powerful economies, such as the EU, run a deficit, as illustrated by Figure 2.1.[6] Nonetheless, most developed countries favor stringent international standards of protection whereas most developing countries favor rules that facilitate technology transfer.

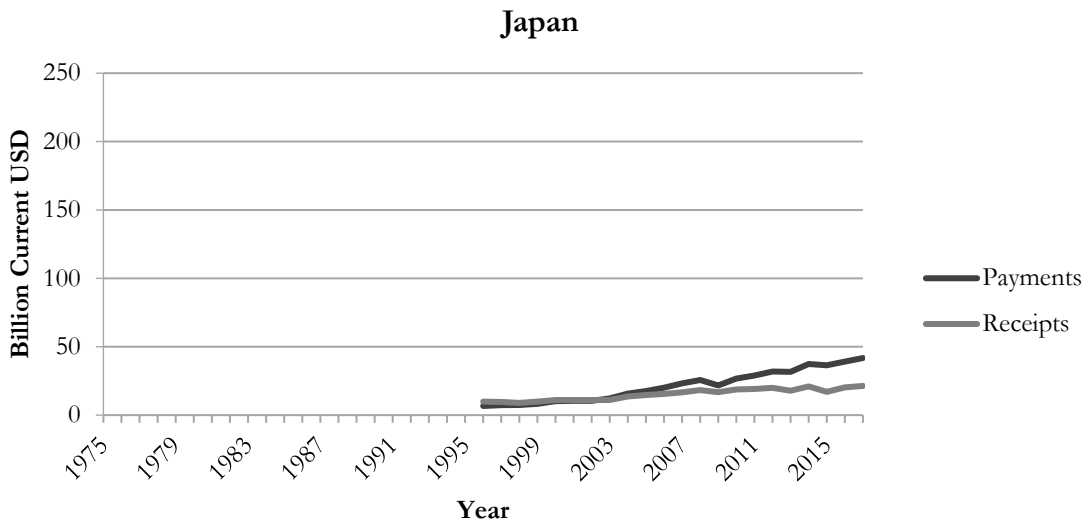
While material factors matter a great deal, this conflict also revolves around different cultural understandings of property and the role of knowledge in society. The arguments for property in knowledge are rooted in a string of Western liberal philosophical traditions, mostly utilitarianism. Deontological arguments for intellectual property, such as applications of Locke's just deserts theory to products of the mind as well as applications of Kant's and Hegel's theories of personhood to authorship (see Burk 2012, 399–400), are also based in European liberal philosophy. Such thinking does not always have an equivalent in non-Western societies. To the contrary, in some cultures, copying and imitating are seen as a compliment to the author or inventor or, as Alford (1995) puts it with regard to China, "an elegant offense." Confucianism, for instance, views the generation of knowledge as an act of imitating and transmitting insights from the past to the present rather than as creating something ex nihilo. In addition, the idea of individual property in knowledge has long conflicted with a collectivist view of society in China (Mun 2008). This does not mean that China is representative of how non-Western societies view knowledge. Yet the example of China illustrates that the idea that knowledge is something that can be owned and traded as a commodity is not always accepted to the same extent in non-Western countries as in the Western hemisphere. Persisting differences in understandings shape what positions countries take vis-à-vis international intellectual property standards. Particularly countries where intellectual property rights have been introduced during colonial rule often reject the ratcheting-up of international intellectual property regulation as neo-colonialism (Okediji 2003).[7]

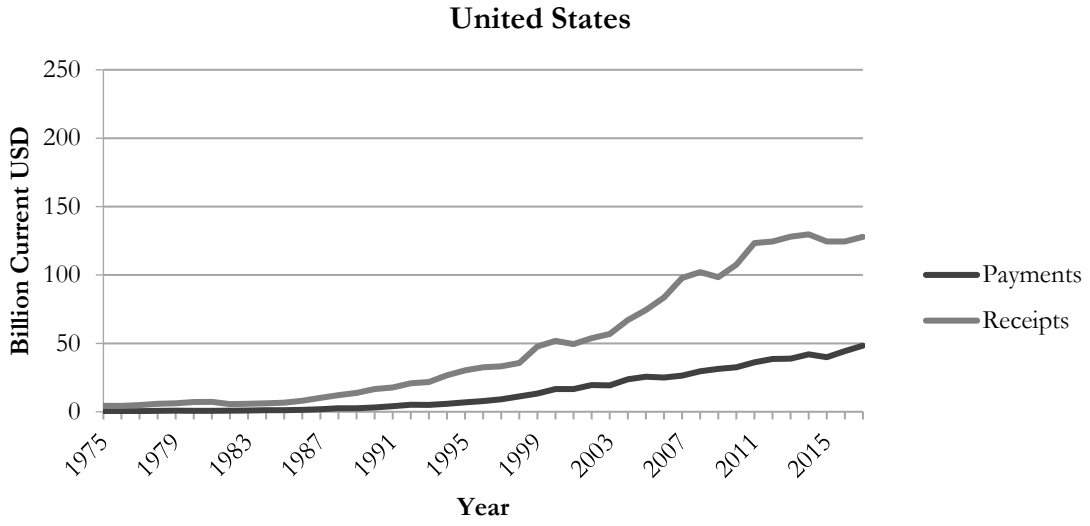
[6] For an extended discussion, see Werle and Troy (2012, 162–63)

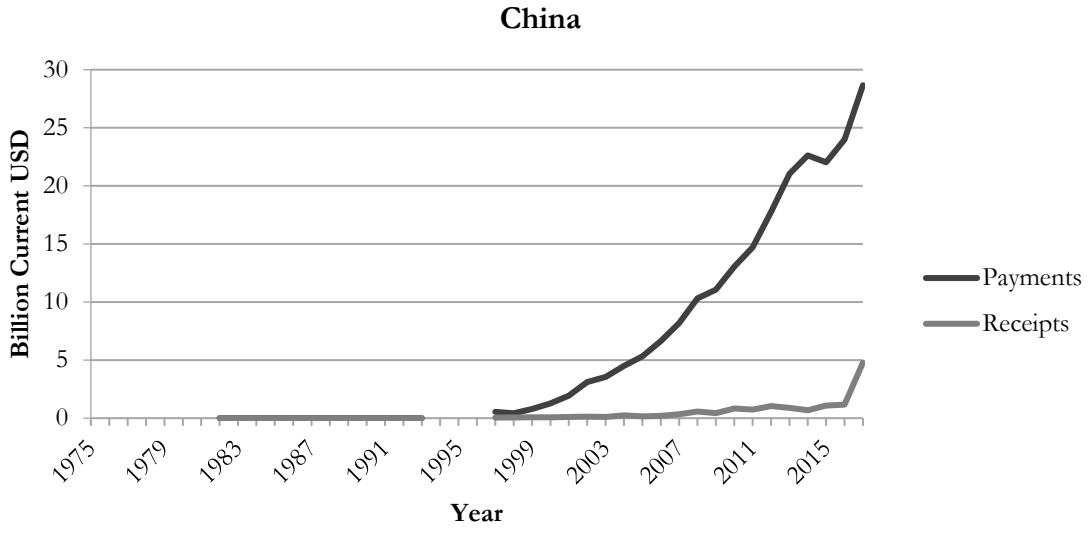
[7] Understandings also shape how international standards are implemented locally (Eimer 2010, 138–42; Eimer and Lütz 2010; Eimer, Lütz, and Schüren 2016).

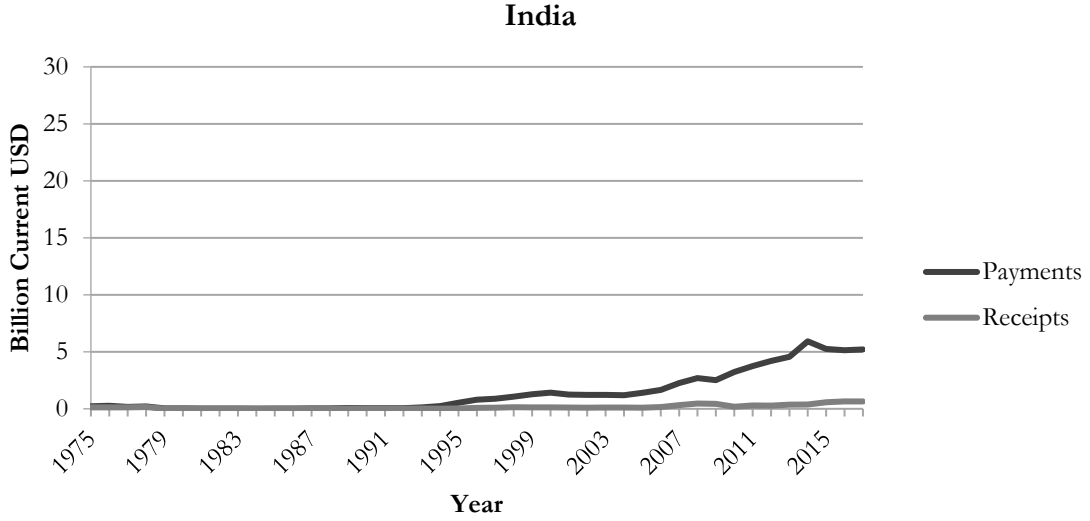
Figure 2.1: Charges for the Use of Intellectual Property in Selected Countries, 1975-2017











Sources: Author's illustrations based on data by the World Bank (2018a, 2018b).

The North-South divide continues to be the most important line of conflict in international intellectual property regulation (see Chon 2007; Okediji 2003). However, as Maskus (2012, 7) notes, "it makes no sense anymore to refer to a singular 'South'." As countries approach the technological frontier, their gains from imitation decrease (Benhabib, Perla, and Tonetti 2012). For this reason, some emerging economies have begun to adopt stricter intellectual property legislation in an attempt to develop proper innovation systems and increase opportunities for resident businesses to upgrade their position in global value chains. The BRICS (Brazil, Russia, India, China, and South Africa) in particular have succeeded in this endeavor and become homes to commercially successful creative and innovative industries (Kennedy 2016). For countries in the Global South, flexibilities to intellectual property rights remain an important instrument to promote public policy objectives. Yet emerging economies to an increasing degree need to consider the economic implications of intellectual property standards (Schüren 2013). This translates into a wider range of positions at the international stage with different emerging economies gravitating towards different positions on the maximalist-minimalist spectrum.[8] China has adopted a more maximalist stance at least at the level of federal government, which, however, often deviates from on-the-ground, province-level policies (Serrano 2016; Yu 2007). Brazil still takes minimalist positions in most regulatory disputes (Yu 2014), which also applies to the cases studied in this book. These developments are all the more important, considering that economic growth also translates into greater influence in global economic governance (Morin et al. 2018).

2.2.2 Producer-Consumer Conflict

A second line of conflict runs between producers and consumers of knowledge goods. Consumers have an obvious interest in cheap and timely access to knowledge and information. Civil society has also grown more critical of intellectual property rights than it used to be during most of the 20th century. Today, an emerging access to knowledge movement holds the view that protection has reached excessive levels and causes prohibitive prices for essential knowledge goods, such as medicines (see Krikorian and Kapczynski 2010). An increasing share of internet users take issue with copyright enforcement that comes at the expense of privacy protection and other civil liberties (Haunss 2013; McManis 2009; Sell 2013; Weatherall 2011). Even in the 1990s, very few NGOs addressed intellectual property rights. Today, the consumer and user movement provides expertise and a large mobilizing

[8] For an overview, see F.M. Abbott, Correa, and Drahos (2013).

potential, as it has expanded to include academics (Morin 2014), critical lawyers (Dobusch and Quack 2013), and open source developers (Coleman 2009) among others.

Many producers of knowledge and their interest groups have ramped up their lobbying for stricter intellectual property protection for an ever-expanding class of knowledge goods and more effective enforcement (Eimer 2010, 145–47). While "[t]he overall degree to which products are being counterfeited and pirated is unknown, and there do not appear to be any methodologies that could be employed to develop an acceptable overall estimate" (OECD 2008, 71), many creative and innovative industries have come to see piracy as one of the most pressing problems for international regulators to address. The divide between private interests in expansive intellectual property rights and the public interest in access to knowledge is the defining fault line in intellectual property rulemaking. In recent years, this conflict has come to the fore in many developed countries again, changing the texture of international disputes on international intellectual property regulation.

2.2.3 Intra-Business Conflict

A third and last line of conflict runs between different types of businesses. New digital business models have developed around internet platforms, such as Google and YouTube, that allow users to search and access knowledge and information. These companies benefit from flexibilities to copyright for the provision of their services and thus advocate for maintaining or even broadening limitations and exceptions. Authors and rights holders in the audiovisual sector, news media, and the publishing industry, by contrast, accuse them of free riding (see Levine 2011). Similar conflicts also exist in other branches. In patents, research and development-based pharmaceutical companies have been clashing against producers of generics for a long time (Roemer-Mahler 2013). Consequently, it would be misleading to treat business as a unitary actor or equate business preferences with the preferences of developed countries. Instead, we need to consider business conflict between right holder industries and industries that use knowledge may tip the scale as another axis of contention in intellectual property regulation.

In sum, in the international regulation of intellectual property, actors are divided among multiple, crosscutting lines of conflict. Over time, preferences have shifted as a result of technological developments and related changes in knowledge and information markets. To some extent, the growing complexity of interests has changed the dynamics of regulatory conflicts by enabling coalitions that would have been less likely before. Yet taken together, these three fault lines are represented in all cases of regulatory disputes over intellectual

property protection. In the cases studied in this book, transnational coalitions have formed among developing countries and civil society groups from the developed world both in earlier and in later episodes. In some cases, businesses have also joined these coalitions to demand reform albeit to a lesser extent and less directly than civil society.

This section has mapped the fault lines in intellectual property regulation in order to differentiate between actors with a preference for stringent regulation and actors with a preference for lax regulation, intellectual property maximalists and intellectual property minimalists. For this purpose, I have focused on distributional implications and normative divides. Like other subjects of international economic governance, intellectual property regulation has distributional consequences for a variety of actors. Unlike technical issues, however, standards of intellectual property protection directly affect the livelihood of ordinary people all around the globe. Existing approaches to international economic governance focus on adjustment costs incurred by states that adopt another country's regulation to determine preferences for or against a particular piece of regulation (Drezner 2007; Mattli and Büthe 2003). The discussion in this section illustrates that intellectual property rules create further costs and problems that go beyond the costs of switching to a different rule and often are hard to quantify. Social costs arise for actors who cannot afford essential knowledge goods and, as a result, do not get access to them in a timely manner. Moreover, strict international standards increase the costs of innovation for countries that are further away from the technological frontier, particularly developing countries, as they cannot rely on imitation anymore to catch up economically with developed countries.

In this section, I have outlined who is in favor of flexibilities and who opposes them. How do we know whether one side prevails? Put differently, where precisely do we have to look in order to establish what constitutes outcomes of regulatory reform?

2.3 Regulatory Outcomes: Assessing the Magnitude of Regulatory Reform

In this section, I conceptualize regulatory outcomes, the dependent variable of this study. Following K. W. Abbott and Snidal (2009, 47), I understand regulatory outcomes in international economic governance primarily as "products of distributive bargaining:"

> Just as in their efforts to capture domestic state regulators, firms, NGOs, and other actors operate in the transnational regulatory space not as neutrals seeking 'good governance,' but as partisans pursuing their special interests and values with differential power and capabilities (K. W. Abbott and Snidal 2009, 47).

Regulatory bargaining on intellectual property and elsewhere creates winners and losers. Most of the time, one side incurs the brunt of the costs associated with adopting an international standard. Common knowledge and much of the International Political Economy literature suggest that materially powerful actors dominate international economic regulation, as they have the greatest capacities to influence the rulemaking process and, as a result, avoid the costs of adopting a standard than runs counter to their preferences. By contrast, this book focuses on regulatory outcomes that accommodate the demands of weaker actors who are losers under the regulatory status quo. Specifically, I study regulatory changes. I look at cases of regulatory dispute where the outcome shifts from favoring materially powerful actors, i.e. developed countries and transnational corporations, to one that reflects the preferences of weaker actors, i.e. developing countries and civil society (see Mattli and Woods 2009a, 4). If I observe significant measurable changes in the outcome, I refer to these as outcomes of regulatory reform. Before I go into detail about the indicators I use to measure the dependent variable, in a first step, I define to what types of empirical cases my concept of regulatory outcomes applies.

The concept of regulatory outcomes here applies to codified rules in the form of standards. Standards are the primary instrument of regulatory coordination in international economic governance. While this definition of regulatory outcomes includes a variety of instruments ranging from soft to hard law, it excludes all informal or tacit forms of agreement (Drezner 2007, 11–12; Mattli and Woods 2009a, 3). Consequently, I focus on declarations, treaties, and other written agreements under international law, such as amendments and protocols to treaties.[9] Moreover, I confine my analysis to public rulemaking. While standard-setting for global markets increasingly takes place in private settings, public governance continues to be more important when economic activities create externalities in sensitive areas of public policy (Büthe and Mattli 2011, 20–21). That said, it should come as no surprise that the international regulation of intellectual property rights largely falls within the ambit of public fora. I thus use the term international regulatory outcomes to denote rules agreed on by states. Note, however, that this does not preclude that non-state actors play a role in the negotiation of regulatory outcomes. In what follows, I discuss how to assess reform outcomes empirically.

[9] I draw on the 1969 Vienna Convention on the Law of Treaties, which defines a treaty as "an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation." See Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331.

Table 2.2: Operationalization of the Dependent Variable

Regulatory outcomes: Assessing the magnitude of regulatory reform

Dimension	Key Question	Measurement		Magnitude
(1) Significance	How demanding?	**Indicator 1a:** Depth (extent of changes required vis-à-vis status quo ante)	Deep or shallow	**Minor reform**
	How comprehensive?	**Indicator 1b:** Scope (comprehensiveness of features affected by outcome)	Broad or narrow	
(2) Legal nature	How binding?	**Indicator 2a:** Obligation (degree to which actors are bound by outcome)	High or low	
	How clear?	**Indicator 2b:** Precision (degree to which authorized conduct is clearly defined)	High or low	**Major reform**

How do we know influence when we see it? In order to answer this question and identify cases of weaker actor influence, I first consider the substantive provisions of a standard. I specifically consider the extent to which a regulatory outcome reflects the policy preferences of proponents of regulatory reform and its acceptance among governments initially opposed to reform. This study then takes into consideration two dimensions of regulatory outcomes, which allows me to assess the magnitude of regulatory reform and observe variation among cases. The first dimension addresses the *significance* of a regulatory outcome. Here, I look at the *depth* and *scope* of a reform to assess how demanding and comprehensive it is. The second dimension concerns the *legal nature* of a regulatory outcome. Here, I determine how *obligatory* and *precise* an outcome is. For the sake of analytical clarity, I construct indicators in a way that permits dichotomized measurements. Conditions are either met or not or take values of either high or low. Taken together, these indicators measure the extent of regulatory change and the level of commitment to the outcome by opponents of reform. This allows me to arrange regulatory outcomes on a single continuum. Because of limited empirical diversity, I use an ordinal scale to classify regulatory outcomes as *minor reform*, *moderate reform*, and *major reform*. Describing variation among cases of regulatory reform later permits me to select non-marginal positive cases for further analysis, which is crucial in exploratory case study research (Goertz and Hewitt 2006, 159–62). Table 2.2 summarizes the dimensions and lays out indicators

In a first step, I consider whether an outcome reflects the policy preferences, in particular the distributional preferences, of important stakeholders that were disadvantaged under the regulatory status quo ante. Existing conceptualizations compare regulatory outcomes based on whether they represent stakeholder preferences for lax or stringent standards. Generally speaking, stringent standards require significant investments into implementation, monitoring, and enforcement from states with less stringent regulations and their resident industries (K. W. Abbott and Snidal 2009, 65–66; Drezner 2007, 11). In intellectual property regulation, changing the level of protection beyond that affects the cost-benefit structure for producers and consumers of knowledge, which results in an important trade-off. While higher levels of protection increase the incentives for producers to create and innovate, they also increase the costs of access. In order to mitigate the adverse effects resulting from lack of access, regulators can either reduce the overall level of protection or create flexibilities tailored to specific public policy goals. While rule-makers, in theory, could decide to decrease the minimum terms of protection for copyright or patents, this has never happened in practice and is unlikely to happen any time soon. Instead, reform attempts generally focus on the introduction of limitations on economic rights. As discussed above, such

limitations and exceptions define cases in which the use (and in some cases the reproduction and distribution) of a knowledge good is permitted without authorization by the right holder. I thus focus on whether a regulatory outcome creates flexibilities in the form or limitations and exceptions for the benefit of formerly disadvantaged groups.

I subsequently determine whether actors whose initial preferences were contrary to the outcome accept it. Here, I look at the signatures and membership status of opponents of reform. If the largest economies do not accept a standard, it is unlikely to matter.[10] Both conditions, the introduction of a limitation of exception for the benefit of groups that were disadvantaged by the regulatory status quo ante and the acceptance of the outcome by initial opponents, need to be met for a case to merit further consideration. Otherwise, the outcome will be coded as *no reform* and not be considered for further analysis.

If both of these preconditions are met, I proceed to probe the *significance* of a regulatory outcome, drawing on two indicators. I first seek to assess the *depth* of an outcome by asking how demanding the changes introduced by the standard are (Indicator 1a). Depth refers to the extent of adjustments required by a regulatory outcome vis-à-vis the regulatory status quo ante. Second, I consider the *scope* of reform by asking how comprehensive the required changes are (Indicator 1b). Depth addresses the intensity of changes whereas scope addresses the extensity of changes. With regard to the issue at hand, outcomes of deep reform need to permit uses to a group of beneficiaries that are normally reserved to the right holder, i.e. the reproduction and distribution of an intellectual property-protected knowledge good. An outcome of broad reform needs to cover a wide range of beneficiaries and address all issues related to the underlying policy problem.

These significance tests allow for avoiding what in statistical inference is known as a type I error, i.e. the incorrect rejection of a null hypothesis. A case may enter a data set as a false positive when the result is coded erroneously as positive when it should be negative due to insensitivity of measurement. In this study, considering all instances of instruments that address limitations or exception to intellectual property rights would bias the analysis, as some outcomes do not require any significant adjustment and thus do not change regulation all that much. This is an important test in my research design, as I seek to explain what I argue are deviant cases. Insignificant cases, however, do not run contrary to existing explanations. In sum, these indicators provide information on the degree of regulatory

[10] See Drezner (2007, 81–85) on "sham standards."

change, and in so doing, the magnitude of reform. In this study, I only consider cases that meet the conditions of both of these two dimensions as significant (*moderate* or *major reform*).

The second dimension addresses the *legal nature* of a regulatory outcome. The indicators used here derive from the legalization literature (K. W. Abbott et al. 2000; Goldstein et al. 2000). They provide information on whether a regulatory outcome is legally binding as well as clear, consistent, and elaborated. I first assess the degree of *obligation* of an outcome, i.e. the degree to which the agreed-upon rule is binding for signatory states (Indicator 2a). High obligation implies a binding rule ("hard law") whereas low obligation implies an expressly non-binding instrument ("soft law"), such as a guideline, a memorandum of understanding, or a model law (K. W. Abbott and Snidal 2000). Treaties that indicate an intent on behalf of their signatories to be legally bound entail a commitment under international law to be followed and an obligation to make reparations in case of breach ("*pacta sunt servanda*," see K. W. Abbott et al. 2000, 408–12). Second, I consider the degree of *precision* of an outcome, i.e. the degree to which a rule specifies unambiguously what is expected from a signatory state (Indicator 2b). High precision implies determinate rules. They display high ex ante clarity, increasing the certainty and predictability for all actors involved. Drawing on the legalization literature, I argue that the more the determination whether a signatory complies with a rule is made ex ante, the greater is the commitment from opponents of the rule and vice versa (K. W. Abbott et al. 2000, 412–13). With regard to the issue at hand, I focus on whether a limitation or exception is mandatory for all signatories of a treaty and whether it is clearly defined, including to how it relates to existing treaty obligations. Outcomes that in addition to being deep and broad score high on both of these indicators constitute cases of *major reform*.

To summarize, outcomes that display high scores on both indicators of significance and both indicators of legal nature constitute cases of *major reform*. Outcomes that score high on both indicators of significance but fail to score high on both indicators of legal nature constitute cases of *moderate reform*. Finally, outcomes that also fail to score high on one of the two indicators of significance only constitute cases of *minor reform*.

As a corollary, I consider the effectiveness of regulatory outcomes. The real-world impact of any regulatory outcome is admittedly hard to assess due to the number of variables involved and the complexity of counterfactuals (K. W. Abbott and Snidal 2009, 62; Drezner 2007, 12–13). Thus, I focus on changes of behavior in terms of the implementation by signatories drawing mostly on secondary data (see Deere 2008, chap. 1). I do this mainly to

avoid a type II error or false negatives, i.e. failing to detect an effect that is present. Particularly outcomes that lack explicit legal bindigness and precision may look weak on paper but nonetheless achieve the effect desired by proponents of reform. Soft law in particular may provide leeway where an outcome needs to account for different levels of economic development (K. W. Abbott and Snidal 2000, 445). For this purpose, I consider the ratification and implementation process although I cannot do so systematically within the scope of this book. This allows me to assess if outcomes of moderate reform matter despite the lesser commitment from opponents of reform. Moreover, it helps me to study whether such outcomes matter differently for different categories of rule-takers, i.e. developed countries, emerging economies, and developing countries.

In this section, I have conceptualized and operationalized the dependent variable of the study. Drawing on these criteria, I can now identify cases of regulatory reform and assess variation among them. In the subsequent section, I apply this discussion to international intellectual property regulation to determine what the universe of cases look like.

2.4 The Universe of Cases: Attempted Reforms

Cases of weaker actor influence and outcomes of regulatory reform should be rare events. A first glance at the history of international intellectual property regulation confirms this expectation. Considering that intellectual property governance reaches back until the late 19th century, however, it is surprising to see that no reform attempt has been truly successful until the beginning of the 2000s.[11] While there have been extended periods of contestation during the 20th century related to both copyright and patent regulation, these have not yielded tangible results for the most part. In this section, I apply my conceptualization of regulatory reform to outcomes in the international regulation of intellectual property in order to sketch the universe of cases of my study and to inform my case selection. I identify four regulatory disputes in the intellectual property governance that have resulted in varying levels of regulatory change, (1) public health and access to medicines, (2) the protection of traditional knowledge, (2) social inclusion and access to printed material for people with disabilities, and (4) agriculture and access to crop seeds for smallholder farmers.

(1) Reform attempts related to patent rules and access to medicines have drawn most scholarly attention so far. In contrast to other cases that I discuss in this section, this is a recent issue and directly related to the adoption of the TRIPS agreement. At the end of the 1990s, a number of developing countries, including Brazil, South Africa, and Thailand,

[11] For an overview, see Sell (2006)

expressed concern that TRIPS would curtail their ability to provide public health for their citizens (Correa 2001). In the face of the emergent HIV/AIDS pandemic, these actors with support from a network of Western NGOs demanded greater flexibilities to patents for medicines in order to be able to supply antiretroviral drugs at affordable prices. This reform attempt resulted in the adoption of two treaties, the 2001 Declaration on the TRIPS Agreement and Public Health (*Doha Declaration*) and the 2005 Amendment of the TRIPS Agreement (*TRIPS Amendment*) that clarified that countries could use limitations to patent rights, including compulsory licensing, to pursue public policy goals (Cullet 2003). Commentators agree that these two treaties in conjunction constituted a major win for proponents of a more flexible patent system (Hein and Moon 2013; Shashikant 2010).[12] In contrast to other cases of reform in intellectual property regulation, it is well explained by existing approaches in the International Political Economy and International Relations theory. As I will discuss in the subsequent chapter, transnational advocacy network approaches have great explanatory currency over this case, as a network of NGOs successfully rallied the public to achieve regulatory change (see Hein, Bartsch, and Kohlmorgen 2007; Sell and Prakash 2004).

(2) Another prominent regulatory dispute in intellectual property regulation revolves around the protection of traditional knowledge. The term traditional knowledge refers to "knowledge, know-how, skills and practices that are developed, sustained and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity" (WIPO n.d.). Here, in contrast to other North-South disputes over international property regulation, local communities and indigenous groups have been discontented by the fact that corporations from the Global North have appropriated both cultural expressions as well as other forms of knowledge commercial gain without asking permission or sharing the benefits that result from the exploitation (Maskus 2012, 233–34). Although attempts at reform reach back to the 1970s, so far, these have failed to produce any meaningful regulatory change. A longstanding WIPO committee has not delivered any noteworthy results up to this point (see Dutfield 2002). In 1985, WIPO and the UNESCO jointly adopted the Model Provisions for National Laws on the Protection of Expressions of Folklore against Illicit Exploitation and Other Prejudicial Actions, which is shallow as well as non-binding and imprecise.

[12] Strictly speaking, the *Doha Declaration* does not constitute an instance of regulatory change, as it only reaffirms flexibilities that exist under the provisions of TRIPS. Yet, in practice, this amounts to the introduction of a limitation, as the U.S. put into question precisely these flexibilities. Applying my conceptualization, both outcomes are deep as well as broad. Yet only the *TRIPS Amendment* is also legally binding and precise.

(3) The issue of access to printed material by people with disabilities has received neither much public nor scholarly attention. Since the late 1970s, proponents of reform have argued that existing international copyright rules exacerbate access to books by people who are blind or live with visual or other print disabilities. In 2013, WIPO finally adopted the Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled (*Print Treaty*) that introduced mandatory limitations for a wide range of beneficiaries. An earlier reform attempt had not resulted in a full-blown treaty but only a set of model laws, the 1982 Model Provisions Concerning the Access by Handicapped Persons to the Works Protected by Copyright (*Model Provisions*), that did not prove overly impactful. As I show in the subsequent chapter, existing approaches to international regulation have difficulties explaining this shift in regulatory outcomes.

(4) Lastly, the issue of access to seeds in subsistence agriculture has produced some level of regulatory reform. This regulatory dispute revolves around the question, as to whether smallholder farmers should be able "to save, use, exchange and sell farm-saved seed/propagating material" (FAO n.d.), including cash crops, to maintain genetic diversity and guarantee local food security. Again, a first reform attempt resulted only in an outcome of no or minor reform, the 1981 International Undertaking on Plant Genetic Resources for Food and Agriculture (*Seed Undertaking*), which was both insignificant and lacking in terms of its degree of legalization. A later reform attempt, however, resulted in a more far-reaching reform outcome, the 2001 International Treaty on Plant Genetic Resources for Food and Agriculture (*Seed Treaty*). While the issue has been subject to some scholarly debate because of its relevance for the international political economy of agriculture (e.g. K. Aoki 2010; Borowiak 2004; Helfer 2004b; Sell 2009), the *Seed Treaty* has not been studied so far and is poorly understood by existing approaches.

In sum, seven episodes of reform attempts have occurred in four issue areas related to the international regulation of intellectual property, agriculture, culture and education, public health, and traditional knowledge. Three of these seven episodes have produced outcomes of at least moderate (1) or major reform (2). Table 2.3 provides an overview of the universe of cases and summarizes the analysis in this section. In the next section, I establish criteria to select cases in a context of limited empirical diversity and increase the explanatory power of my approach.

Table 2.3: Cases of Reform in International Intellectual Property Regulation

Case	Issue area	Preconditions		Significance		Legal nature		Magnitude
		Flexibility	Acceptance	Depth	Scope	Obligation	Precision	
1981 International Undertaking on Plant Genetic Resources for Food and Agriculture	Agriculture	Yes	Yes	Low	Broad	Low	Low	**Minor reform**
2001 International Treaty on Plant Genetic Resources for Food and Agriculture		Yes	Yes	High	Broad	High	Low	**Moderate reform**
1982 Model Provisions Concerning the Access by Handicapped Persons to the Works Protected by Copyright	Culture and education	Yes	Yes	Low	Broad	Low	Low	**Minor reform**
2013 Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled		Yes	Yes	High	Broad	High	High	**Major reform**
2001 Declaration on the TRIPS Agreement and Public Health	Public health	Yes	Yes	High	Broad	Low	Low	**Moderate reform**
2005 Amendment of the TRIPS Agreement		Yes	Yes	High	Broad	High	High	**Major reform**
1985 Model Provisions for National Laws on the Protection of Expressions of Folklore against Illicit Exploitation and Other Prejudicial Actions	Traditional knowledge	Yes	Yes	Low	Narrow	Low	Low	**No reform**

2.5 Logic of Case Selection: The Benefits of Studying Deviant Cases

The analysis in this book is exploratory, outcome-centric, and qualitative. The unit of analysis is isolated episodes of regulatory dispute, in which materially weaker actors have demanded changes to the regulatory status quo. Specifically, I am interested in cases of regulatory dispute that take surprising values on the dependent variable relative to expectations of both conventional wisdom and existing theories of international regulation (outcomes of *moderate reform* and *major reform* as opposed to outcomes of *no reform* or *minor reform*). In abstract terms, the research question is the following: *Why does the outcome Y occur and what accounts for the variation in Y?* While often regarded as a problematic method of case selection, in exploratory research designs, the researcher selects cases based on the value of the dependent variable. This necessitates a careful strategy of case selection and the application of methodological techniques that allow for valid and general inferences about the conjectured causal relationship between an explanatory factor X_1 and the dependent variable Y. In this section, I discuss some of the challenges associated with selecting cases on the dependent variable and more generally with discriminating among rival explanations in small-n qualitative research. I also address how I approach these challenges in this book. Finally, I select cases for analysis.

In small-n qualitative research, case selection is a "theory-guided iterative process" (Leuffen 2007, 145). Random selection only produces representativeness in large-n quantitative research. Thus, in a qualitative study, the researcher needs to select cases intentionally, drawing on some empirical understanding of the range of possible values of the outcome and the object under investigation more broadly as well as knowledge of the causal factors identified by existing theory. Choosing cases on the dependent variable is famously associated with selection bias, since it may lead to skewed estimates of the causal effect of an independent variable X_1 on Y (G. King, Keohane, and Verba 1994). Selection bias is a form of systematic error that occurs when the researcher selects cases in such a way that the dependent variable does not vary sufficiently. If the selected cases represent less than the full range of possible variation of Y, the findings cannot be generalized beyond the cases studied with sufficient confidence. Selection bias thus undermines the external validity of the argument. Moreover, there is the risk of confirmation bias. If only positive cases are selected, any shared characteristic may be identified as the cause of the outcome, which is particularly problematic if the researcher focuses on evidence that supports the initial theory and neglects other data (Leuffen 2007, 147–48). Confirmation bias compromises the internal

validity of the explanation, as the causal conclusion drawn from the analysis may not be warranted in the first place.

I seek to avoid some of the problems associated with selecting on the dependent variable by accounting for a range of values that Y can take. As there have been multiple episodes of regulatory dispute revolving around the same issue but with varying outcomes, I will conduct controlled, paired comparisons of these cases to achieve this goal. First, I focus on changes in outcomes (Y at point in time t_1 as compared to Y at t_2), which allows me to identify the factor that explains these changes through within-case comparisons. Second, I account for variation in the outcome across cases. My analysis proceeds from two negative cases of attempted but unsuccessful reform (*minor reform*) to a positive case (*major reform*) as well as case that falls in between the two (*moderate reform*). This allows me to consider two axes of variation, within-case and cross-case variation, despite limited empirical diversity while holding a range of potentially explanatory factors constant (Ragin 1987, 26–30).

In order to increase explanatory leverage this research design integrates multiple logics of inference. On the one hand, I combine deviant-case analysis with Mill's method of difference (paired, controlled comparisons akin to a most similar design) to identify the factor that causes outcomes of reform. On the other, I use process tracing to increase the internal validity of my argument. I argue that this design allows me to avoid explanatory overdeterminacy, i.e. failing to observe that one variable provides a sufficient explanation, as well as indetermacy, i.e. lacking the observations to eliminate competing explanations (Dür 2007). I also consider a range of alternative explanations to avoid omitted variable bias. Some of the cases presented in the previous section are deviant relative to existing models of causation that inform scholarly thinking about international economic regulation. As I show in the subsequent chapter, they deviate from approaches that focus on material power resources (realism and regulatory capture) and, to some extent, approaches that emphasize ideational factors (transnational advocacy networks and epistemological communities).

With this in mind, I have selected four cases for two controlled, paired comparisons. Here, the explanatory variables identified by other theories of international regulation do not covary with the outcomes of these cases and the hypothesized mechanisms of these approaches are not observable when they should be. First, I have chosen the two cases in culture and education revolving around access to printed material for people with disabilities, as they display the largest variation in outcomes. Here, I will compare the 1982 *Model Provisions* and the 2013 *Print Treaty* and explain the shift in the regulatory outcome by focus-

ing on shifts on the explanatory variable. Second, I have selected the issue area of agriculture, as one of the cases displays another value that my dependent variable can take (moderate reform). Here, I explain the variation in the outcomes between the 1981 *Seed Undertaking* and the 2001 *Seed Treaty*. In the conclusions, I contrast the two paired comparisons to account for some endogeneity problems associated with within-case analysis. After introducing my theoretical approach in Chapter 4, I will go into greater depth about the logics of inference that I employ in this book.

2.6 Discussion

As the discussion in this chapter has shown, the regulation of intellectual property despite its legal-technical nature is a highly controversial subject in international economic governance. Standards of protection have important distributional implications and often directly affect the livelihood of ordinary people all around the world, as they curtail access to knowledge. Consequently, preferences for stringent or lax standards and flexibilities vary not only according to countries but also within societies. Contrary to conventional wisdom and mainstream approaches in International Political Economy, it is not always the materially most powerful actors who assert themselves in regulatory disputes. To the contrary, I have identified two cases where weaker actors have achieved regulatory change and varying levels of regulatory reform, the *Print Treaty* and the *Seed Treaty*. Why do existing approaches to international regulation fail to explain these outcomes?

3 State of the Art

In this chapter, I discuss how conventional accounts of global economic governance explain who wins and who loses in regulatory disputes. In so doing, I show why existing theories of international regulation cannot account for the cases of weaker actor influence identified in the previous chapter. I argue that institutional context remains underconceptualized in the literature and that greater attention to institutional complexity is warranted.

Since the early 2000s, a large body of literature on international economic regulation has emerged. Initial contributions have focused on broad trends, such as international regulatory arbitrage, races to the bottom in environmental and labor governance, and the broader implications of the shift of rulemaking authority from the national to the international level (e.g. Braithwaite and Drahos 2000; Kahler and Lake 2003). In recent years, the literature has moved towards explaining specific outcomes of regulatory bargaining (e.g. Drezner 2007; Mattli and Woods 2009b). Today, scholars from a variety of analytical perspectives investigate which actors are involved in regulatory conflicts and what power resources allow them to exert influence.[13] Approaches can be roughly divided into three camps. A first camp points to material power resources and materialist conceptions of economic interest. A second camp highlights ideational sources of power, such as expert knowledge and normative authority, and points to ideas, persuasions, and the role of uncertainty in conceptualizing preferences (see Seabrooke 2007). A third camp occupies a middle ground between materialism and constructivism and emphasizes the institutional context, in which regulation takes place, as an explanatory factor (see Farrell and Newman 2014, 2015).

In the first section, I address realist approaches. In the second section, I turn my attention to the literature on business power and regulatory capture. In the third and fourth section, I debate ideational approaches to international economic governance, reviewing the literatures on transnational advocacy networks and epistemic communities. In the fifth section, I introduce institutionalist approaches to international regulation and argue that recent contributions in International Relations on the topic of regime complexity provide a starting point for the explanation of the cases studied in this book. In the sixth and final section, I conclude, suggesting that a novel, International Political Economy take on regime complexity is needed.

[13] For an overview, see Avant, Finnemore, and Sell (2010).

3.1 Realism

Realism is the most influential school of thought in the study of global economic governance. Realist accounts put states at the center of analysis. They proceed from the assumption that states seek to realize mutual gains by coordinating their rules and furthering the global integration of markets. At the same time, realists argue that states seek to avoid the costs of switching to a new regulatory framework and instead prefer to "upload" their domestic rules to the international level (see Büthe and Mattli 2011; Drezner 2007).[14] Outcomes of regulatory bargaining then are a function of the distribution of economic capabilities among states (see also Gruber 2000; Krasner 1991). When the economically most powerful states agree on an international standard, less powerful states are expected to follow suit (see also Simmons 2001).[15] The reasoning is straightforward: States with smaller internal markets need to comply with the rules set by states with large internal markets, if they want to increase opportunities for their domestic producers. When the preferences of these great powers diverge, this is expected to result in the creation of competing standards or unenforceable "sham standards."

Drezner (2007, 68–71) and other realist scholars argue that non-state actors, particularly civil society organizations, play only a marginal role in international regulatory bargaining. According to this line of thinking, nongovernmental actors are generally unable to surmount their collective action problems at the transnational level, leaving them unable to influence processes of regulatory bargaining. Realism acknowledges the importance of international institutions as focal points that facilitate cooperation among states and the enforcement of rules (Drezner 2007, 64–68). Yet it treats international institutions as transmission belts of great power preferences that do not have an independent causal effect on regulatory outcomes (see Krasner 1982; Mearsheimer 1994; Steinberg 2002). If the great powers are dissatisfied with a specific institution, they may abandon that forum in favor of another one or create a new institution (Benvenisti and Downs 2007; Drezner 2007, 63–64, 2009, 2013).

The notion that the most advanced economies determine the outcomes of the international regulation of intellectual property is ubiquitous in the literature on intellectual property regulation. Okediji (2003) portrays the international system of intellectual property regula-

[14] The approach draws on the Varieties of Capitalism literature in Comparative Politics to argue that firms' regulatory preferences are heavily structured by their home country institutions (see Hall and Soskice 2001a, 15–16).

[15] Drezner (2007, 37–39) and other scholars in this vein consider the EU a unitary state actor for economic purposes.

tion as a hegemonic project. She argues that intellectual property standards are not only shaped principally by the great powers but also serve as an instrument to protect their edge over the periphery in the global economy. Consistent with realism, Okediji and other contributors in this vein explain the dominance of industrialized countries with their superior market power and portray international institutions in the governance area as tools in the hands of the great powers. This is exemplified by the emergence of a trade-based strategy to increase international intellectual property protection through economic coercion in the 1980s. The U.S. in particular started exerting bilateral pressure on developing countries to cajole them into adopting more stringent rules and improving enforcement. Section 301 of the Trade Act of 1974 allowed U.S. industries to petition the Trade Representative to investigate actions of foreign governments that they consider harmful to their business (Sell 2010b, 769). In subsequent years, this resulted in the adoption of a watch list approach. Until today, countries that are considered infringers of U.S. intellectual property by domestic interest groups are listed on the Special 301 Report as "Priority Foreign Countries" to threaten penalties if they do not change their behavior (see Karaganis 2011, 7).

The watershed moment of the adoption of TRIPS also provides ample support for realist arguments. TRIPS standards clearly benefit net exporters of knowledge at the expense of net importers of knowledge (e.g. F. M. Abbott 1989). This showcases what Gruber (2000) calls "go-it-alone power." Developing countries were aware that they would be even worse off in a scenario where the EU and U.S. created the WTO as an exclusive club. The establishment of TRIPS as part of the WTO further institutionalized the linkage between the international trade system and intellectual property rights governance, increasing the ability of the great powers to leverage market access against smaller economies.[16] Deere (2008) identifies a carrot-and-stick approach by the EU and the U.S. of using bilateral trade deals and threats in order to promote the implementation of TRIPS by developing countries. Similarly, Drahos (2005) points to the inclusion of "TRIPS-plus" standards in bilateral trade and investment agreements between the EU and the U.S. on one side and developing countries on the other. TRIPS-plus provisions require states to implement more stringent regulations than those agreed on in TRIPS.[17]

[16] A number of studies show that the legalization of the WTO has indeed worked to the advantage of actors with the greatest legal capacities, typically the economically most advanced countries (e.g. Bown 2005; M. L. Busch, Reinhardt, and Shaffer 2009; Conti 2010; Horn, Mavroidis, and Nordström 1999).

[17] The effectiveness of U.S. TRIPS-plus bilateralism is somewhat disputed. Morin (2009) highlights that the U.S. has so far only negotiated Free Trade Agreements with such provisions with smaller trade partners.

The cases studied in this book nonetheless deviate from this pattern of great power influence. Here, weak actors with diffuse interests were able to shape regulatory outcomes despite the opposition of the EU and the U.S. While realism accounts for general trends in the international regulation of intellectual property, particularly during the 1990s and early 2000s, it cannot satisfactorily explain more recent developments (see Morin 2014, 275–77). Taking into consideration power shifts hardly changes the picture from a realist perspective (see also Hopewell 2014, 312–15). While two emerging powers, Brazil and India, were important actors in both cases, China has largely stayed on the sidelines. Without the support of China (with a 2015 real GDP of current USD 12.24 trillion), India (GDP USD 2.6 trillion) and Brazil (GDP USD 2.06 trillion) are outmatched by the EU (GDP current USD 17.28 trillion) and the U.S. (GDP USD 19.39 trillion) in terms of economic capabilities (World Bank 2018c).[18] This casts doubt on the assumption of a direct causal link between economic capabilities and regulatory outcomes. The *Print Treaty* and the *Seed Treaty* display that power resources other than market size are likely to play a role under specific conditions. They indicate that materially weaker states and non-state actors play a more prominent role in regulatory processes than predicted by realist accounts.

Importantly, the realist literature also disregards the institutional context, in which regulation takes place, arguing that international institutions are essentially tools in the hands of the most powerful governments. This, however, contradicts what we observe in terms of how regulatory processes play out, as we will see in later parts of the book. Here, institutions constitute actual constraints on actors and even the most powerful states are not always able to substitute one forum with another.

3.2 Business Power and Regulatory Capture

A second stream of the literature addresses the role of firms and business groups in international economic governance. While approaches in this vein share many of the materialist assumptions of realism, they diverge from the state-centric framework, pointing to a shift of regulatory authority from states to private sector actors (see Cutler, Haufler, and Porter 1999a). This literature argues that business actors are best positioned to influence international standards under conditions of international economic interdependence (see Fuchs 2007; Strange 1996). States' increasing reliance on footloose transnational corporations, so the argument goes, makes international regulation more susceptible to capture by special interests (see K. W. Abbott and Snidal 2009; Mattli and Woods 2009a).

[18] Power shift needs to be substantial or will bring about only incremental changes, as suggested by power transition theory (for an overview, see Zangl et al. 2016, 171) and recent realist contributions on the rise of China and other BRICS countries (e.g. Drezner 2007, 221–25; Ikenberry 2008, 2011).

The literature on business power and regulatory capture does not constitute a unified research paradigm. Yet it is held together by a number of common themes. Firms with assets in multiple jurisdictions often share regulatory preferences but face opposition from civil society or other businesses in their home countries. This encourages these transnational corporations to act collectively and form cross-border alliances in order to influence international rulemaking. These actors have significant material power resources at their disposal "in terms of financial capital, technology, employment, and natural resources" (Cutler, Haufler, and Porter 1999b, 6). Particularly firms with the ability to offshore production may use the threat of exit to coax public regulators into adopting business-friendly regulations (see Culpepper and Reinke 2014). As a result, public regulators may become overly cautious of "disrupting the market," causing them to exercise regulatory self-restraint at the expense of public welfare (Fuchs 2007, 103–4). In addition, private sector actors can use their expert knowledge and better access to information to obtain privileged access to rulemakers and rule-making fora (Pagliari and Young 2014, 577). This allows business to gain disproportionate influence on regulatory outcomes, particularly when an issue area is characterized by both high technical complexity and low political salience (Culpepper 2011, 7–8).

Like realists, this literature argues that civil society organizations' "resources frequently do not match their ambitions or needs and are insignificant compared to the means at the disposal of industry groups" (Mattli and Woods 2009a, 29). In marked contrast to realism, it highlights institutional factors. A number of contributions identify flaws in the design of international regulatory fora that make it harder for civil society to participate, specifically shortcomings in institutional due process, such as exclusivity and a lack of accountability to the broader public (Tsingou 2015; Underhill and Zhang 2008).

Business power approaches have been mainly applied to international financial governance (e.g. Culpepper and Reinke 2014; Pagliari and Young 2014, 2016; Tsingou 2015; Underhill and Zhang 2008). They are equally applicable to the international regulation of intellectual property rights. Intellectual property law is often seen as an "arcane domain" (Eimer and Philipps 2011, 460) that is reserved for legal experts. Accounts of knowledge industry entrenchment in domestic regulatory agencies and international regulatory fora abound (e.g. Ryan 1998; Sell 2010b). The literature on international intellectual property regulation highlights knowledge industries' structural power in both the developed and the developing world. Particularly accounts of the TRIPS negotiations have demonstrated how business power has translated into regulatory outcomes. Sell (2003) shows that a transnational coali-

tion of knowledge industry groups has succeeded in putting intellectual property rights on the agenda of international trade negotiations and in establishing an unprecedented international standard for protection (see also Tyfield 2008; Weissman 1996). Bhagwati (2004, 183–85) and Drahos (2002) come to a similar conclusion and characterize TRIPS as an instance of regulatory capture, protecting private interests at the expense of the general public. These scholars point to the closed-door nature of international trade negotiations and the general lack of attention to intellectual property regulation by civil society until the mid-1990s (see also Matthews 2006, 7).

However, business power approaches fall short of explaining the outcomes of the cases studied in this book for similar reasons as realism. Although a number of firms and industry groups have deployed considerable resources to protect the regulatory status quo and advance their regulatory agendas, the outcomes of both cases are more balanced than these approaches would predict. This literature makes an important case for taking private actors seriously and considering other power resources than the economic capabilities of states, such as expert knowledge and private information. Yet it underemphasizes the plurality of interests even within industries at the transnational level (see Pagliari and Young 2016). What is more, business power approaches fail to account for conditions under which opponents of the regulatory status can generate reform (see Carpenter and Moss 2014, 9–11; Kastner 2014, 1317–18). While these approaches point to institutional factors that facilitate civil society participation in regulatory processes, they do not identify a causal mechanism by which regulatory capture can be overturned (see A. Baker 2010).

3.3 Transnational Advocacy Networks

Constructivist approaches from International Relations have found their way to International Political Economy only recently.[19] Among these, the transnational advocacy network approach stands out as an explanation of reform in global economic governance. Transnational advocacy networks are coalitions of activists, civil society organizations, and other actors from different countries that rally around shared values and principled beliefs. This approach suggests that these coalitions can make a difference even when opposed by materially powerful governments or firms (Keck and Sikkink 1998).[20] It argues that transnational advocacy networks may change standards of appropriateness by virtue of their normative authority. Where successful, this results in the institutionalization of these norms as international rules (see Finnemore and Sikkink 1998).

[19] For an overview, see Abdelal, Blyth, and Parsons (2010).
[20] For an overview of transnational approaches, see Risse (2013).

Normative authority increases the resonance of a transnational advocacy network's principled claims with rule-makers and the general public. NGOs in particular derive legitimacy from their not-for-profit nature and perceived altruism (Avant, Finnemore, and Sell 2010, 13). Moreover, transnational advocacy networks "gain influence by serving as alternate sources of information" (Keck and Sikkink 1998, 19). They may provide testimony for groups without voice or disseminate facts that are otherwise unavailable to the public to sway public opinion on an issue. Transnational advocacy networks activate these power resources and influence their target actors by drawing on the strategic repertoire of social movements (see Joachim 2003). Strategic framing serves to raise awareness for their concerns and mobilize support. Framing processes render information comprehensible and meaningful, so that it becomes usable in the political arena. Frames provide clear problem definitions of often vague issues, causal explanations, and appeals to widely accepted norms, which makes acting on these problems possible (Joachim 2003, 250–51). Finally, the network structure allows these actors to multiply their channels of access to decision-makers at all levels, ranging from the local to the global.

Many contributions in this vein argue that the effectiveness of transnational advocacy networks depends heavily on the opportunity structures provided by domestic and international institutional contexts. Institutional contexts that facilitate access to outsiders allow transnational advocacy networks to increase their leverage on target actors. At the domestic level, the availability of institutional access points and ties to institutionalized gatekeepers are beneficial (Checkel 1997, 478–80; Joachim 2003, 251–52). Where these do not exist, activists are expected to concentrate their efforts on the international level. Particularly governance areas that are heavily structured by rules enable influence by transnational actors, including advocacy networks (Cerny 2010; Farrell and Newman 2014). Most multilateral international institutions have lowered the barrier to entry due to rising accountability expectations, providing an additional channel to exert pressure on government representatives (Risse-Kappen 1995, 29–32).

The transnational advocacy network approach has been widely applied to cases in international intellectual property regulation (e.g. Dobusch and Quack 2013; Haunss and Kohlmorgen 2010; Sell and Prakash 2004). A number of scholars have studied the campaign for access to medicines at the turn of the millennium. Despite initial opposition by the U.S. and the pharmaceutical industry, the campaign has resulted in the adoption of the Doha Declaration on the TRIPS Agreement and Public Health at the 2001 WTO Ministerial Conference. Hein and Moon (2013, 23) argue that the rise of non-state actors trans-

formed global health governance into "a much more flexible field of alliances and conflicts". They trace regulatory reform to the emergence of an access to medicines norm at the international level. Sell and Prakash (2004) focus on the framing strategy of the access to medicines campaign. They demonstrate that the transnational advocacy network for access to medicines established a link between the issue areas of intellectual property rights and human rights, legitimizing greater flexibilities in patent regulation (see also Odell and Sell 2006). Transnational advocacy networks have also shaped outcomes in international copyright regulation. Sell (2013) shows how a network of internet activists impeded the ratification of the Anti-Counterfeiting Trade Agreement that was championed by the EU and the U.S. She argues that internet technology transformed the opportunity structure in favor of the transnational advocacy network by facilitating collective action and diffusion of information.

In the cases studied in this book, regulatory reform is attributable to the involvement of transnational coalitions of weaker actors. However, the transnational advocacy network approach is insufficient for the explanation of both regulatory outcomes. Due to its roots in the social movement literature and its focus on framing, the approach overemphasizes public outrage as a condition for regulatory reform (see Meins 2000). In the access to medicines case, the transnational advocacy network was able to raise awareness for the implications of patent regulation and undermine the legitimacy of TRIPS as a result of a spike in press coverage of the HIV/AIDS crisis at the turn of the millennium (Owen 2013; Sell and Prakash 2004, 161–62). In the cases of the *Print Treaty* and the *Seed Treaty*, public attention has been scant to non-existent as displayed by the absence of press coverage even during periods of heavy mobilization.

3.4 Epistemic Communities

In addition to activists, transnational coalitions for access to knowledge increasingly involve other constituencies. These include academics (Morin 2014), open source software developers (Coleman 2009), as well as critical lawyers and internet users (Dobusch and Quack 2013). These diverse, issue-centered coalitions are best understood as epistemic communities, i.e. networks of professionals that draw on their expert authority to influence regulatory outcomes (Haas 1992). Like transnational advocacy networks, epistemic communities are motivated by a shared set of principled beliefs and a common policy enterprise. In contrast to transnational advocacy networks, epistemic communities also hold shared causal beliefs and standards of validity. Like the transnational advocacy network literature, explanatory approaches focused on epistemic communities draw on constructivist theorizing.

They argue that decision-makers often face highly complex questions and are aware of their inability to assess how other actors are likely to behave or what consequences a particular course of action might entail. Under conditions of uncertainty, epistemic communities play a critical role, as they may provide the information needed and help formulate policies. Decision-makers, in turn, will defer to expert authority, particularly if there is a consensus in a specific scientific or professional community about what is the optimal course of action. In sum, epistemic community approaches suggest that regulatory outcomes not simply reflect the distribution of material capabilities among actors but also the prevailing opinion of experts and professionals on a specific subject matter (Haas 1992; see also Loya and Boli 1999).

Epistemic community explanations have been used to address questions of international economic regulation for a number of years (e.g. Djelic and Quack 2010; Furusten and Werr 2016; Radaelli 1999). A number of contributions have stressed the role of epistemic communities in recent cases of intellectual property regulation. Dobusch and Quack (2010, 2013) attribute the emergence of open licenses, specifically Creative Commons, to the emergence of a network of academic lawyers who were critical to the continuous expansion of U.S. copyright law. Similarly, Coleman (2009) shows that networks of hackers and free and open source software developers have introduced concepts such as "copyleft" into the public debate and, in doing so, shifted discourses about coding from intellectual property to freedom of speech (see also Johns 2009, chap. 16).[21]

There is, however, little indication of expert consensus in favor of greater flexibilities to international intellectual property standards. To the contrary, the legal discipline remains divided as to whether limitations and exceptions are needed and whether they would be feasible. Morin (2014) shows in accordance with Dobusch and Quack's findings that legal academics have become more and more involved in a border-crossing discourse on intellectual property regulation. These critical academics have challenged the interpretational sovereignty previously held by practicing lawyers.[22] However, this has increased rather than reduced uncertainty about the welfare effects of intellectual property on behalf of decision-makers. As we will see in the empirical chapters of this book, some experts maintain that greater flexibilities are unnecessary. They hold that existing rules already give states sufficient leeway to take measures if needed. A number of legal practitioners and scholars go as

[21] Copyleft is a play of words on copyright that refers to a form of licensing that offers users the right to distribute and modify a computer software or creative work under the condition that the same rights be preserved under derivative works.
[22] For a similar analysis of EU patent regulation, see Leifeld and Haunss (2012).

far as arguing that rules focused on flexibilities undermine the international system of intellectual property protection. According to this line of thinking, new rules set a precedent for regulatory disputes even in unrelated areas of intellectual property rulemaking as well as for cases in dispute settlement mechanisms. Experts who are proponents of greater flexibilities argue that, if carefully designed, international standards on limitations and exceptions are unproblematic from a legal perspective. Yet even this group is divided as to whether hard law treaties or non-binding recommendations are preferable (e.g. Hugenholtz and Okediji 2008). Networks of experts and professionals are undeniably an important factor in international intellectual property regulation. At the same time, it is doubtful whether they have affected international intellectual property regulation in the ways suggested by the epistemic community approach.

The involvement of businesses and governments in some transnational coalitions for reform complicates the picture. This indicates a further blurring of the divide between domestic and international levels in the field of intellectual property rights. It also has implications for how these coalitions pursue their regulatory agendas. On the one hand, greater diversity allows these coalitions to draw on a greater variety of power resources, both ideational and material. On the other, heterogeneity may have self-defeating consequences (Dobusch and Quack 2010, 228–29). The more diverse a transnational coalition, the greater are the challenges to internal cohesion. Conflicts over goals or means can be detrimental to collaboration (see Morin 2010, 324–25). Moreover, different power resources may be incompatible. For instance, the involvement of for-profit organizations will undermine the normative authority of a coalition of activists. This indicates a theoretical issue. Both the transnational advocacy network approach and the epistemic community approach's exclusive focus on ideational factors is too narrow. More recent contributions suggest to take a broader approach and reject the "rigid separation between 'principled' and 'instrumental' motivations (or 'ideas/norms' and 'interests')" (Sell and Prakash 2004, 149). The distinction between principled actors (i.e. civil society NGOs) and instrumental actors (i.e. firms and industry groups) disregards important commonalities. Both groups of actors use similar strategies to achieve their goals—albeit to varying degrees—including informational and monetary lobbying, rhetoric, and even power politics via state allies.

Even more importantly, we need a better grasp of how institutional context affects the emergence of transnational coalitions, their ability to engage in sustained collective action, and their influence on regulatory outcomes. The concept of opportunity structures used in the transnational advocacy network literature is promising, yet underspecified at the inter-

national level. More specifically, the causal mechanisms by which international institutions enable and constrain transnational change coalitions are undertheorized. The degree of institutionalization tells us little about how international rules and regulatory fora increase or decrease the likelihood of changing the regulatory status quo.

3.5 Regulation in Context: Considering Regime Complexity

The accounts discussed above have troubles explaining the *Print Treaty* and the *Seed Treaty*. I argue that this is mainly due to a lack of attention to the institutional context, in which regulatory disputes take place. Notably, in both cases, institutional factors have shifted towards greater institutional complexity and lack a focal institution for regulatory coordination. A recent wave of institutionalist contributions to the literature on international economic regulation emphasizes the independent causal effect of institutional factors on regulatory outcomes. Yet, as I will show in this section, even existing institutionalist approaches are of little help in explaining the outcomes of the cases studied in this book, as they focus on settings where a single institution dominates. I thus explore the literature on regime complexity in International Relations, demonstrating the need to develop an analytical framework that assesses the combined effects of institutions.

A number of scholars challenge the view of realist and regulatory capture approaches that international institutions hardly matter for the explanation of regulatory outcomes or are intrinsically biased in favor of business. Since the mid-2000s, studies have pointed to the opening up of international institutions to civil society organizations and other stakeholders and the increasing transparency of decision-making processes in a variety of governance areas, including development, environmental protection, and human rights (e.g. Kingsbury, Krisch, and Stewart 2005).[23] In a foundational volume, Mattli and Woods (2009b) and their collaborators (e.g. K. W. Abbott and Snidal 2009) have developed an analytical framework to assess what kinds of institutional contexts facilitate civil society participation and influence in regulatory processes. They argue that societal demand for change needs to be met by "extensive" institutional supply for reform to occur. Here, extensive supply indicates "proper due process, multiple access points, and oversight mechanisms" (Mattli and Woods 2009a, 17). Limited supply, by contrast, implies that a rulemaking forum is "exclusive, closed, and secretive" (Mattli and Woods 2009a, 17).

[23] In a more recent contribution, Tallberg et al. (2014) provide ample statistical evidence for the increasing involvement of transnational actors in international institutions.

Recent historical institutionalist approaches have taken this debate a step further by identifying a set of causal mechanisms by which international institutions enable the formation of transnational alliances for regulatory reform. (for an overview, see Djelic and Quack 2003; Hall and Taylor 1996). Historical institutionalism has been developed as an approach to Comparative Politics (see Pierson and Skocpol 2002; Thelen and Steinmo 1992) and has gained currency with the emergence of the comparative capitalisms literature (Hall and Soskice 2001b). In recent years, historical institutionalism's insights have been increasingly applied to the study of International Relations and International Political Economy phenomena (see Djelic and Quack 2003; Farrell and Newman 2015; Fioretos 2011b, 2017; Hanrieder 2015a; Rixen, Viola, and Zürn 2016), including to the study of international economic governance (see Büthe and Mattli 2011; Farrell and Newman 2010; Newman 2016).

Farrell and Newman's (2014, 2015, 2016) "new interdependence" approach, in particular, bridges historical institutionalist theorizing from Comparative Politics and transnational relations perspectives, including business power, epistemic community, and transnational advocacy network approaches. Public and private institutions at the international level, so the argument goes, provide societal actors who seek regulatory coordination with an opportunity structure to create new standards. Over time, such a transnational standard may drain away the support from and effectively supplant domestic rules. This approach demonstrates that international institutions are more than a means to the ends of the most powerful actors and often have an independent effect on global regulatory politics. Dissatisfied actors—even if they are weak at home—may encounter potential allies in an international forum and build cross-national alliances to influence regulatory outcomes (see also Djelic and Quack 2003; Newman 2008b, 2008a). This literature also shows that prevailing comparative-statics approaches, such as realism, are often insufficient to explain regulatory outcomes, as processes of regulatory change may unfold over extended periods of time (Lall 2012).

These institutionalist approaches certainly allow for a more nuanced understanding of how institutions enable and constrain actors in international economic regulation. Yet both the Mattli and Woods framework as well as the new interdependence approach focus exclusively on the characteristics of specific institutions that are focal points for regulatory coordination in their respective governance areas (see Büthe and Mattli 2011, chap. 2). In contrast to this assumption, the governance areas in the cases studied here have shifted towards greater institutional complexity.

In the area of plant variety protection, the number of fora has multiplied over the years. In 1961, an alliance of developed countries created the UPOV as the first international standard for intellectual property over plants and as a forum for further rulemaking. In the years that followed, a variety of institutions became players in the governance area, including the FAO, the CBD, and the WTO, all of which are based on different and, to some extent, conflicting principles. In the area of copyright regulation, the institutional context has also changed but in a different way. Since its inception, the WIPO and its predecessor organizations have been the most important, if not the only, game in town. With the entry into force of the landmark TRIPS agreement in 1995, the WTO joined the WIPO as another important forum in the governance area. The appearance of the WTO on the scene of intellectual property governance marked a change towards greater institutional competition, as it was endowed with significant resources and threatened to put into question the WIPO's central position in the area (Eimer and Schüren 2013, 547–48; May 2007, 32–34).

Since the end of the Second World War, such shifts have taken place in practically all issue areas of global governance (Raustiala 2013). The reasons for this are manifold. States sometimes delegate rulemaking authority to multiple institutions. They may do so purposefully, as they look for efficiency gains and hope to achieve them through inter-institutional competition (see B. S. Frey 2008). Yet overlap can also be an unintended consequence of the growth of the international institutional order (Raustiala 2013, 315). In other cases, different groups of states disagree over the appropriate forum and delegate to different institutions, whose authority then overlaps (Büthe and Mattli 2011, 24; Morse and Keohane 2014; Urpelainen and Van de Graaf 2015). Finally, overlap can be the result of mission creep by international organizations. Bureaucracies expand the scope of their activities beyond their mandate and encroach on the turf of other organizations (Barnett and Finnemore 2004, chap. 1) or by producing "progeny" of their own (see Johnson 2014).

Institutional proliferation and related phenomena, including the overlap of governance activities and competition among international institutions, are surprisingly underappreciated by existing scholarship on global economic governance in International Political Economy. They are widely acknowledged by a burgeoning literature on regime complexity in International Relations and International Law, however (e.g. Aggarwal 1998; Alter and Meunier 2009; Gehring and Oberthür 2009; Orsini, Morin, and Young 2013; Raustiala and Victor 2004; Young 2002). In a seminal contribution, Raustiala and Victor (2004, 279) have introduced the concept of a regime complex to denote "an array of partially overlapping and nonhierarchical institutions governing a particular issue-area." Crucially, they argue that

the growing prevalence of regime complexes "make[s] it increasingly difficult to isolate and 'decompose' individual international institutions for study" (Raustiala and Victor 2004, 278).

Traditional regime theory, neoliberal institutionalism in particular, had looked at institutions as "persistent and connected sets of rules (formal and informal) that prescribe behavioral roles, constrain activities, and shape expectations" (Keohane 1988, 383). According to this view, issue areas are regulated by one institution that serves as a focal point for cooperation among states. Today, in many issue areas of global governance, authority is dispersed among a number of fora. The literature on regime complexity shows that the availability of multiple alternative institutions in a governance area counteracts the constraining force of institutions and instead increases the range of options for strategic behavior (Raustiala 2013, 301). It argues that regime complexity facilitates strategies of institutional selection, such as forum shopping and regime shifting (see Jupille, Mattli, and Snidal 2013, chap. 2). In governance areas without a focal institution, actors who are dissatisfied with the status quo may try to move negotiations from one forum to another (see Alter and Meunier 2006; De Bièvre and Thomann 2010; M. L. Busch 2007; Helfer 2004b). Actors have varying expectations about how responsive a specific forum will be to their demands based on differences in the membership composition or the procedural rules of a forum (Raustiala 2003, 1027). If actors suspect that an institution favors their concerns, they have an incentive to relocate to that institution either to reach a single favorable decision or to achieve more far-reaching changes by shifting rulemaking on that subject matter to that venue altogether (Helfer 2009, 39).

Since institutions often espouse conflicting and straight out contradictory rules, institutional complexity also enables acts of interpretation, particularly where rules are inconsistent (see Raustiala and Victor 2004). Most governance areas lack explicit hierarchy and there is no supreme authority in international law to resolve "problems of contradictions between individual decisions, rule collisions, doctrinal inconsistency and conflict between different legal principles" (Fischer-Lescano and Teubner 2004, 1001). These ambiguities provide space for actors to promote new interpretations or implement rules in ways that fit their agendas. Raustiala and Victor (2004, 301–2) even point to strategies of "strategic inconsistency" (see also Okediji 2003, 346). As actors understand that legal contradictions between different international institutions can only be resolved politically, some create rules in one forum that are incompatible with those in another in an attempt to force broader institutional change in a governance area.

These insights provide important building blocks for theorizing about how actors pursue their goals in densely institutionalized contexts. However, the literature on regime complexity does not offer an unequivocal answer to the question of who benefits from increasing institutional complexity. Some maintain that regime complexity favors powerful states. These scholars caution against "treaty congestion" (Brown Weiss 1993, 697) and the fragmentation of international law, arguing that the proliferation of international institutions causes an erosion of the international legal order (Benvenisti and Downs 2007).[24] According to this view, states with greater material capabilities are less dependent on international institutions for monitoring and enforcing compliance with agreed upon rules by other states. In the absence of a focal point for coordination, they can also use outside options more effectively and have greater authority in legal disputes over conflicting rules (Drezner 2009). Finally, powerful states possess the necessary resources to create alternative institutional structures, such as regulatory networks, that tend to be non-transparent and closed to outsiders, to circumvent more open fora in a governance area (e.g. Kahler and Lake 2009). Other scholars point to the opportunities for weaker actors that are challengers of the status quo (Gómez-Mera 2016; Helfer 2004b; Morse and Keohane 2014; Quack 2013). Contributions in this vein stress the opportunities for entrepreneurial agents who strategize across institutions to build coalitions with likeminded actors and advance innovative proposals that resolve rule conflicts.

These divergent views result not only from different assumptions but also highlight a problem of conceptualization and, specifically, operationalization. Only few contributions systematically address the empirical variation among institutional arrangements (see however Biermann, Pattberg, and van Asselt 2009; Holzscheiter, Bahr, and Pantzerhielm 2016; Keohane and Victor 2011; Zürn and Faude 2013). Most existing approaches conflate multiple dimensions of institutional interaction and attempt to project all of them on a single continuum. I argue that we need to consider how different dimensions affect different categories of actors in different ways. While some governance areas display a division of labor among the elemental institutions (Gehring and Faude 2014), others are characterized by competition (Betts 2013) and even fragmentation (Gómez-Mera 2015; Hafner-Burton 2009; Kelley 2009; Zelli and van Asselt 2013). This also applies to the cases studied in this book. The area of plant variety protection has grown more densely institutionalized and, in fact, fragmented. In copyright regulation, by contrast, the number of institutions has remained largely constant over time and the institutional context has merely become more

[24] For balanced perspectives, see Davis (2009), Fischer-Lescano and Teubner (2006), and Raustiala (2013).

competitive. Understanding these effects allows us to identify which varieties of regime complexity benefit only the powerful and which varieties provide opportunity structures for materially weaker actors to challenge the status quo. The literature on regime complexity provides an avenue to understand regulation in context. So far, however, no single approach adequately captures the causal relationships between varying institutional contexts, actor strategies, and regulatory outcomes under conditions of regime complexity.

3.6 Discussion

In this chapter, I have assessed the applicability of existing accounts of international economic governance for explaining cases of regulatory reform that are the focus of this book (summarized in Table 3.1). Realism and theories of regulatory capture proceed from the assumption that actors are motivated by prospective gains and losses and use material power resources to achieve a distribution of costs and benefits that works in their favor. These approaches argue that the states and firms with the greatest material capabilities set the rules of the game, particularly if they can expect little opposition from the broader public. Considering the substantial stakes involved in economic governance in general and the international regulation of intellectual property rights in particular, cases of regulatory reform defy the predictions of realism and theories of regulatory capture. Although standards, including the *Print Treaty* and the *Seed Treaty*, do not overturn the international system of intellectual property rights, beneficiaries of the regulatory status quo in these and other cases fought tooth and nail to thwart regulatory reform. Developed countries and right holders feared that pro-change actors could use new flexibilities as precedents for a more far-reaching reform agenda.[25]

[25] For a similar argument in the context of international financial regulation, see Quaglia (2017).

Table 3.1: Comparing the Explanatory Power of Existing Theories of International Regulation

Approach	Explanation/causal mechanism		Outcomes	
Realism	Actors seek to avoid adjustment costs; large economies can leverage market access against smaller economies to make them adopt standards close to their domestic rules	Yes (*Print Model Provisions* and *Plant Undertaking*)/ No (*Print Treaty* and *Plant Treaty*)	Regulatory outcomes reflect the preferences of the largest economies (EU and U.S.)	Yes (*Print Model Provisions* and *Plant Undertaking*)/ No (*Print Treaty* and *Plant Treaty*)
Business Power and Regulatory Capture	In technical issues areas, rule-makers defer to the expertise of firms and other business actors; business interest groups are often entrenched in regulatory institutions, giving them a lobbying advantage over civil society	Yes (*Print Model Provisions* and *Plant Undertaking*)/ No (*Print Treaty* and *Plant Treaty*)	Regulatory outcomes reflect the preferences of industries with vested interests; shift away from regulatory capture possible when issue salience increases	Yes (*Print Model Provisions* and *Plant Undertaking*)/ No (*Print Treaty* and *Plant Treaty*)
Transnational Advocacy networks	Coalitions of activists may frame issues in such a way that creates public awareness, exerting pressure on decision-makers to change rules	No	Regulatory change according to the preferences of transnational advocacy coalition	Yes
Epistemic Communities	Under conditions of high complexity and uncertainty, rule-makers defer to the expert authority of academics and professionals	Yes	Regulatory outcomes reflect consensus in epistemic community	No

Constructivist approaches to international regulation, at first blush, have a more accurate expectation of the potential for weaker actor influence on regulatory outcomes. Transnational advocacy network and epistemic community approaches correctly identify collective action by transnational constituencies as a factor for regulatory change. The transnational advocacy network approach argues that civil society actors can use strategic framing to mobilize the public and in this way exert pressure on policymakers to adopt reforms. The epistemic community approach conjectures that the presence of a unified network of experts may convince policymakers to adopt reforms, particularly in issue areas that display high levels of technical complexity, including intellectual property rights. However, since there was little to no measurable public outcry in the selected cases and the respective expert communities were fragmented, I did not find evidence for the conjectured mechanisms. As NGOs and experts clearly were pivotal actors in both cases, this raises a follow up question: Under what conditions and through what processes could these actors influence regulatory outcomes and achieve reform?

In the last part of this chapter, I have considered approaches that focus on the institutional context, in which rulemaking processes takes place, to explain regulatory outcomes. Importantly, contributions to this literature point to conditions that allow transnational coalitions to challenge regulatory outcomes and mechanisms through which change occurs. However, existing institutionalist approaches focus almost exclusively on governance areas with a single dominant institution. Consequently, they lack the analytical tools to make sense of settings with multiple overlapping institutions, as is the case in the international regulation of copyright and plant variety protection. The literature on regime complexity in International Relations provides a starting point for understanding how institutional overlap, competition, and proliferation affect political bargaining. Yet it falls short of answering the question of who benefits from varying forms of institutional complexity.

4 The Institutional Opportunity Approach

In this chapter, I provide an alternative explanation to make sense of how weaker actors achieved the *Print Treaty* and the *Seed Treaty* as well as regulatory reform in similar cases. I address the following questions: *What explains the influence of weaker actors on regulatory outcomes? What conditions enable them to play a role in regulatory processes and what are the mechanisms through which they can achieve reform? Why does the magnitude of reform vary across the cases selected?*

In answering these questions, I develop the *institutional opportunity approach* as a novel explanation for the influence of weaker actors on regulatory outcomes. The institutional opportunity approach posits that the direction of regulatory change depends crucially on the broader institutional context, in which rulemaking takes place. My approach draws on institutionalist theorizing to advance the literature on regime complexes and identify institutional configurations that create openings for challengers of the status quo. I argue that competition between regulatory institutions opens up the opportunity structure for proponents of reform, as it enables challengers to select a venue that favors their interests and exploit conflicting rules. The institutional fragmentation of governance areas, by contrast, causes a closure of the opportunity structure, as it constrains the ability of challengers to act collectively.

In the remainder of this chapter, I flesh out the theoretical argument of this book. In the first section, I introduce the analytical framework, including the approach's central propositions on how different institutional contexts enable and constrain challengers of the status quo in their attempts to achieve regulatory reform. In the third section, I establish the causal mechanisms that link agency and institutional context and identify causal pathways that lead to varying regulatory outcomes. In the fourth section, I discuss methodology and data collection. In the fifth and final section, I offer some concluding remarks.

4.1 Analytical Framework

The institutional opportunity approach submits: *When there is no focal point for setting rules in a governance area, the ability of materially weaker actors to influence regulatory outcomes depends on the degree of institutional differentiation and the mode of interaction among the elemental institutions in that area.* The institutional context of a governance area, the negotiation forums that claim authority for an issue, the rules they embody, and the relationships among them, provide the arena for recurrent conflicts among stakeholders. Different institutional complexes provide vary-

ing opportunity structure for challengers of the regulatory status quo, as they shape access to allies and the rulemaking process and the capacity to innovate and act collectively.

I develop the analytical framework and core hypothesis in three steps. First, I lay the foundation for the theoretical argument and demonstrate what the study of regime complexity can gain through innovations from historical institutionalist theorizing. I define institutions as the key concept of this study and lay out assumptions about how actors behave. My approach corresponds to what Katzenstein and Sil (2008) call eclectic theorizing (see also Lake 2013). The idea is that assumptions, concepts, and hypotheses from disparate literatures "can be separated from their respective foundations, translated meaningfully, and recombined" (Katzenstein and Sil 2008, 111, emphasis removed). While the aim is to develop a mid-level theory to explain regulatory reform under conditions of regime complexity, I expect that some of the insights generated here are also relevant for broader debates.

Second, I conceptualize the constellation of actors in regulatory disputes. I differentiate between three categories of actors, *challengers* who are losers under the regulatory status quo and seek reform, *incumbents* who benefit from and seek to preserve the status quo, and *bystanders* whose stakes in the regulatory dispute are limited. Challengers, in order to achieve regulatory change, need to mobilize a diverse range of allies and engage in sustained collective action throughout all stages of the regulatory process.

Whether they are able to do so depends on strategies as well as the opportunity structure provided by the institutional context, in which the regulatory dispute takes place. I borrow the concept of opportunity structures from the literature on social movements to denote the arrangement of factors exogenous to a group of challengers that enable or constrain them in pursuing their goals, focusing on institutional factors (see Joachim 2003, 251; McAdam 1996). Depending on the interplay of these factors, I argue that, the opportunity structure in a specific governance area is more open or more closed for challengers—all else being equal. Third, I map the variation among institutional contexts, considering two dimensions of institutional complexity, the mode of *interaction* and the degree of *differentiation*. On the one side, I assess whether the relationship among the elemental institutions in a governance area is *more coordinated* or *more competitive*, arguing that competition enables actors to select a forum and thus improves access for challengers of the status quo. On the other, I look at whether an institutional arrangement is *more integrated* or *more fragmented*, arguing that integration facilitates challengers' attempts to mobilize broad support and sustain collective action.

Figure 4.1: Institutional Contexts and Opportunity Structures

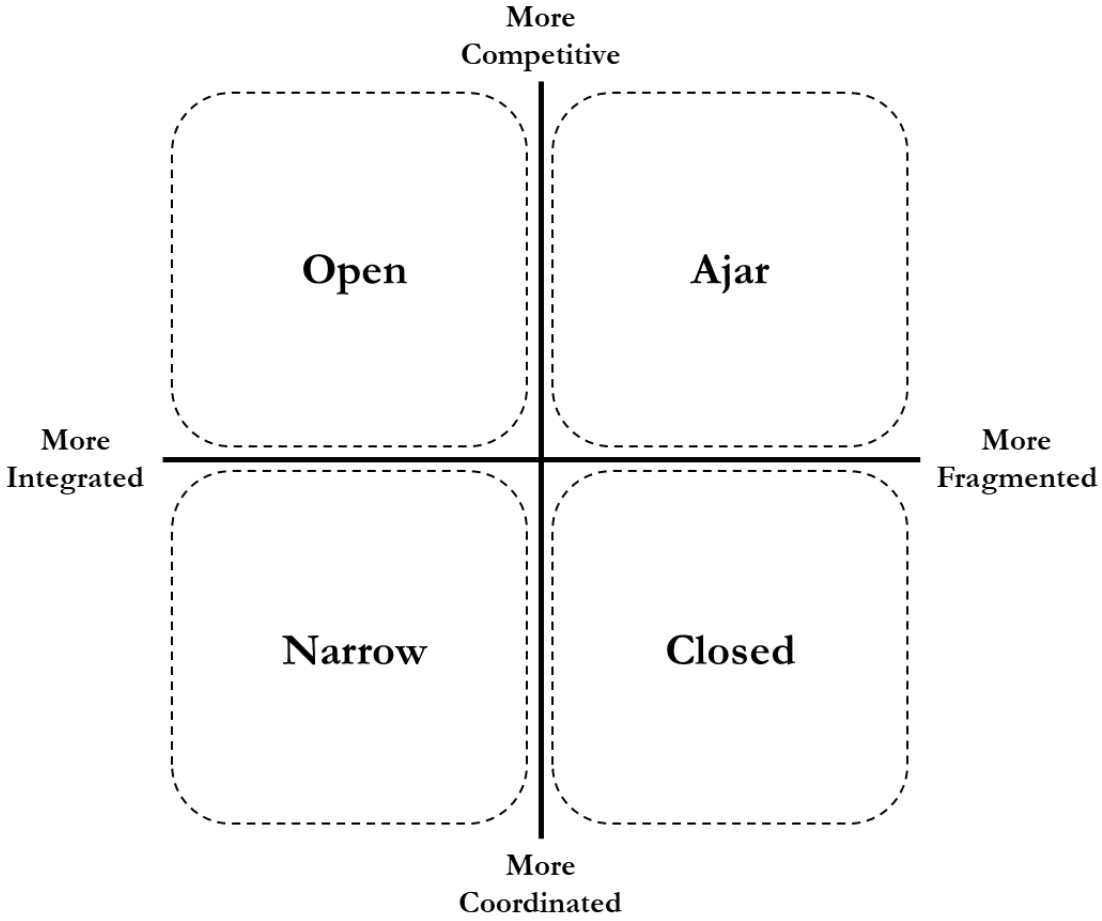


Figure 4.1 illustrates these arguments. The y-axis captures the dimension of institutional interaction. Competitive institutional contexts provide more open opportunity structures and, hence, should facilitate weaker actor influence. The x-axis, by contrast, captures the dimension of institutional differentiation. The fragmentation of institutional contexts causes a closure of the opportunity structure and is, thus, expected to exacerbate weaker actor influence. This yields the following picture (from closed to open): In institutional contexts that are coordinated and fragmented the opportunity structure for challengers is *closed*. In contexts that are coordinated and integrated, there is a *narrow* opportunity structure. Challengers should be able to mobilize support and sustain collective action. However, such institutional configurations make it difficult for challengers to select a forum to press their agenda. In competitive and fragmented contexts, the opportunity structure is *ajar*. Here, challengers may choose a forum to advance their preferences but should encounter difficulties in building broad and sustained coalitions. In contexts that are competitive and integrated, challengers face an *open* opportunity structure. I expect the openness of the opportunity structure to be a critical determinant of the success and magnitude of reform.

4.1.1 Theoretical Foundations: Assumptions and Definitions

The argument for institutional opportunity structure builds on the literature on regime complexity and institutionalist theorizing, particularly historical institutionalist approaches (Pierson 2004; Sheingate 2006). Institutionalist theory is a heterogeneous body of literature that is characterized by "its attention to the ways in which institutions structure and shape behaviour and outcomes" (Steinmo 2008, 118). Here, at the most general level, institutions denote sets of rules that govern social behavior. Rules, in turn, refer to prescriptive statements that forbid, require, or permit certain kinds of actions (Ostrom 1990, 51).[26] Institutionalist approaches proceed from the assumption that institutions have an independent causal effect on how actors pursue their goals and on who wins and who loses in political conflicts. Historical institutionalism has not yet been used systematically to explain outcomes related to regime complexity (see however Jupille, Mattli, and Snidal 2013).

I argue that applying historical institutionalist theorizing to the study of regulatory bargaining under conditions of institutional complexity offers three distinct advantages over existing approaches. First, historical institutionalism provides a processual understanding of politics. Historical institutionalism sets itself apart from comparative-statics approaches to international economic governance and other institutionalist schools of thought by its attention to temporality and process. Historical institutionalist analyses situate causes and effects in their historic context and take into account the timing and sequence of events (Hall 2016; Pierson 2004). They adopt a dynamic perspective and seek to explain how actors' decisions to comply with, to contest, or to break institutionalized rules over extended periods of time or at critical junctures feed back into and transform their institutional environment (see Mahoney and Thelen 2010). Drawing on this understanding permits me to trace the causal mechanisms that connect actor strategies, institutional context, and regulatory outcomes.

Second, historical institutionalism studies institutions not in isolation but as parts of larger configurations and accounts for the combined effects of institutions to explain outcomes of political struggles (Büthe 2016a, 45, 2016b, 488; Pierson and Skocpol 2002, 706–8). In contrast to rational choice institutionalist approaches, historical institutionalist approaches usually do not focus on the characteristics of a single institution to explain outcomes of political struggle. Instead, they consider the broader institutional context, in which a con-

[26] This is a decidedly more narrow definition of institutions than that proposed by sociological institutionalism, which includes shared norms and values as well as cognitive scripts and templates, and focuses on how institutions structure behavior (DiMaggio and Powell 1983, 148).

flict takes place. This view derives from a different conception of the social function of institutions. Drawing on transaction cost theory, rational choice institutionalism understands institutions as equilibrium solutions to specific cooperation problems (see Williamson 1985). Approaches in this vein argue that actors create institutions to reduce transaction costs and uncertainty about the behavior of others, allowing them to realize mutual interests[27] Historical institutionalists agree with rational choice institutionalists that institutions exist because they help actors cooperate. However, they also view institutions as arenas for political conflicts among actors with different preferences and capabilities (Collier and Collier 2002; Mayntz and Scharpf 1995; Scharpf 1997).[28] Historical institutionalists stress that institutions often do not work as intended. This allows losers of political battles to find loopholes and trigger changes at later points in time. Since the social world is replete with institutions, there are various possibilities for unintended interactions between older and newer elements in every political conflict (Clemens and Cook 1999; Orren and Skowronek 1993; Pierson 2004, 109–10; Sheingate 2014, 464). Thus, in contexts of institutional complexity, historical institutionalism provides an analytical toolkit that captures how the interplay among institutions in an issue area creates room for strategic action by entrepreneurial actors.

Third and last, recent historical institutionalist advances do not focus on one predetermined category of actors with assumed fixed interests. Instead, they identify contexts for action, the constellations of actors within these contexts, and the coalitional dynamics within these actor constellations (Büthe 2016a; Farrell and Newman 2014, 2015, 2016). This permits me to capture analytically not just what actors want initially and how their interests align but how their preferences evolve and how this translates into the formation of new and unexpected alliances between various groups of stakeholders. Earlier historical institutionalist approaches have been largely silent about agency, which has earned the literature a reputation of overemphasizing stability (see Hall and Thelen 2009). Newer contributions put greater focus on change and, consequently, acknowledge the need "[t]o make agents of change theoretically visible" (Büthe 2016a, 46). Entrepreneurial actors who are losers under the status quo may achieve reform, if they can assemble new coalitions to shake up fragile compromises (Hall 2016; Jackson 2010; Mahoney and Thelen 2010).

[27] This includes neo-liberal institutionalism and rational design in International Relations (e.g. Keohane 1984; Koremenos, Lipson, and Snidal 2001). For more differentiated perspectives, see Knight (1992), Moe (2005), and North (1990).
[28] For elaborate critiques, see Pierson (2004, 105) and Wendt (2001).

Emphasizing agency, however, poses a formidable challenge. Doing so comes at the risk of diluting the core proposition of historical institutionalist theory that institutions are the key determinants of political outcomes (Capoccia 2016, 1100; Parsons 2007, 66–68). Adopting a position on agency also requires complementing historical institutionalism with assumptions drawn from other schools of thought. Unlike rational choice institutionalism and sociological institutionalism, historical institutionalism is not committed to one particular theory of individual action (Hall and Taylor 1996, 950–51). Some historical institutionalist approaches adopt rationalist or constructivist assumptions (e.g. Blyth 2003; Hall 2010). Others argue that historical institutionalism has a distinct theoretical core, such as bounded rationality or prospect theory (e.g. Fioretos 2011a, 2011b; Jupille, Mattli, and Snidal 2013). Finally, some adopt a middle of the road approach that views actors as following both a logic of consequences and a logic of appropriateness (e.g. Nexon 2012; Rixen and Viola 2016; Zürn 2016). These scholars assume actors to be goal-oriented and behave instrumentally without adopting the synoptic rationalist view of rational choice institutionlists.

I adopt the latter position. I assume that, due to the distributional implications of regulatory politics, actors tend towards calculating behavior (March and Olsen 1998, 952–53). Yet I acknowledge that this is only an approximation (see Fearon and Wendt 2002).[29] The ideas actors hold about what they deem just or fair may collide with what is best for them from a material perspective. As I will discuss in the subsequent section, not all rule-makers have large stakes in every regulatory dispute. Actors may appeal to beliefs and desires of these bystanders by presenting their ideas in ways that draw the latter to their side. This perspective is largely instrumental but allows me to understand why actors with limited stakes in a regulatory dispute feel compelled to join an effort or why actors with conflicting views come to a shared understanding of how to solve a particular problem.

4.1.2 Actor Constellation

The institutional opportunity approach's central claim is straightforward: Similar to how different institutional arrangements enable or constrain social movements at the domestic level, different configurations of international institutions provide varying opportunity structures for challengers of the regulatory status quo at the transnational level. Whether

[29] I argue that other logics of action than an instrumental logic, such as arguing (see Risse 2000), did not play a major role in the cases studied in this book. Although actors challenged the validity claims of their counterparts' ideas about intellectual property, there is little to no evidence suggesting that actors engaged in a truth-seeking discourse. As I show in the empirical chapters, actors did not revise or even question their assumptions. Instead, their use of norms and ideas was mostly strategic, directed at either legitimizing their own position or discrediting other actors' stance on a matter. If the data allows for other interpretations, I make this explicit in the analysis.

challengers can achieve reform, to a significant extent reflects the openness of the opportunity structure that these actors confront. However, opportunities alone are not enough. They need to be identified and seized by entrepreneurial actors.

Actors, here, include states and a variety of non-state organizations. States remain the primary governors or rule-makers in global economic governance. Firms and, to an increasing extent, civil society NGOs also seek to shape regulatory standards. While it is important to bear in mind that states and non-state actors possess different capabilities, I primarily differentiate between three sets of actors based on their initial preferences regarding a particular regulatory matter, *challengers*, *incumbents*, and *bystanders*. As mentioned above, challengers are dissatisfied with the regulatory status quo because of its normative implications and actively seek to shift rules in their favor. Incumbents are winners under the regulatory status quo and seek to preserve or even expand their control over the regulatory matter in question. Bystanders are not heavily committed to any one side of the conflict. Their stakes are usually low, leading them to adopt a fence-sitting strategy. Involving bystanders can be crucial, as it may tip the scale towards either side of the regulatory dispute.

In this constellation, challengers' dual task lies in disrupting the support for an institution and overcoming the collective action problems associated with mobilizing a crucial mass of allies who support their cause. I argue that for regulatory reform to occur—absent a fundamental shift in the distribution of power—challengers need to develop a collective strategy. They need find a way to convert bystanders to their column to build a *winning coalition* and sustain collective action throughout the regulatory process. Conversely, incumbents are expected to adopt strategies directed at convincing bystanders to join their side or stay out of the conflict.

In what follows, I first introduce the different categories of stakeholders in greater detail and describe their preferences, sources of power, and strategic repertoires. Then, I address the requirements for winning coalitions.

Challengers, Incumbents, and Bystanders: Sources of Power

C*hallengers* of the regulatory status quo play the central role in this book. The term encompasses actors who are disadvantaged by a piece of regulation and therefore seek to reform it. Critically, challengers often have fewer material resources to work with than their opponents. In many regulatory disputes, this group includes developing countries that benefit from laxer regulatory standards. In addition, challengers commonly involve civil society

NGOs from both the Global North and the Global South that advocate regulatory reform on principled grounds and seek to improve the livelihood of disadvantaged groups.

Developing countries are not only economically weaker than their developed counterparts. They also have less access to legal-technical expertise. With the exception of a number of emerging economies, most developing countries lack the qualified personnel to negotiate on regulatory matters on an equal footing with the EU, Japan, and the U.S.[30] However, developing countries can press the numbers advantage to gain influence in regulatory matters. While many regulatory fora are consensus-based, the greater number of lower- and middle-income countries as opposed to high-income countries allows them to exert voice, if they are able to engage in concerted action.

While civil society NGOs legitimacy and transnational activists also cannot match the funds of business actors, they can cast doubt on the legitimacy of the regulatory status quo based on their principled authority. Organizations that represent or advocate for social groups that are disenfranchised by a regulatory scheme may make moral claims to change outcomes according to their preferences. The authority of advocacy NGOs derives from their perceived altruism and their appeal to widely shared moral values, such as human rights (Avant, Finnemore, and Sell 2010, 13). Demands are most likely to resonate with decision-makers and the broader public, if an issue involves bodily harm to vulnerable individuals and there is a clear and short causal chain or narrative assigning responsibility and if it involves legal equality of opportunity (Keck and Sikkink 1998, 27). Beyond that, NGOs and other societal actors, including critical academic lawyers, act as providers of various forms of expertise, including as alternative sources of information (Keck and Sikkink 1998, 18–22). This is crucial, as generating and disseminating competing information and expertise puts challengers in the position to make viable suggestions for reforming regulation.

Challengers are opposed by *incumbents* who benefit from the status quo and seek to preserve or even enhance their position. Here, incumbents are not only privileged by the regulatory status quo but also by their greater material capabilities. In most cases, this group includes advanced economies as well as firms and business associations from the developed world.

With regard to state actors, the most important incumbents are the EU and the U.S. I consider the EU as a unitary actor, as it largely negotiates with one voice in matters of interna-

[30] See Matthews (2007) and Sell (2010b, 777–78) on the distribution of regulatory capacities, particularly legal-technical expertise, in the context of intellectual property regulation.

tional economic regulation, including in intellectual property rulemaking.[31] The EU and the U.S. clearly dwarf challengers in terms of most economic indicators, such as GDP and share of global trade. They also possess the largest and most diverse internal markets and are thus the least vulnerable to external disruptions (Büthe and Mattli 2011; Drezner 2007).[32]

Similar to state incumbents, non-state incumbents, including firms and business associations, have significant bargaining capabilities at their command. In addition, many interest groups are longstanding participants of international regulatory fora. Their entrenchment in these institutions gives them a first-mover advantage in many regulatory disputes, which increases their influence on regulatory outcomes (see Lall 2012). Finally, firms and business associations have large legal departments and can afford to engage the services of law firms to support their case. As a result, decision-makers often depend on the information and expertise provided by interest groups (Woll and Artigas 2007).[33]

Actors are *bystanders* in a given regulatory dispute, if their stakes with regard to the specific subject matter in question are low or if they not have a specific conviction as to how a subject matter should be regulated. In practice, all categories of actors, including developed and developing countries, civil society NGOs from neighboring issue areas, as well as corporations and interest groups that are only remotely affected by a piece of regulation, can be bystanders. They may possess any of the capabilities discussed in this section and are thus courted by challengers and incumbents alike. I assume that bystanders are generally risk-averse and status-quo oriented. Specifically, they seek to avoid risks associated with regulatory change, such as unanticipated adjustments costs. What is more, their tacit support is often a key factor maintaining the status quo. If, however, challengers are able to mobilize the support of bystanders, this creates significant pressure on incumbents to adopt reform.

Building Winning Coalitions

How do we know whether a specific campaign has attracted enough support for incumbents to give in to the demands of challengers? Contributions on weaker actor influence in world politics have always struggled to answer this question precisely. With regard to the

[31] I will qualify this assumption where needed.

[32] The ability to convey knowledge and facilitate technology transfer on the one hand and to withhold knowledge and deny access to essential knowledge goods on the other allows these actors to exert additional pressure in matters of international intellectual property regulation (Strange 1994, 119).

[33] See Quack (2013) on the importance of legal-technical expertise in bargaining under conditions of institutional complexity.

adoption of new norms, Finnemore and Sikkink (1998, 901) argue that whether a "tipping or threshold point" is reached depends on the ability of norm entrepreneurs to mobilize the support of both a "critical mass" of states, i.e. a sufficient number of states, and "critical" states, i.e. states that enjoy a certain status. Risse-Kappen (1995) argues with regard to the ability of transnational coalitions to influence the behavior of target states that challengers need to get access to the political system and assemble a "winning coalition" (see also Risse 2013). The size of and requirements for building winning coalitions "are determined by the domestic structure of the target state, that is, the nature of its political institutions, state-society relations, and the values and norms embedded in its political culture" (Risse-Kappen 1994, 187). Contributions to the literature on reform in global economic governance point in similar directions (see Djelic and Quack 2003).

It is indeed difficult to determine the requirements for *winning coalitions* without regard to context. Drawing on Mattli and Woods' (2009a) in particular, I argue that coalitions must display two characteristics to be successful. First, mobilization needs to be *broad*. This implies that mobilization efforts extend to and involve a diverse range of actors who can contribute a variety of resources to a campaign for reform. Second, collective action needs to be *sustained*. This means that mobilization lasts for the entirety of the regulatory process. While this conceptualization does not constitute a hard and fast rule that allows for an a priori identification of winning coalitions, it covers a range of important indicators of mobilization. In what follows, I explicate these requirements in depth.

As we have seen in previous parts of the book, the North-South divide is a major fault line in international economic regulation. If challengers involve only "outsiders" from the developing world, the pressure on developed country incumbents will be relatively low. In such a constellation, they can act as a united front against external actors (Fox and Brown 1998; Joachim 2003; Trumbull 2012, chap. 1). If a pro-change coalition also involves societal actors from the developed world, the pressure to give in to the demands of challengers increases. Such North-South coalitions can attack on two fronts. On the one side, they can act in concert to exert pressure "from above" in international-level bargaining. A broad coalition may use linkage politics and threaten to vote against regulatory proposals by incumbents on related subject matters. On the other, ties to local groups allow challengers to gain access to domestic decision-making processes and exert pressure "from below" (Djelic and Quack 2003, 23–25; Sikkink 2005).

In addition, broad mobilization implies that challengers are able to break the supremacy of incumbents in terms of non-material resources, in particular in terms of expertise. Appeals to distributional justice often conflict with the construction of technical neutrality, on which many regulatory bodies are built (Büthe 2010b). Dominant interests may use norms of technical rationality to shield an institution against the influence of challengers. Thus, challengers need to translate the solution into the language of the institution in order to convince final holdouts and show to incumbents that regulatory change is possible within the logic of the institution. In other words, whether the introduction of a new idea succeeds, depends on other actors' perception of the challenger coalition's quality as being a more or less legitimate participant of the institutional discourse and the fit of a new idea with existing institutionalized understandings (Schmidt 2008, 315). This presupposes the mobilization of actors with expert knowledge. For instance, developing countries and NGOs may improve their standing in standard-setting bodies, if they are able to establish ties to lawyers who are critical of the status quo. The involvement of societal actors that represent or advocate for disadvantaged groups or can claim a moral higher ground for other reasons allows incumbents to simultaneously threaten the mobilization of shame (Keck and Sikkink 1998, 23–24). Similar reasoning applies to the mobilization of actors whose stakes in the regulatory dispute of interest are low. If bystanders back up from supporting the status quo, this increases challengers' leverage over incumbents on both material and normative grounds.

Changing regulation is a lengthy and intricate process that extends over a number of stages, including agenda setting, negotiations (often across multiple fora at the same time), implementation, and enforcement. At every step of this process, incumbents may make use of their advantaged economic position to divert attention from and "decelerate, distort, weaken, or otherwise undermine" (Mattli and Woods 2009a, 27) the reform project. Specifically, incumbents may try to entice challengers and third parties to leave the pro-change coalition by offering selective incentives, such as distinct material benefits. For these reasons, challengers must sustain collective action over the course of the regulatory process. The collective action literature argues that sustaining mobilization is particularly challenging for disparate coalitions where the benefits of mobilization are diffuse (Olson 1965). Thus, a number of preconditions need to be met for challengers to be able to maintain collective action. First, challenger coalitions need to be based on a rough convergence of material interests and a basic consensus about what constitutes an appropriate solution. Moreover, coalitions require a number of committed and resourceful entrepreneurial leaders who develop an

overall strategy, broker and establish links among allies, and are able to maximize the means that the coalition has at its disposal (see Newman 2008a, 2011; Sheingate 2003). Finally, coalitions need to develop an organizational form that facilitates exchange of information, deliberation about the aims of a campaign, the integration of new allies, and concerted action when needed. Usually, transnational coalitions take the form of networks, as this mode of organization requires little formal set-up and facilitates the coordination of activities that span multiple levels (Keck and Sikkink 1998).

In sum, materially weaker challengers can influence regulatory outcomes, if they are able to mobilize a diverse transnational coalition and sustain mobilization throughout the entire regulatory process. The Institutional opportunity approach argues that the capacity of challengers to engage in broad and sustained collective action is shaped by the institutional context, in which the regulatory context takes place. In the subsequent section, I explain which institutional contexts provide open opportunity structures for challengers, facilitating the formation of winning coalitions, and in what kinds of institutional contexts opportunity structures are closed.

4.1.3 Institutional Contexts and Opportunity Structures

The concept of institutional context refers to the framework of existing rules in a governance field and the fora where new rules are negotiated.[34] In contrast to earlier approaches that focused on the explanation of cases of regulatory conflict with a single focal institution, this study looks at cases that take place in contexts with multiple institutions. Hence, a reconceptualization is in order. Applying institutionalist theorizing to the study of regime complexity, I suggest that two dimensions of institutional contexts determine the openness or closure of the opportunity structure for challengers of the status quo. On the one hand, I consider the mode of *interaction* among the institutions in a governance area, differentiating between more coordinated and more competitive arrangements. On the other, I look at the degree of *differentiation* of an institutional context, differentiating between more integrated and more fragmented arrangements.

The existing literature on regime complexity usually projects institutional contexts on a single continuum according to their degree of integration or fragmentation (see Biermann, Pattberg, and van Asselt 2009; Holzscheiter, Bahr, and Pantzerhielm 2016; Johnson and

[34] Since rulemaking in intellectual property regulation takes place almost exclusively in intergovernmental institutions, the discussion in this section disregards private institutions.

Urpelainen 2012). Consider, for instance, Keohane and Victor's (2011, 8) characterization of regulatory governance arrangements:

> At one extreme are fully integrated institutions that impose regulation through comprehensive, hierarchical rules. At the other extreme are highly fragmented collections of institutions with no identifiable core and weak or nonexistent linkages between regime elements. In between is a wide range that includes nested (semi-hierarchical) regimes with identifiable cores and non-hierarchical but loosely coupled systems of institutions.

This single-continuum model has been a critical first step in empirical research and theory development. Empirically, it has provided a measure for assessing variation between institutional contexts in different issue areas and change within institutional contexts over time. In so doing, the model has challenged the claim of an ever-increasing fragmentation of global governance (see Holzscheiter, Bahr, and Pantzerhielm 2016). With regard to theory development, these approaches have helped the debate to move past earlier, inductive typologies of institutional interaction that had little explanatory value.[35] Specifically it has allowed for the generation of causal hypotheses.

However, explanations derived from this conceptualization of regime complexity point in widely different directions. As discussed in the previous chapter, a number of scholars have taken up on the concept of fragmentation to argue that the undermining of focal points benefits powerful states at the expense of other actors (see Benvenisti and Downs 2007; Drezner 2009, 2013). Others, have advanced conflicting claims that increasing complexity allows challengers to engage in strategies of institutional selection (e.g. Helfer 2004b; Morse and Keohane 2014). The problem is that the single-continuum model attempts to account for all dimensions of institutional complexity, including density, i.e. the number of institutions in a governance area, and hierarchy. How densely populated a regime complex is and whether it is hierarchic may or may not be empirically correlated. Yet it makes sense to treat these dimensions as theoretically distinct, as they relate to the different functions of institutions. The first set of arguments emphasizes the view of institutions as constraints, pointing to problems of access and collective action. The other highlights the resources generated by institutions. Those who emphasize opportunities for weaker actors, argue that

[35] This includes the differentiation between nested, overlapping, and parallel institutions (see Aggarwal 1998; Alter and Meunier 2006; Young 1996) as well as Young's (2002) differentiation between horizontal and vertical interplay.

conflicts of authority among institutions allow challengers to choose the forum that they expect to be most responsive to their demands.

Historical institutionalism emphasizes that institutions always function as both constraints *and* resources (Hall and Thelen 2009, 10–11). On the one hand, institutions determine who gets access to and who is excluded from a rulemaking process. In addition to procedural rules and the like, access depends on the permeability of boundaries between different institutions in an issue area (Sheingate 2006, 845–46). A group disadvantaged by one institution may be better positioned in another institution to get what it wants (Mahoney and Thelen 2010, 9). In an issue area where a number of institutions overlap in terms of authority, challengers may be able to select a forum in which to introduce a topic, facilitating their access to the rulemaking process (see Baumgartner and Jones 2009; Sheingate 2006). If an issue area is governed by a focal institution that is dominated by beneficiaries of the status quo, this confers agenda control to incumbents, which exacerbates access for challengers (Capoccia 2016, 1111–13).

On the other hand, all institutions generate resources (Deeg and Jackson 2006, 159; Djelic and Quack 2003, 18). They do so not only in the obvious way of distributing spoils to the victors of political battles and their supporters. Institutions also function as resources by virtue of their ambiguity. Since rules are often vague, there is room for strategic actors to interpret these rules in new and creative ways and, in so doing, launch processes of institutional development (Lieberman 2002; Sheingate 2006, 846, 2010, 169–71). Policy innovations are rarely created out of thin air. Particularly frictions between different related institutions create opportunities for entrepreneurial actors to innovate, as they allow for acts of "reinterpretation, recombination and bricolage" (Djelic and Quack 2003, 30). Contexts that are "ordered", in the sense of internally coherent, by contrast, make it more difficult for challengers to achieve reform (Lieberman 2002, 700–702). Here, the elemental parts are often complementary and mutually reinforcing, providing stability to the broader institutional configuration in a governance area (see Hall and Gingerich 2009).[36]

Models built up around a one-dimensional continuum from integration to fragmentation disregard one or the other of these institutional functions. The institutional opportunity approach systematically applies these insights to international-level institutional complexes to generate hypotheses about what kinds of contexts are more open or more closed for

[36] Two institutions are complementarity when the presence of one institutions "raises the returns available from the other" (Hall and Gingerich 2009, 450), at least for beneficiaries of an institutional arrangement (Crouch et al. 2005, 374–75).

weaker actor influence. Specifically, I propose a two-dimensional conceptualization of regime complexity that disentangles the differentiation of an arrangement in fewer or more sub-units from the interaction among these sub-units. This allows me to paint a more differentiated picture of regime complexity and its effects on weaker actors. Drawing on historical institutionalist theorizing, I argue that *institutional competition*, by which I understand a contest for regulatory authority among the fora in a governance field, enables challengers to shift negotiations from one venue to another that favors their interests. *Institutional fragmentation*, here conceptualized as the density and diversity of institutions in a governance field, constrains challengers, as the embeddedness of potential allies in a variety of fora undermines their capacity for sustained collective action. In the two following subsections, I operationalize these dimensions and develop hypotheses on how they affect opportunities for weaker actors.

The Dimension of Interaction: From Coordination to Competition

Institutional contexts vary as to how the elemental institutions that form part of a governance area interact. I differentiate between more coordinated or more competitive arrangements. Coordination refers to the existence of a division of labor among the elemental institutions of a given governance field (Werle 2001). In highly coordinated contexts, institutions are fully geared to one another, each occupying a separate niche. Institutional competition, by contrast, refers to a contest of authority between two or more regulatory fora in a governance field (Gehring and Faude 2014). In highly competitive arrangements, elemental institutions claim authority for the same subject matters and contradict one another.

A given institutional context is competitive if two or more international institutions *overlap* at least partially in terms of governance activities and membership and if these institutions contain conflicting rules. In economic terms, competition requires sellers to be in the same market and offer their goods or services to some of the same buyers. In a similar fashion, institutional competition occurs when multiple institutions have some of the same members and claim some of the same competences (Alter and Meunier 2006; Orsini, Morin, and Young 2013, 30–31; Rosendal 2001; Urpelainen and Van de Graaf 2015, 801; Young 1996). Second, sellers need to make somewhat varying offers to buyers.[37] Here, I focus on the differences between institutions in terms of substantive provisions and underlying principles. This particularly relates to *inconsistencies* between the formal rules (i.e. standards and

[37] I use this economic analogy for illustrative purposes only. It is understood that politics and markets function according to different logics. The idea is to highlight that competitive dynamics between international institutions allows actors to select strategically where to pursue their preferences.

other legal norms) that have been adopted by institutions in a governance area but also to contradictions in the understandings of the social purpose that these rules enshrine.[38]

The concept of institutional competition has proven useful in explaining the success of challengers in domestic institutional settings (Baumgartner et al. 2009; Sheingate 2006, 2010). Yet its application to international-level phenomena has been less systematic. Where multiple institutions overlap, actors can attempt to move negotiations to the forum that they deem most responsive to their demands based on their expectations for support by other members of the institutions as well as procedural and substantive rules. Permeable boundaries between institutions enable challengers to circumvent fora that are in firm control of incumbents and "look for allies elsewhere" (Baumgartner and Jones 2009, 36). At the international level, overlap between institutions works in similar ways. Here, it allows both challengers and incumbents to engage in strategies of institutional selection, such as forum shopping and regime shifting. Actors may choose among a number of institutions and select the venue they deem most receptive to their demands based on its mandate, membership composition, or procedural rules (Alter and Meunier 2006, 364–65; M. L. Busch 2007, 735–36; Helfer 2009). The room for maneuver created by institutional overlap is particularly important for weaker actors. In contexts with clearly defined jurisdictional boundaries, they are stuck with the institution that is considered the appropriate forum for dealing with the regulatory matter of interest. If this institution is in firm control of incumbents, weaker actors require outside assistance—in the form of public outcry for instance, as emphasized by the transnational advocacy network literature—for being able to challenge the status quo.

In addition to overlap, competitive institutional contexts display inconsistencies, which functions as another important resource for challengers of the regulatory status quo. Rule conflicts "provide space for political contestation over how rules should be interpreted and applied" (Streeck and Thelen 2005, 26). Institutionalist approaches have pointed out contradictions as a driving factor of institutional development at the domestic level (Lieberman 2002, 703; Sheingate 2003, 192–93). The literature on regime complexity makes a similar argument for the international level. Here, inconsistent rules and/or principles relating to the social purpose of a piece of regulation also provide entrepreneurial actors with an opportunity to introduce new ideas on how to combine existing elements and reconcile these

[38] This is not to suggest that competition necessarily yields a disequilibrium. Competitive arrangements can be stable over an extended period of time, as long as each forum is used by a critical mass of stakeholders.

inconsistencies (Baumgärtner 2011, 15–17; Gehring and Oberthür 2009, 142–43).[39] Absent rule conflict, it should be more difficult for challengers to promote new ideas. Other actor groups have an incentive to preserve the legal and normative consistency of the regulatory framework, as it guarantees predictability and reciprocity. In contexts where the elemental parts are complementary, benefits accrue to a larger number of stakeholders, making it more difficult for challengers to convince other actors of the necessity of reform (see M. Aoki 1994; Hall and Gingerich 2009; Hall and Soskice 2001b; Höpner 2005; Milgrom and Roberts 1995)

Crucially, competition enables actors who are dissatisfied with the status quo to pursue strategies of institutional selection, such as forum shopping and regime shifting, and advance their agenda in a venue they expect to be responsive to their demands (see De Bièvre and Thomann 2010; M. L. Busch 2007; Helfer 2004b, 2009; Jupille, Mattli, and Snidal 2013; Lipscy 2015). In a situation with multiple potential suppliers of a governance activity, challengers may attempt to move negotiations on a specific subject matter from one institution to a different venue. In coordinated contexts, actors usually do not explicitly consider strategies of institutional choice (Jupille, Mattli, and Snidal 2013, 41). Here, one institution is the focal point for coordination on a particular matter: Its competence for this matter is unrivalled by other institutions (Hanrieder 2015b, 192). This particularly constrains weaker actors that do not possess the resources that are necessary to create new institutions to the use of this forum. I thus argue that competition is associated with an opening up of the opportunity structure for challengers. In coordinated contexts, by contrast, the opportunity structure is more closed. This particularly holds for institutional configurations with an established division of labor. Where the regulatory authority of institutions is clearly defined, actors cannot simply move to a different forum to pursue their goals. In the absence of rule conflicts, it is more difficult to introduce new ideas about how to regulate a subject matter and advance alternative interpretations of existing rules to change a regulatory framework.

The Dimension of Differentiation: From Integration to Fragmentation

Institutional contexts can be arrayed on a second continuum. Governance areas vary in terms of their institutional differentiation, ranging from integration to fragmentation. In contrast to traditional one-dimensional conceptualizations of regime complexity, here I

[39] It is important to note that these arguments primarily relate to rule development and not to implementation or enforcement, where inconsistencies could allow powerful actors to coerce weaker actors bilaterally into adopting their preferred interpretation. Whether this is the case or not, is a different (empirical) question, on which I can only speculate in this book (see Raustiala 2013, 313–24).

address only the cohesion of an institutional context in terms of its *density* and *diversity*. Highly integrated settings center on only a few related subject matters and display a low count of elemental parts (Johnson and Urpelainen 2012, 645). Fragmentation, by contrast, refers to a piecemeal state of institutionalization in a governance area (Benvenisti and Downs 2007, 610). Institutional contexts on this extreme of the continuum correspond to what Bhagwati (1995) in the context of trade has referred to as "spaghetti bowl" arrangements.

While the availability of alternative fora is what enables institutional choice in the first place, institutional fragmentation constrains challengers in their ability to act collectively. Institutionalist approaches point out that, in highly fragmented institutional contexts, actors are likely to be entrenched in different institutions for historical reasons or because of varying access to the elemental institutions (see Swank 2001). Over time, they develop specific assets in a particular institution, such as expectations, knowledge of procedures, or privileges, which disincentives switching to a different institution to pursue their interests (Pierson 2004, 148). Consequently, institutional proliferation complicates concerted action, as it prevents challengers from mobilizing broad support coalitions. Even if challengers are able to identify potential allies, acting across a larger number of institutions makes it harder to sustain collective action. Change coalitions will usually not be able to find a "common carrier" for their reform attempt, as groups are committed to a host of issues based on their area of mobilization (Schickler 2001, 15).

Similar arguments can be made for international-level institutional contexts. Here, I focus on two indicators to measure the differentiation of an institutional context. First, fragmentation signifies increasing diversity or "segmentation of governance systems along sectoral lines" (Young 2011, 1). In highly diverse contexts, related subject matters are addressed by a number of specialized institutions (Zürn and Faude 2013). For challengers, this exacerbates mobilization efforts. Potential allies are embedded in different fora where they have acquired specific competences. This results in a classic collective action problem. These actors are incentivized to remain in their respective institutions and lack the necessary capabilities to contribute in a different setting (Benvenisti and Downs 2007, 597). Second, differentiation points to high levels of institutional density (Raustiala 2013, 295). Here, I focus on the number of institutions within a governance field.[40] High institutional density

[40] The existing literature does not provide any indication on what constitutes a threshold for high institutional density. Considering the contingency and idiosyncrasy of processes of institutional development, I argue that

implies that important constituencies are scattered across a multiplicity of fora. This makes it difficult for challengers to sustain collective action over an extended period of time, as they lack the resources to participate in negotiations that span multiple institutions. By implication, in more integrated institutional contexts, challengers will encounter fewer collective action problems. Here, potential allies are spread across fewer institutions and, ideally, participants of the targeted institution, which facilitates the identification of shared interests and coalition building.

Beyond that, fragmentation may allow incumbents "to substitute among different governance structures" (Drezner 2007, 63). The greater the specialization of fora in a governance area, the greater is the redundancy of policy tools. Even if highly diverse elemental institutions deal with a variety of different subject matters, they will perform some of the same tasks in terms of rulemaking. This enables incumbents to respond to attempts of forum shopping and regime shifting by challengers with their own strategies of institutional selection. Powerful states can issue threats to cut funds, not partake in the rulemaking process anymore, or exit an institution altogether and move to a different institution (Drezner 2013, 283–86). This decreases the incentives for incumbents to make concessions to challengers, as they can pursue alternative strategies of institutional choice. In contexts where there is less segmentation of policy tools and fora are not readily substitutable, incumbents should be less willing to relinquish a forum to challengers.

Finally, this conceptualization raises the question of how the two dimensions of institutional context are related. As Raustiala (2013, 302) points out: "practice—and common sense, if not the basic laws of entropy—suggests that two phenomena are related: a rising tide of disconnected rules, of which no one person or office can keep track, will surely yield conflict if not contradiction." Raustiala's points are valid. Yet there may also be governance areas with high levels of institutional density and diversity where institutions do not compete much and coexist, as Aggarwal (1998) has put it, in parallel to one another. While institutional proliferation makes overlap and competition more likely, empirical studies point out that some highly differentiated arrangements, for instance in environmental and health governance, have established some level of order or coordination (see Holzscheiter, Bahr, and Pantzerhielm 2016; Zelli and van Asselt 2013).

it does not make much sense to arbitrarily define such a threshold for a qualitative study. Instead, I consider the expansion of an institutional context relative to earlier points in time.

Table 4.1: Conceptualizing Institutional Context

Institutional contexts: Assessing institutional contexts and the opportunity structures

Dimension	Key Question	Measurement		Explanation	Opportunity structure
(1) Interaction	How overlapping?	**Indicator 1a:** Intersection (extent to which activities of the elemental institutions of a governance area overlap)	High or low	**Hypothesis 1a:** Institutional selection (the greater the intersection among institutions, the greater the possibilities for forum shopping)	**Open**
	How inconsistent?	**Indicator 1b:** Conflict (degree to which the rules enshrined by the elemental institutions in a governance area are inconsistent)	High or low	**Hypothesis 1b:** Rule innovation (the more conflicting the rules, the larger are the prospects for establishing an issue on the agenda)	
(2) Differentiation	How different?	**Indicator 2a:** Diversity (degree of disparity of sub-issues addressed by the elemental institutions in a governance area)	High or low	**Hypothesis 2a:** Mobilization of allies (the more diverse an institutional context, the more difficult it is to mobilize actors embedded in different fora)	
	How many?	**Indicator 2b:** Density (number of institutions in a governance area)	High or low	**Hypothesis 2b:** Sustaining collective action (the larger the number of institutions in a governance area, the more difficult it is to sustain collective action)	**Closed**

As summarized in Table 4.1, the institutional opportunity approach considers two dimensions of institutional complexity, on the one hand the mode of institutional interaction, i.e. the degree of competition or coordination, and on the hand other the level of institutional expansion, i.e. degree of differentiation or integration. Both dimensions have two indicators each. For each of the dimensions, I have developed causal hypotheses that relate to how they enable or constrain actors who challenge the regulatory status quo. Drawing on insights from institutionalist theorizing and the literature on regime complexity, I argue that competition among the elemental institutions of a configuration allows challengers to identify alternative paths of regulatory development. Institutional overlap and rule conflict enable strategies of institutional selection and (re)interpretation, opening up of the opportunity structure for challengers. Fragmentation, by contrast, accounts for a closure of the opportunity structure for challengers. High levels of institutional density and diversity exacerbate broad and sustained mobilization.

4.2 Modeling the Regulatory Process: Linking Agency and Structure

So far, I have identified two variables to explain how weaker actors can achieve regulatory change. On the one hand, I consider the actor constellation, focusing on the articulation of a demand for reform by challengers. I argue that weaker challengers need to build broad pro-reform coalitions and sustain collective action throughout the entire regulatory process to exert enough pressure on powerful incumbents. On the other, I take into account the institutional context, in which regulatory disputes take place. I argue that, under conditions of institutional complexity, different institutional configurations provide varying opportunity structures for challengers. How do these variables interact precisely? I understand institutional context as an antecedent condition (Van Evera 1997, chap. 1). The influence of challengers on regulatory outcomes is magnified in specific institutional configurations and reduced in others. In order to illustrate their interplay, I model the regulatory process. I ask: If my explanation is true, what is the pathway that leads from demand for regulatory change to the observed outcome? I identify causal mechanisms and define observable implications for them.

For the purpose of this book, we can understand regulatory process as a set of two sequential stages, agenda setting and negotiations. How pathways of regulatory change unfold and whether they lead to outcomes of reform, is a function of the interplay of agency and institutional conditions at these two stages of the regulatory process. This framework permits me to disaggregate the broad puzzle of weaker actor influence and regulatory reform into more tractable questions. Accordingly, each case study asks two questions: Were challeng-

ers of the regulatory status quo able to select a forum to pursue their regulatory agenda? And given their choice of forum, were they able to mobilize sufficient support and exert enough pressure on incumbents to give in to their demands? In what follows, I introduce the resulting two-step framework, which will serve as a template for analysis for the empirical chapters.

4.2.1 Venue Selection and Agenda Setting

The first step in explaining regulatory outcomes is to account for agenda setting. Similar to domestic decision-makers, international rule-makers, at one point in time, address a specific issue—or, for that matter, a limited number of issues—but not others. Challengers need to create awareness and capture the attention of other stakeholders in order to establish a problem on the agenda of a regulatory body. Only if challengers succeed in rendering their issue salient, will pivotal states consider regulatory change. This, of course, presupposes that a number of actors are in fact dissatisfied with the regulatory status quo and converge on what they perceive to be the problem. Thus, at this initial stage of the regulatory process, dissatisfied actors need to agree on a definition of the problem. Here, entrepreneurial leaders often play a key role. Such actors enjoy the credential and standing in a given governance area that allows them—at least during this early phase—to interpret and make sense of a particular problem (Baumgartner and Jones 2009, 28–29, 48). By way of framing, entrepreneurs give meaning to an issue, so that it can be acted upon. Moreover, it allows them to connect a problem to specific solutions that promote their agenda (Joachim 2003; Keck and Sikkink 1998, 17). The agenda status of an issue is crucial for how the regulatory process proceeds. If incumbents are able to keep an issue off the agenda or maintain control over how an issue is discussed, a reform project is unlikely to catch on. Under such circumstances, it becomes more difficult if at all possible for challengers to mobilize allies, and, ultimately, achieve an outcome of profound reform.

Challengers' access to the agenda depends on the institutional context in a governance area. They have greater access to the agenda in competitive institutional contexts than they do in coordinated contexts. Here, they can select a venue for pursuing their aims based on their expectations of what the most responsive forum in the governance area is. Furthermore, the existence of alternative venues allows challengers to change the roster of participants in a particular regulatory dispute. This draws on an argument developed by Baumgartner and Jones (2009, 35) for domestic politics: "While particular venues may confer general advantage on business or other specific groups, the simple existence of alternative policy venues is more important than the distribution of advantage conferred by a particular ven-

ue." Hence, in competitive contexts, the causal mechanism of *venue selection* should allow challengers to establish an issue on the agenda of rule-makers and shape the requirements for winning coalitions (see also Sheingate 2006). In coordinated contexts, subject matters are assigned a focal institution, which gives incumbents greater agenda control. While challengers may be able to raise awareness for an issue even if they cannot choose the forum, here, incumbents may dictate the terms under which the issue is discussed. Specifically, they may delay negotiations until salience abates or refer the issue to a sub-committee with little regulatory authority. Under these conditions, challengers should be unable to select a venue and I expect the regulatory process to fizzle out.

From this discussion, I derive the following two observable implications: *If the hypothesized mechanism of venue selection holds true, in competitive contexts, we should observe challengers deliberately choosing a forum and effectively establishing their issue on the agenda. In coordinated contexts, we should observe incumbents exerting agenda control.* Observations include statements by challengers and incumbents on what constitutes the appropriate forum to discuss an issue, the draft agendas and minutes of regulatory body meetings, and contextual information on committee structures.

4.2.2 Negotiations and Conflict Expansion

Given that challengers are able to establish an issue on the agenda of rule-makers, the second step is to consider who prevails in the negotiations on a new regulatory outcome. At this stage of the regulatory process, challengers need to build broad and sustained coalitions to exert enough pressure on incumbents. Engaging in broad and sustained collective action is easier in integrated contexts than it is differentiated contexts. In highly differentiated contexts, potential allies are spread across a number of institutions. They often have invested time, political capital, and other resources in achieving their goals in different venues, reducing their incentives to join the efforts of other actors in different venues. In integrated contexts, potential allies are concentrated on a smaller number of institutions, facilitating mobilization. Coalition building builds on what Schattschneider (1960, 12) has called "the expansion of the scope of conflict." He argued that "it is the weak who want to socialize conflict, i.e., to involve more and more people in the conflict until the balance of forces is changed" (Schattschneider 1960, 40). Incumbents by contrast have an interest to avoid the politicization of a regulatory issue, as they have greater influence on outcomes, if they stay away from the public eye (see also Culpepper 2011). The mechanism of conflict expansion decreases the legitimacy of and disrupts the support for the status quo by involving constituencies that question the appropriateness of existing rules and demand reform. By

the same token, it allows for the emergence of a new majority that supports a specific solution.

Challengers usually attempt to demonstrate and attract attention to the failures of the regulatory status quo (Hall 2010, 214–15). With regard to international economic governance, information about the social costs of an existing regulatory standard is of particular importance (Mattli and Woods 2009a, 21–25). In issue areas, such as labor or environmental policy, mobilization often revolves around demonstration effects. Challengers may frame specific events, such as natural disasters and corporate scandals, as exemplary for deficits in the existing regulatory framework. However, challengers may also attempt to portray broader societal grievances as cases of market failure that require regulatory change. Pointing out externalities is expected to affect the cost-benefit calculation of previously uninvolved actors. Moreover, this kind of information makes explicit that regulatory standard-setting is not just technical but entails distributional conflict and questions of distributional justice. This, in turn, allows challengers to promote their solution as fairer and more equitable. Again, this step usually involves framing strategies and the development of a legitimating narrative (Trumbull 2012, 26–29). Identifying a shared frame for reform should be more difficult for challengers, if actors are already embedded in different institutions. Here, not only does it become harder for challengers to motivate these groups to become involved in a different institution, they should also work on more narrow questions.

I derive the following observable implications from this discussion: *If the hypothesized mechanism of coalition building holds true, in integrated contexts, we should observe an increasing participation of stakeholder groups in negotiations and a politicization of the issue in question. In fragmented contexts, we should observe challengers failing to organize broad and sustained collective action.* Observations include data on the participation of previously noninvolved groups of actors during the negotiation stage, particularly of new non-state actors, as well as regulatory body reports.

Figure 4.2: Modelling the Regulatory Process

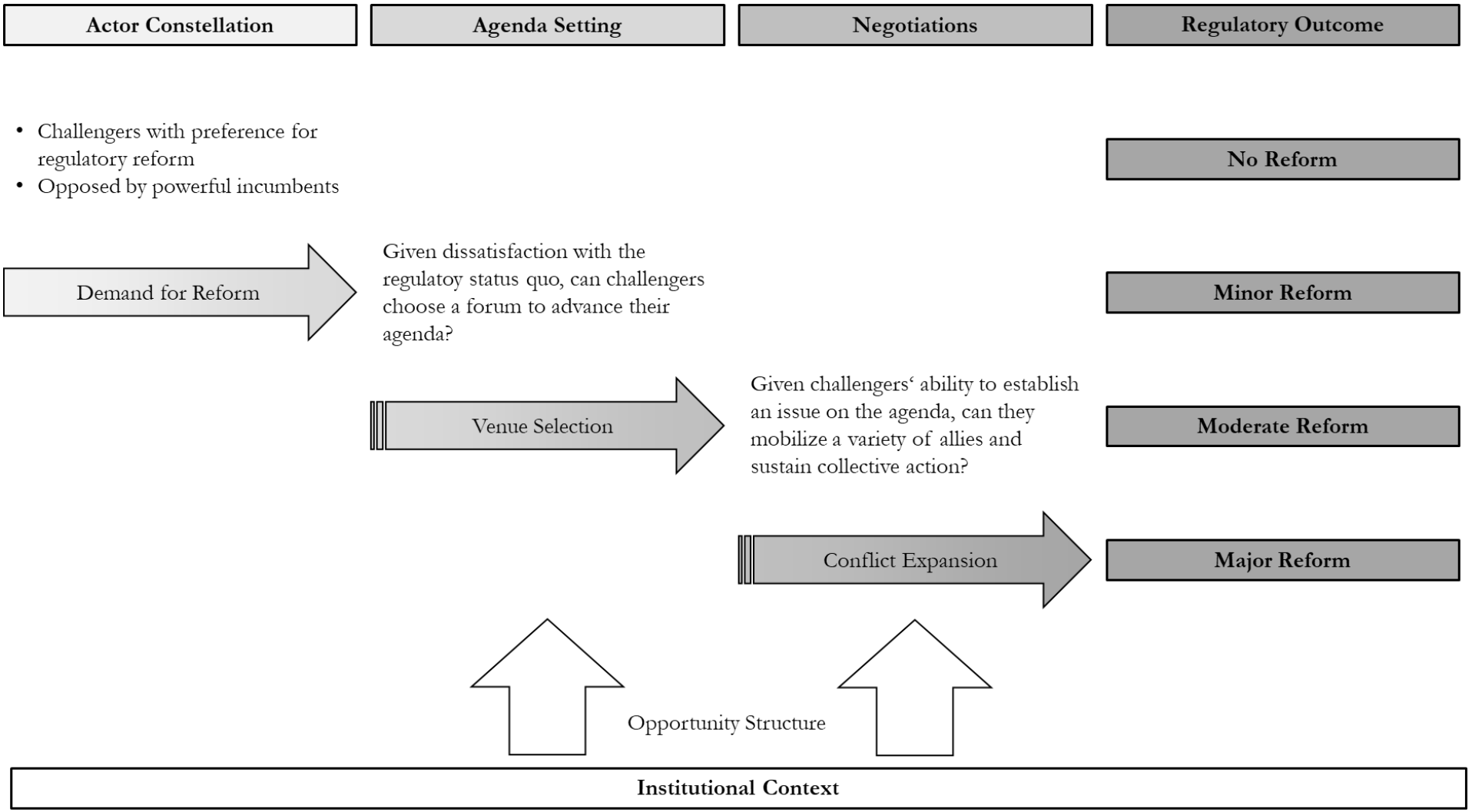


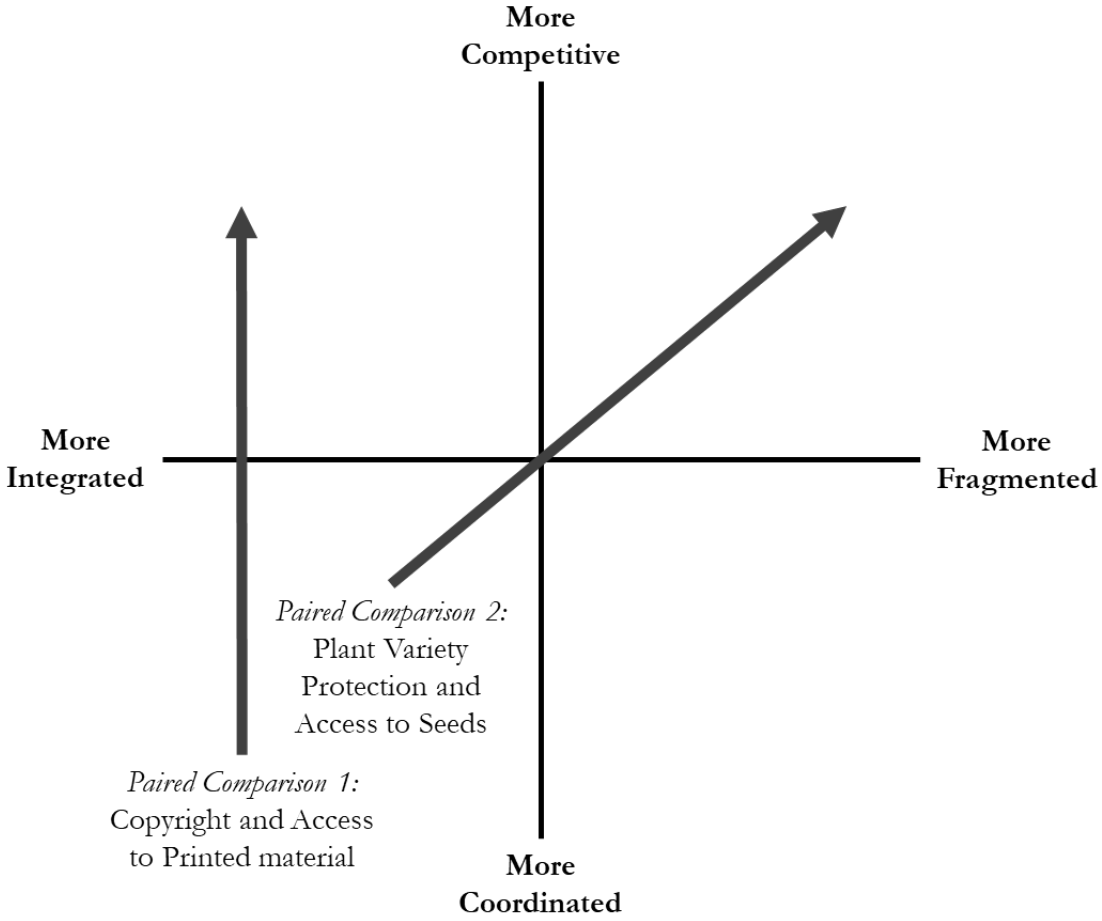
Figure 4.2 illustrates the regulatory process and summarizes the analytical framework. Depending on variation in the institutional context, the mechanisms identified in this section will not be activated and I expect pathways to lead to reform outcomes of varying magnitudes. If a challenger coalition cannot select a forum to push for reform, I expect the reform process to break down. Even if it is able to mobilize external allies, incumbents control and determine the terms of negotiations. Hence, we should expect outcomes of *no reform* or *minor reform* under these circumstances. If challengers can select the forum but find themselves in a highly differentiated context, supporters may already be embedded in different fora, making it more difficult to build a broad pro-change coalition and sustain collective action. This should allow challengers to achieve outcomes of *moderate reform*. Only if challengers can both select a forum and have optimal conditions for coalition building, they should be in a position to negotiate outcomes of *major reform*.

4.3 Logics of Causal Inference and Data Collection

In this book, I conduct an exploratory analysis of cases of attempted regulatory reform. I have selected two deviant cases for in-depth analysis and another couple of control cases to develop, test, and refine the arguments set forth in this chapter. The selected cases are deviant in that outcomes cannot be sufficiently explained by existing theories of international regulation. As discussed in Chapter 2, selecting cases on the dependent variable requires a careful methodological approach to avoid bias. For these reasons, I have chosen cases that display variation at the cross-case and the within-case level. Moreover, I base my analysis on an integrative case study method that allows me to examine the causal effect of the hypothesized explanatory factor on the outcome as well as the causal process and mechanisms that link independent and dependent variables (see Rohlfing 2012). In what follows, I elaborate on my methodological considerations to establish how I will draw conclusions from the data and what kind of data I have collected to investigate the arguments laid out in this chapter.

The analysis in this book combines two logics of inference to maximize the explanatory power of my theoretical approach. First, I employ a covariational logic of inference to probe the relationship between the hypothesized explanation and the outcomes. Second, I use a causal mechanism-based logic of inference to increase the internal validity of my explanation.

Figure 4.3: Trajectories of Change in the Institutional Contexts of the Case Studies



I have selected four cases of attempted regulatory reform to conduct two paired comparisons. These cases are highly similar with regard to all relevant explanatory factors but the antecedent variable of institutional context. The outcomes vary across cases and over time. In both paired comparisons, earlier reform attempts have failed (outcomes of *minor reform*). Later reform attempts have been more successful, albeit to varying degrees. While the copyright case displays an outcome of *major reform*, the plant variety protection case displays only an outcome of *moderate reform*. I investigate these episodes from both a cross-case and a within-case perspective, proceeding from the hypothesis that variation in institutional contexts and the openness of opportunity structures explains the varying influence of weaker actors. Figure 4.3 depicts the trajectories of change in the institutional contexts of both cases in a highly stylized manner to illustrate change across cases and over time.

This approach is modeled on Mill's indirect method of difference and attempts to hold as many potentially relevant explanatory variables constant as possible (George and Bennett 2005, chap. 8; Ragin 1987, 39–42). I establish the similarity of cases based on a similar actor constellation and a similar problem structure. In all cases, similar coalitions of weaker actors demanded regulatory reform and were opposed by the EU, the U.S., and important

business interests. Consequently, I do not attribute outcomes of regulatory reform to variation in the actor constellations over time or across cases but to variation in institutional contexts. In addition, both regulatory conflicts revolve around flexibilities to intellectual property rights and have a public good-dimension. Due to the lack of variation on other possible variables, I infer that changes in supply side conditions were a likely explanation of changes in regulatory outcomes.

Considering that I have selected cases on the dependent variable, it would be problematic to draw causal conclusions solely based on covariation. For these reasons, the main part of the analysis applies process tracing and thus a causal mechanism-based logic of inference (e.g. Beach and Pedersen 2013; Bennett and Checkel 2015a; George and Bennett 2005). Process tracing uses "evidence from within a case to make inference about causal explanations of that case" (Bennett and Checkel 2015b, 4). The method seeks to open the black box of causality and establish the link between a hypothesized explanatory factor and the outcome in question (Trampusch and Palier 2016). Process tracing offers a number of distinct advantages. As process tracing sheds light on how specifically a variable or a combination of variables produces an outcome, it addresses problem of equifinality and multicollinearity (George and Bennett 2005, 161–62). Given that mechanisms are sufficiently specified, it also allows for the elimination of competing explanations that predict the same outcome. Last, process tracing is particularly well suited to investigate explanations that span different levels of analysis, such as the institutional opportunity approach. This book uses process tracing to unravel how different macro-level structures (institutional contexts) enable or constrain micro-level processes (mobilization for reform) that produce macro-level outcomes (regulatory change). Breaking down the regulatory process into distinct analytical entities specifically allows me to understand why some paths lead to outcomes of *moderate reform* or *major reform* while others break down and lead to outcomes of *no reform* or *minor reform*.

I concur with the epistemological position that causal mechanisms are in principle unobservable (Bennett and Checkel 2015b, 10–11; Mahoney 2001). This position derives from the realist school in the philosophy of science.[41] The idea underlying this view is that the link between a cause X and an outcome Y can be broken down into distinct, yet interlocking ontological entities and processes that transmit the causal force of X on Y. In principle, this requires the researcher to zoom in on the lowest level of analysis, at which observations can be gathered. To prevent infinite regress, the researcher "model[s] only the part of

[41] For a different view, see Hedström and Ylikoski (2010, 50–51).

a mechanism that are theorized as absolutely essential (necessary) to produce a given outcome" (Beach and Pedersen 2013, 31). By implication, the researcher needs to make strong predictions about what we should observe empirically if a specific causal mechanism exists (Van Evera 1997, 30–40). As my focus lies on theory development, my approach is somewhat looser than in theory-testing case studies. While I have specified causal mechanisms and their observable implications in the previous section, I also take an inductive approach and refine the hypothesized mechanisms in the light of the data collected.

A mechanism-based understanding of causal inference has implications for data collection. Process tracing has different data requirements than comparative methods (Gerring 2007, 178–81). Whereas comparative designs mainly seek to assign values to independent, dependent, and control variables, within-case analysis necessitates observations on the relationships among the explanatory variables and between these variables and the dependent variables (Beach and Pedersen 2013, 72–74; Brady, Collier, and Seawright 2004, 11–12). Within-case observations can take various forms. Process tracing involves more than presenting events in narrative form. Instead, process-tracing case studies are best carried out as a step-by-step test of each part of the theorized mechanism. Depending on the types of observable implication that are assumed, different steps may require different types of within-case observations (Beach and Pedersen 2013, 4–5).

For the first part of the analysis, I carried out an initial assessment of the values of the dependent variables and a set of potential explanatory variables for the larger universe of cases. To this end, I drew on the secondary literature, particularly in International Political Economy and—because of the technical complexity of the subject—the legal literature on intellectual property rights. I also collected data from some primary sources to carry out a number of preliminary tests on existing theories according to established indicators (see Chapter 3).

After this initial process of "soaking and poking" (George and Bennett 2005, 89–90), I turned to the systematic collection and analysis of data. To collect within-case observations, I mainly used three sources of primary data, an extended analysis of publicly available documents, specialized reporting, and semi-structured expert interviews.[42] First, I collected and analyzed official documents that provide information on actors' preferences and the regulatory process. This includes minutes of international institution meetings, reports, position papers by actors, as well as a variety of incidental sources. Subsequently, I supplemented

[42] For a discussion of the advantages and disadvantages of different evidentiary sources, see Yin (2009, chap. 4).

this part of the analysis with semi-structured expert interviews to achieve a better understanding of undocumented events and behind the scenes interactions.[43] These interviews largely served the purpose to systematize my prior findings and put them into perspective (see Bogner and Menz 2002, 37–38). In order to mitigate the problem of information asymmetry between interviewer and interviewees, I conducted the interviews largely after I had already done important parts of my data collection (Littig 2008; Mikecz 2012). Last, I compiled a number of descriptive statistics to understand how institutions and institutional contexts have changed over time. This involves figures on membership developments, financial streams, and the participation of non-state actors. I contextualized these analyses by drawing on historical accounts of these institutions and archival sources.

To avoid selectivity and bias, I followed a number of guidelines to ensure high data quality and analytic rigor (Bennett and Checkel 2015b; George and Bennett 2005, 99–105; Thies 2002). Collecting my data, I made sure to gather evidence from diverse and independent streams. For one, I tried to interview representatives of all potentially relevant camps. A number of potential sources, however, did not agree to interviews. Some interviewees only agreed on the condition of anonymity. Others would not allow me to record interviews or asked me to let them authorize statements. As a rule of thumb, I stopped collecting additional evidence from one stream when repletion occurred. During data analysis, I triangulated all sources of data to probe the plausibility of conflicting claims. Yet triangulation is no guarantee for a complete and accurate reconstruction of a chain of events. Thus, I make explicit when data was unavailable or I have reservations regarding the quality of data. Moreover, I prioritized publicly available sources of data over interviews and I indicate when I was only permitted to use interviews as background information. Lastly, I considered the potential biases of evidentiary sources. To this end, I weighted the evidence provided by historiographic accounts, document analysis, and interviews in light of my expectations about instrumental motivations of the sources.

In this section, I have I argued that my integrated approach allows me to combine systematic analysis with thickness of description in order to probe a wide range of empirical material for explanations of the surprising outcomes that I have observed. In addition to

[43] Interviews play a larger role in the case study carried out in Chapter 5 than in the one carried out in Chapter 6. The reasoning for this is pragmatic: In Chapter 5, I analyze a recent case, which has been in only a few academic publications. Here, interviews complemented my document analysis, providing me with an additional perspective in the absence of secondary literature. In Chapter 6, I analyze cases that date back longer in time. For one, this made it more difficult to find interview partners who had participated in the negotiations. The expected value of doing interviews was also lower, as participants and observers from all camps had already published their experiences in some form or another.

providing an internally valid explanation of the outcomes of the selected cases, this book pursues a second goal. It advances the institutional opportunity approach as an explanation of regulatory change under conditions of institutional complexity. Employing a mixture of case study methods allows me to account for the particularities of the cases and draw generalizable causal inferences from the analysis of the empirical material. Process tracing in particular facilitates iteration between data and theory and combining deductive and inductive reasoning (Beach and Pedersen 2013, 16–18; Bennett and Checkel 2015b).

4.4 Discussion

Historical contributions to International Relations and International Political Economy have advertised their analytical toolbox as a means to understand regime complexity (see Fioretos 2011b, 389–91; Rixen and Viola 2016, 15–16). Yet until now, the potential has remained largely untapped. This book explores to what extent historical institutionalism's arguments on institutional interaction travel to the international level.

Drawing on historical institutionalist theorizing, I have developed the institutional opportunity approach to address two gaps in the literature on international economic governance. First, I sought to theorize how losers under the regulatory status can shift regulatory outcomes according to their preferences and achieve reform. Coalitions between civil society organizations and developing countries have received little attention in International Relations and International Political Economy research (see however Bolton and Nash 2010; Rutherford, Brem, and Matthew 2003). Yet this actor constellation is potentially relevant in a number of issue areas that affect broader societal interests. Second, I have generated a number of testable hypotheses on how regime complexity affects the strategic options of various kinds of actors. The existing literature has been largely inconclusive on the question as to whether regime complexes benefit powerful states at the expense of weaker actors or vice versa. The Institutional opportunity approach identifies the characteristics of different institutional contexts that make them more or less conducive to reform attempts by challengers.

In the subsequent chapters, I apply the institutional opportunity approach to explain the cases studied in this book. The next chapter investigates the regulatory conflict over access to educational materials for people with print disabilities. Chapter 6 then examines the regulatory conflict over access to seeds for smallholder farmers.

5 Copyright and Access to Printed Material

If sighted people in wealthy countries had 95 percent of their books and other printed material taken away, the copyright laws would be amended overnight.

—*William Patry* (2012, 10)

Even today, people living with a print disability have only limited access to books and other printed material. According to estimates by the World Blind Union (n.d.), only five percent of all published books are available in formats accessible to people with print disabilities in developed countries and less than one percent in developing countries.[44] The dearth of accessible printed material is particularly problematic where textbooks and other educational material are concerned. A shortage of accessible expressive works[45] is also inherently problematic, since access to these knowledge goods affects "the ability of citizens everywhere to democratically participate in political and cultural discourse" (Sunder 2012, 24). While some of this underproduction can be attributed to the absence of a commercial market for printed material in accessible formats, copyright presents a barrier to access to knowledge for people with print disabilities. Many national copyright laws impede the non-market production and allocation of so-called accessible format copies of published works.

On 27 June 2013, the international community adopted a treaty that promises to improve inclusion and participation opportunities for people with visual and other print disabilities on a worldwide scale. The Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled (*Print Treaty*) introduced a set of mandatory limitations and exceptions to international copyright law. Prior to the *Print Treaty*, in some copyright systems, consent from the right holders for making available accessible format copies was required even for not-for-profit organizations. Moreover, sharing converted works across institutions or borders was often cumbersome and sometimes downright impossible. Importantly, the *Print Treaty* permits such uses without explicit authorization from right holders and facilitates the cross-border transfer of accessible format copies.

[44] These estimates vary. According to Greenwood, White, and Creaser (2011, iv) of the Royal National Institute of Blind People, the number is close to seven percent. All actors in the governance area agree that "blind and partially sighted readers face a dramatically limited choice of titles" (Greenwood, White, and Creaser 2011, ii).

[45] I borrow the term "expressive work" from Landes and R. Posner (2003, 37) to denote any work that qualifies for copyright protection under modern law. This includes works of the imagination, including pieces of literature, music, and visual arts, but also nonfiction, textbooks and other educational materials, as well as, at least in certain jurisdictions databases and software. I use the terms expressive work and creative good interchangeably.

An international solution for this problem has been in the making for over 35 years. WIPO and UNESCO first debated the issue between 1977 and 1982 on the initiative of Brazil and a number of blind associations. However, this first reform attempt resulted only in the adoption of a set of model laws in 1982, which were explicitly non-binding and did not have a lasting impact. In 2002, the World Blind Union with the support of a few NGOs put the issue on the agenda of WIPO again. When the member states of WIPO concluded the *Print Treaty* eleven years later, to some observers this was nothing short of a miracle (Saez 2013e). Beneficiaries of the status quo ante, including the EU and the U.S. as well as publishers and the movies industry, had vehemently opposed an international treaty during most of the negotiations. Proponents of greater flexibilities were considerably weaker in material terms and included a number of developing countries, access to knowledge NGOs, disabled rights organizations, and library associations. What explains this outcome?

In this chapter, I apply the institutional opportunity approach to both episodes of attempted reform to unravel this puzzle. I argue that shifts in the institutional context opened up the opportunity structure for challengers. During the first reform attempt in the 1970s, WIPO was the unrivaled focal point for rulemaking on copyright matters and had an established division of labor with UNESCO. The coordination between WIPO and UNESCO favored incumbents, as they had control over where the issue would be discussed and how it would be settled. Incumbents were able to stall the debate by setting up a working group, an instrument geared towards issuing non-binding recommendations instead of binding rules. The adoption of TRIPS shook up the institutional context. When challengers began mobilizing again for reform for a second time in the 2000s, they found WIPO competing with the WTO for authority in copyright regulation. These changes in the institutional architecture of the governance area permitted incumbents to target WIPO as a forum to discuss flexibilities to copyright. With the incumbents' abandoning the WIPO-UNESCO system of co-governance, they inadvertently curtailed their control over the agenda of copyright regulation. Through process tracing, I study how this shift from a coordinated to a competitive institutional context provided the conditions for the emergence of a reform coalition and ultimately enabled challengers to prevail against the opposition of powerful incumbents.

This chapter draws almost exclusively on new and original data. The international negotiations on limitations and exceptions for people with print disabilities have received some attention by legal scholars (see Hely 2010; Kaminski and Yanisky-Ravid 2015; Kongolo 2012; von Lewinski 2010; Ng-Loy 2010; Nwankwo 2011; Rekas 2013; Scheinwald 2012;

Williams 2012). Yet this is the first study of the Marrakesh Treaty and its origins from a political science perspective.

In the first section, I discuss what is at stake in this regulatory dispute. In the second section, I provide an overview of the history of the international copyright regulation. In the third section, I study the first reform attempt between 1977 and 1982 and explain what caused its breakdown. In the fifth section, I look at the second reform attempt between 2002 and 2013 and explain how challengers were able to achieve major reform in this case. In the sixth and final, I compare the two episodes and conclude.

5.1 The Demand for Flexibilities for People with Print Disabilities

Who wants what in this regulatory dispute? Copyright laws may prevent people who live with print disabilities from participating on an equal basis in society. People who are blind, visually impaired, or have other print disabilities cannot effectively use standard printed material without assistance. The term print disability in addition to blindness and visual impairment encompasses physical disabilities that prevent an individual from holding or manipulating printed material. It also includes cognitive, developmental, learning, and perceptual disabilities that make it difficult for those affected to read standard print, such as dyslexia. Due to their impairment, print-disabled persons require copies of works in formats that are accessible to them, such as audio, Braille, or large print. Copyright laws may impede the provision of accessible format copies of works, creating a barrier to access to essential knowledge good.

Copyright is a property right. As such, in legal parlance, copyright confers a "bundle" of exclusive rights to the owner of a work, including the right to its use and distribution. While most countries' copyright laws provide some level of flexibility to facilitate the conversion of works into accessible formats and their distribution to those who need them, the depth and scope of such limitations and exceptions vary across countries. Specifically, copyright laws may require organizations to ask permission and offer financial compensation for reproducing and making available accessible format copies regardless of whether they are profit-oriented or not. This creates administrative hurdles and other costs for these organizations, most of which are not-for-profit and constrained on resources. In addition, copyright laws impose restrictions on the circulation of converted works across institutions and borders. Technological advances, including optical character recognition and speech synthesis, have made the conversion of works into accessible formats easier in many cases. In others, such as textbooks with illustrations, significant human input is still required. If

providers of accessible works cannot share copies among them, this results in unnecessary duplication of efforts and a waste of resources. In addition to the underfunding of specialized institutions, such as libraries for the blind, copyright is an important barrier to the availability of works in accessible formats. Copyright laws that lack robust limitations and exceptions create externalities, which are borne not just by print-disabled persons but society as a whole. This poses a larger democratic problem, as it curtails social participation of people living with print disabilities.

These problems affect a significant number of people on a worldwide scale. Even though the numbers have been decreasing for the past twenty years, visual impairment remains a significant global health issue. According to estimates by the Vision Loss Expert Group, in 2015, 36 million people were blind and 216.6 million people lived with moderate to severe visual impairment (Bourne et al. 2017). Importantly, these figures do not include those affected by other print disabilities. Moreover, age-related causes of visual impairment are likely to increase due to rising life expectancy. Visual disabilities are distributed unequally across the globe. Ninety percent of all visually disabled persons live in developing countries (WHO n.d.). This combined with the fact that fewer works are available in accessible formats in the Global South are important—yet far from the only—determinants of developing countries' preference for greater flexibilities.

Copyright is not the sole cause of the availability problem. Particularly in developing countries, the prevalence of visual impairment and the lack of available accessible works are in large part due to lack of resources. Many causes of visual impairment and blindness are preventable but not treated due to insufficiently funded health infrastructures (Pascolini and Mariotti 2012).[46] Where resources are scarce, this may involve political choices between investing in treatment of causes of visual impairment and increasing the availability of works in accessible formats. However, as Story (n.d., 47, emphasis removed) puts it, even though "copyright restrictions are not the main barrier to use and access, they reinforce other problems and certainly do not assist in the resolution of more critical access problems." Copyright flexibilities, by implication, may mitigate these problems. An international standard can clarify what limitations and exceptions countries may or indeed ought to adopt in order to facilitate the provision of copyright-protected works. It can also facilitate the issue of cross-border transfer of converted works. The latter is particularly relevant for

[46] Experts of the World Health Organization estimate that "preventable causes are as high as 80% of the total global burden" (Pascolini and Mariotti 2012, 614). Such causes include uncorrected refractive errors, cataracts, and presbyopia.

countries that share a language, as they can reduce redundancies in converting works and improve the supply of works in accessible formats by exporting and importing converted copies.

Why are flexibilities that benefit people with a print disability contentious? This question looms large because most accessible formats are not traded on commercial markets. Since there is little to be gained, the stakes should be relatively low for right holders and countries that are net-exporters of expressive works and learning material. What then explains their adamant opposition to an international standard on limitations and exceptions? This stance is even more surprising, considering that EU and U.S. copyright laws have contained limitations and exceptions that benefit people with disabilities for a long time.[47] U.S. copyright law, in particular, has extensive flexibilities. The fair use doctrine provides an open-ended mechanism to establish limitations and exceptions to further the provision of public goods (Landes and Posner 2003, 115). While the EU has not been successful in harmonizing its copyright system so far, most member states' copyright laws contain flexibilities to promote the availability of works in accessible formats (Depreeuw 2013, 420; Guibault 2010; Guibault, Westkamp, and Rieber-Mohn 2007, 41, 51–52). Moreover, the 2001 EU Copyright Directive comprises an exhaustive list of cases, for which member states may adopt limitations and exceptions, including to the benefit of people with disabilities.[48]

A first reason for the dispute is the fragile nature of the compromise between private and public interests enshrined in copyright. This regulatory dispute raises the question of what role the market should play in allocating essential knowledge goods and, if the market fails to do so in a way that satisfies demand, what other policy instruments should be used to promote the availability of these goods. Historically, print-disabled persons have used the services of specialized institutions, most of which are publicly funded, such as libraries for the blind, to obtain works in formats that are accessible to them. For this reason, in most countries, right holders have come to accept limitations and exceptions to copyright laws that benefit people with disabilities as long as they do not interfere with their commercial interests.

Due to technological advances, accessible printed materials have—at least theoretically—become more marketable. Particularly digitization and the internet have greatly facilitated the reproduction and dissemination of accessible format copies. Nowadays, many works

[47] However, most copyright laws do not permit the export and import of accessible format copies.
[48] See Directive 2001/29/EC of the European Parliament and of the Concuil of on the Harmonisation of Certain Aspects of Copyright and Relates Rights in the Information Society, May 22, 2001, 167 OJ L, 10-19.

are readily accessible due to efforts by organizations, such as the DAISY Consortium, that develop and promote technical standards for digital text documents. File formats, such as EPUB 3 for e-books, allow for an on-the-fly conversion with devices, such as speech synthesizers or refreshable Braille displays. Print-disabled users can also use specialized online libraries, such as Bookshare,[49] to borrow accessible e-books. If publishers and retailers were to adopt EPUB 3 or a similar standard, disabled persons could purchase e-books on mass-market platforms, such as Amazon. Technological change could decrease the need for non-market instruments in the provision of accessible printed material at least in developed countries. This puts into question the social compromise on allowing non-market instruments in copyright regulation to provide public goods. Opponents of greater flexibilities to copyright, specifically authors and publishers, argue that more extensive limitations and exceptions could prevent the emergence of a market for accessible format copies.[50] At worst, so the argument goes, far-reaching flexibilities could hurt the entire digital book market. If persons with and without disabilities can use the same formats, far-reaching limitations and exceptions may increase the potential for abuse and piracy. Representatives of disability organizations doubt this account, as textbooks in particular are tailored to the needs of people with print disabilities and require significant human input for the conversion of formulas and illustrations:

> Technology will not solve all problems so easily. Of course, today, I can buy six million e-books on Amazon but a large portion of these books contains graphics, there are nonfiction works and textbooks, which are not accessible. I would be happy as a library, if I could say: "I can offer many big books of fiction on the free market." But the whole nonfiction and textbook issue to get people educated and into work, there is a potential in my library to create an offering for the blind and visually disabled.[51]

One incident that illustrates this point is the controversy over the inclusion of a text-to-speech function in Amazon's e-reader Kindle 2 in 2009. While the print-disabled community welcomed the feature, it drew the ire of U.S. copyright advocates. Particularly the Author's Guild expressed concern that Kindle could undermine the commercial audiobook market. Legally, it presented the case that such a function amounts to an unauthorized reproduction of the work in a different format (Ganapati 2009). Defenders of Kindle argued

[49] See https://www.bookshare.org/.
[50] Interview with Former Secretary General of the International Publishers Association (December 8, 2015).
[51] Interview with Director of *Deutsche Zentralbücherei für Blinde zu Leipzig* [German Central Library for the Blind in Leipzig], March 22, 2016. See also Interview with President of the European Blind Union (April 11, 2016).

that a speech synthesizer could not be compared to a professional speaker. Beyond that, additional ways for users to consume their lawfully acquired e-books in private would not be harmful to publishers and other right holders. "Traditional" digital talking books require specific devices, such as a DAISY player, and are generally distributed by entities that only serve print-disabled persons.[52] This ensures that users without disabilities cannot benefit from the reproduction. As the harmonization of formats has progressed and the technological barrier between mass market and accessible printed material was lowered, right holders have taken a greater interest in people with disabilities as potential consumers. As a result, they have grown more cautious of the effect of copyright flexibilities on existing markets.

A second reason for the opposition by the EU, the U.S., and right holders to an international standard on limitations and exceptions for people with print disabilities was their fear that such a treaty could lead to a "slippery slope" and weaken international intellectual property law as a whole. According to this view, a standard on limitations and exceptions could serve as a precedent for further agreements on flexibilities to copyright, such as standard on limitations and exceptions for educational purposes. An agreement on limitations and exceptions to copyright could set the tone for negotiations in other areas of international intellectual property regulation, including in patent regulation, where users and net-importers of knowledge also demand greater access to essential knowledge goods, such as medicines. These actors voiced concerns that a legal instrument on limitations and exceptions to copyright could influence cases of international trade litigation and specifically WTO adjudication on TRIPS in ways that give ample scope to infringers. In sum, a range of beneficiaries of stringent standards of intellectual property protection felt threatened by the prospect of a standard that codifies more far-reaching flexibilities, as they feared that it could erode international intellectual property regulation.

In other words, the dispute over flexibilities for people with print disabilities served as a proxy war for the larger conflict on the appropriate level of international intellectual property protection. As the discussion in this section has shown, the principal challengers of the status quo in this regulatory dispute were users of copyrighted material and developed countries. Incumbents, by contrast, mainly included right holders and developed countries. To better understand the institutional context, in which both episodes of reform attempts took place, and how it changed over time, I provide an overview of the history of the governance area in the subsequent section.

[52] Digital talking books are specifically catered to the needs of people with print disabilities. In contrast to standard audio books, they are navigable, which facilitates educational uses in particular.

5.2 The Evolution of International Copyright Regulation

The origins of modern copyright, understood as a legal right that grants the creator of a work exclusive rights for its use and distribution, date back to the 18th century. In 1710, the Parliament of Great Britain passed the Statute of Anne, which was the first law that gave authors and publishers protection for a fixed period. The statute's formal title "An Act for the Encouragement of Learning, by Vesting the Copies of Printed Books in the Authors or Purchasers of Such Copies, during the Times therein Mentioned" foreshadows the utilitarian reasoning that copyright incentivizes creativity, which dominates thinking about intellectual property until today. Similarly, the stated purpose of the U.S. Copyright Clause of 1787 was "to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." Despite this resemblance, copyright laws varied wildly across countries over the course of the following 200 years. On the one hand, national differences reflected the influence of a second philosophical tradition, the personality theory of copyright, which was consequential for the evolution of "authors' rights" in continental Europe (Baldwin 2014; see also Ginsburg 1990).[53] On the other, copyright laws were the product of fierce distributional conflicts first at the domestic level and later on at the international level. Taken as a whole, however, the depth and scope of protection increased throughout the 19th and 20th century in almost all parts of the world. This section sketches how the different philosophical approaches to copyright were consolidated and, more importantly, how international standards for copyright came into place. In doing so, I trace the evolution of the institutional context of international copyright regulation.

The view that the expressions of ideas can be owned emerged during the European Enlightenment and found appeal among authors during the 18th century. Up to that point, most societies saw knowledge as a divine gift, for which one could not claim property. While authors began to seek monetary compensation for their works in the 15th century, property rights protected only the physical manuscript for another 300 years. However, the invention of printing led the European states to adopt laws on the distribution of books, which later served as important building blocks for the development of the institution of copyright. Amid rising religious tensions, states sought control over what texts could be

[53] In most common law countries, i.e. in the UK, the U.S. and many other Anglophone states, expressive works are protected by copyright, which primarily governs economic aspects of reproduction. In civil law countries, by contrast, expressive works are protected by authors' rights, such as the *droit d'auteur* in France and the *Urheberrecht* in Germany. Authors' rights systems, in addition to economic rights, recognize the inalienable moral rights of a creator. International copyright standards protect both economic and moral rights. In accordance with common usage, I generally refer to copyright.

published in their territories. To achieve this end, rulers in the early modern period granted commercial monopolies or "privileges" to printers in exchange for submission to censorship. The most advanced legal precursor to copyright existed in mid-17th century England, where the crown conceded the guild of printers and publishers, the Stationers' Company, a monopoly for printing in the entire kingdom in return for exercising pre-publication censorship (Hesse 2002; see also Long 1991). During the 17th century, the rate of literacy increased and a middle-class reading public emerged. As the demand for literature grew, authors realized that they could benefit financially from their creative work (Woodmansee 1984). In the 18th century, authors' claims for financial reward coincided with a turn in the discourse on authorship. German romanticism in literature from Herder to Goethe and idealism in philosophy from Kant to Fichte laid the intellectual foundation for an understanding of the author as the proprietor of his or her work (Rose 1988). At the same time, publishers had developed a vested interest in preserving the economic aspects of the old privilege system. While censorship was put into question as the European societies took a step towards greater openness, publishers had become a powerful enough lobby to secure many of their benefits (Hesse 2014). This convergence between the material interests of authors and publishers on the one side and new understandings about what can be owned shaped the emergent copyright laws that spread across Europe at the turn to the 19th century (May and Sell 2006, chap. 4).

However, copyright was not uncontested. From the beginning, the institution of copyright was fraught with tensions over the appropriate extent of the protection of private property and the role for the public domain (see Ginsburg 2006). As in patent legislation (see Machlup and Penrose 1950; MacLeod 1991), in copyright legislation, the private interests of authors and publishers collided with public policy goals. On the one hand, policymakers pursued the goal of creating a market for printed material. On the other, they sought to guarantee affordable access to books in order to achieve their aim of increasing public education. Copyright was also challenged by the practice of literary piracy. Until the mid-19th century, countries did not extend copyright protection to works by foreign authors. In many places, a commercial reprint industry thrived off selling unauthorized copies of successful foreign works (Hesse 2002, 40–41). In contrast to the Old World, where piracy was controversial, it was widely accepted in America (Johns 2009, chap. 8). As Banner (2011, 27) notes, "[i]n an era when the United States was a net literary importer, the politics of the issue favored the domestic reading public over foreign authors and publishers." U.S. copyright and patent laws of the time mirrored this view (Ben-Atar 2004, 125–26). As late as in

1891, U.S. Congress passed a copyright act, which included a manufacturing clause to defend its infant publishing industry (Khan 2002). The U.S. was a special case as a latecomer to economic development. Yet, initially, European copyright laws were also geared towards promoting the competitiveness of domestic authors and publishing industries.

The market for literary works expanded significantly following the industrial revolution, which brought innovations in printing. The invention of the rotary press and other technological improvements increased the output of publishers. Moreover, advances in transportation and efforts to remove tariffs and other barriers to trade allowed them to supply international markets (Dommann 2014, chap. 1). At the midpoint of the 19th century, authors and publishers began to pressure their governments to negotiate international rules to ensure the protection of their assets in other jurisdictions. An initial stage of bilateral contracting among the European states was followed by a series of multilateral conferences with the aim of regulation copyright through an international standard (Burger 1988, 8–15; Ricketson 1987). In 1886, eight countries agreed on a first multilateral treaty on copyright, the Berne Convention for the Protection of Literary and Artistic Works (Berne Convention), which to this day remains a cornerstone of the governance area.[54] The U.S. was excluded from joining the Berne Convention, at first because it retained a provision in its copyright law requiring authors to register their works. Later, the decision to uphold the manufacturing clause prevented the U.S. from the joining the Berne Union. The U.S. did not let the clause expire until 1986 and only became a member of the Berne Convention in 1988. Nonetheless, Congress passed legislation to extend copyright to foreign authors in 1891 and the U.S. started negotiating bilateral treaties on reciprocal treatment of copyrighted works (May and Sell 2006, 119–22).

International efforts to regulate copyright reach back longer in time than in most other areas of economic governance. Prior activities occurred in telecommunications, postal services, and measurement standards but most activities in regulatory standard setting did not take place until much later, often after World War II.[55] Briefly after the conclusion of the Berne convention, its member states set up an international organization to support further rulemaking in copyright and beyond. In 1893, the parties of the Berne Convention and the respective treaty in patent regulation, the 1883 Paris Convention for the Protection of In-

[54] The founding parties to the Berne Convention were Belgium, France, Germany, Italy, Spain, Switzerland, the United Kingdom, and Tunisia, which, at this point, was under French protectorate.
[55] The International Telegraphic Union was founded in 1865, the Universal Postal Union in 1874, and the International Bureau of Weights and Measures in 1875. The International Standardization Organization, for instance, was created in 1947.

dustrial Property (Paris Convention), established a secretariat to administer the two agreements. The United International Bureaux for the Protection of Intellectual Property (BIRPI)[56] was legally under Swiss supervision but quickly became the focal international institution for intellectual property rulemaking in the early 20th century.

Notably, BIRPI started out as a club of colonial powers. These states used this platform to not only diffuse intellectual property rights to other developed countries but also as an instrument of imperial rule (Okediji 2003, 321–25). The Berne Convention's founding members had designed it so as "to accede thereto at any time for their Colonies or foreign possessions" (Drahos 2002, 75–76). Consequently, upon signature, France and the UK declared that their accession to the Convention extended to their colonies (Ricketson 1987, 79). After decolonization, the former colonial powers were mainly interested in raising the standards of international copyright protection and further expanding their geographic reach. They continued to exploit the economic dependence of their former colonies to prevent their exit from and to promote accession to the Berne Convention. The BIRPI secretariat supported this by supplying a controversial interpretation of international law on the question of state succession, advocating a continuity of treaty obligations (Drahos 2002, 76).

Inevitably, this sparked a debate on intellectual property rights at the time of decolonization. At first, the conflict focused on patents. In the 1950s, a number of developing countries initiated a debate on technology transfer, which continued to rage on as part of the debate on the "New International Economic Order." Developing countries that were members of the Paris Union pushed unsuccessfully for a reform of international patent protection standards (Ryan 1998, 197). As they found BIRPI unresponsive to their demands, they tried to shift the debate to the UN, which they "perceived as a neutral forum without the 'vested interests' represented in the Pans Union that favoured developed countries, patent-holders and corporations" (Menescal 2005, 764). The secretariats of multiple UN organizations, including the United Nations Conference on Trade and Development, the United Nations Development Program (UNCTAD), United Nations Industrial Development Organization (UNIDO), and the International Labour Organization (ILO), saw the opportunity of enlarging their mandates by taking up intellectual property as a subject matter. Developed countries under pressure from right holder and industry associations sought to avert a shift of rulemaking authority to the UN system. When Brazil and Bolivia

[56] BIRPI is the acronym for the official French designation *Bureaux Internationaux Réunis pour la Protection de la Propriété Intellectuelle*.

tabled a draft resolution at the UN General Assembly in 1961 that called for a restructuring of the international patent system, the International Chamber of Commerce and the Association for the Protection of Intellectual Property swiftly rejected this demand (see Menescal 2005).[57] The draft resolution also alerted BIRPI's director, who felt prompted to pen "a letter to the Secretary-General of the UN drawing his attention to the interest of the International Bureau in this Resolution as being *the only International Organisation solely engaged in the development of the protection of industrial property* and offering his cooperation in any future work which might emerge as a result of the Brazilian Resolution" (BIRPI 1962, 40, emphasis my own).

The conflict spread to copyright quickly. Here, in a similar manner, developing countries and the U.S. attempted to engage in strategies of regime shifting and competitive regime creation. In 1951, a number of UNESCO member states led by the U.S. adopted another multilateral copyright standard, the Universal Copyright Convention (UCC), for countries with copyright legislations that were not in full accordance with the Berne Convention (Sandison 1986). More importantly, the UCC provided developing countries, which had not yet acceded to the Berne Convention, with a more flexible standard allowing for a larger public domain. To limit regulatory cherry picking, UNESCO member states agreed to an Appendix Declaration to the UCC. This clause states that members of the Berne Union need not apply the provisions of the UCC to states, which renounced Berne Convention in favor of the UCC. In other words, had a country already agreed to the higher standard, it could not go back without losing its copyrights in other participating jurisdictions (Ficsor 2013b, 5).

In copyright regulation, postcolonial struggles revolved around the issue of education. Beginning with the 1960s, providing mass education became a pressing issue for the newly sovereign states. Developing countries argued that, in addition to scarce resources, overly stringent international copyright standards constituted the main barrier to access to education material. On one hand, they could not afford to import textbooks because of the Western market pricing and publishers' unwillingness to make concessions. On the other, developed countries retaliated against the unauthorized reproduction of education materials, even when a "pirating" country was neither a member of the Berne Convention nor the UCC. Developing countries that were members of the Berne Convention thus called for a

[57] UN General Assembly, Resolution 1713 (XVI), The Role of Patents in the Transfer of Technology to Under-Developed Countries, A/RES/1713(XVI) (December 19, 1961), http://undocs.org/A/RES/1713(XVI).

reform of the treaty to facilitate knowledge transfer. Over the years, they developed a number of reform proposals, asking for a reduction in the duration of copyright, translation rights, the facilitation of licensing from Western publishers, flexibilities for educational purposes, the protection of folklore, and related matters (Story n.d., 50). While the BIRPI and the UNESCO secretariats expressed their support, the developed countries, under pressure from their publishing industries, rejected substantial reform proposals (Drahos 2002, 74–79). In a last-gasp effort, a group of developing countries threatened to exit the Berne Convention at the 1970 revision conference. A year later, jointly with the UCC an appendix to the Berne Convention was adopted, which introduced a number of watered-down flexibilities (Okediji 2006, 15–19; Ricketson 1987, 122–25). In the absence of a true institutional alternative to push for regulatory change, developing countries' drive for reform ultimately stalled.

Under challenge from UN organizations, in subsequent years, the BIRPI secretariat took action to become a "more normal international organization" (May 2007, 23). In a first step, in 1967, BIRPI member states approved of a proposal to recreate the organization as WIPO. When the proposal was implemented in 1970, this brought about a series of key changes. BIRPI had been essentially controlled by the Swiss government. BIRPI's recreation as WIPO accomplished that its members could assume responsibility for the organization's budget, program, and activities. In a second step, these reforms enabled WIPO to become a UN specialized agency in 1974. The driving force behind this process was Árpád Bogsch, WIPO's Deputy Director General at the time and later director general. He envisioned "WIPO as a universal organization for the protection of intellectual property and saw the link with the UN as a crucial mechanism to this end" (May 2007, 24). Bogsch and a number of developed countries were convinced that working within the UN system would persuade more developing countries to join WIPO, ensuring the organization's continued relevance (see Bogsch 1992, 28–29). Most importantly, proponents of this move argued that it would protect WIPO against the threat from other UN institutions and specifically help marginalizing UNESCO's role in copyright rulemaking. WIPO justified its claim to remain the focal point in the governance area by reference to its ability to preserve rule coherence (Okediji 2008, 76–81).[58]

[58] Even early proposals were explicit in this regard. A 1966 paper stated that "[w]hile UNESCO's present role in the administration of the Universal Copyright Convention would be left untouched, the new Organization is expected to be *the center of all new world-wide efforts for maintaining, improving, and adapting, the rules of international protection in the field of industrial property and copyright*" (BIRPI 1966, 183, emphasis my own).

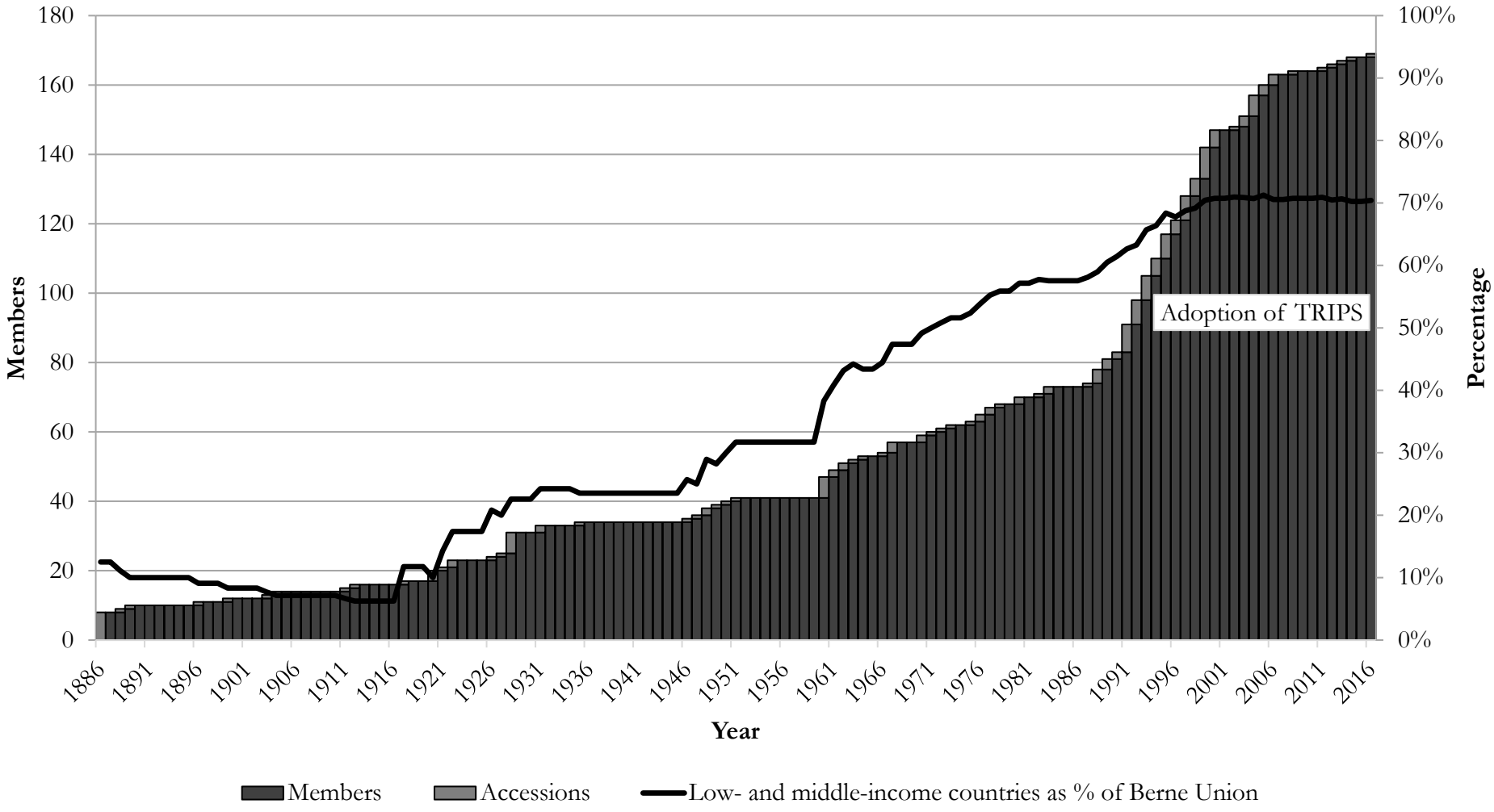
Other industrialized countries expressed concerns that developing countries would obtain the majority in WIPO and try to weaken international intellectual property protection. In effect, UN affiliation obliged WIPO to reconcile its mission with the UN's developmental mission, which involved cooperation with UNCTAD and UNIDO on the facilitation of technology transfer (May 2007, 25–27). While this had little immediate effect on WIPO, its affiliation with the UN system created tensions at later points in time and some the concerns of the developed countries were ultimately vindicated. WIPO's accession to the UN system "turned the organization from a rich man's club of industrialized countries into [one with] a potentially universal membership" (Ryan 1998, 126).

Looking at the Berne Convention alone, membership skyrocketed to 169 in 2016. The Berne Union expanded slowly from eight to about 40 members in the first 70 years of its existence. Its membership then doubled twice between 1960 and 1990 and between 1990 and the mid-2000s. What is more, the proportion of developing country members increased significantly from one eighth in 1886, and even lower figures in subsequent years, to about 70 percent today (see Figure 5.1).[59] In the long run, the Berne Convention's membership expansion changed the dynamics of collective action within the international institution. Changes in the composition of membership have introduced new problems and distributional concerns to the Berne Union.

Throughout the 1980s and 90s, the governance area again underwent sweeping transformations. In the meantime, international markets for copyrighted goods had shifted towards audiovisual media. Particularly the U.S. grew increasingly interested in producing and selling creative goods in developing and emerging economies. Yet it also faced rampant piracy, particularly in the realm of motion picture intellectual property. Furthermore, due to the increasing importance of computer software, it sought to expand international copyright standards to cover software code. These reasons compelled the U.S. to finally join the Berne Convention in 1988.

[59] I have coded developing countries using the latest UN classification of low- and middle-income countries (UN 2016, 162). This classification underestimates the number of developing countries before 2016. Thus, these figures are only indicative.

Figure 5.1: Less Developed Countries in the Berne Convention, 1886-2016



Sources: Author's illustration based on data from WIPO (2019b).

This was no more than a stepping-stone to an even more impactful development. A broad alliance of both copyright- and patent-based industries lobbied the U.S. government to put the issue on the agenda of the Uruguay Round of multilateral trade negotiations (see Drahos 2002, chap. 6; Ryan 1998, chap. 4; Sell and Prakash 2004, 155–57).[60] As previously marginalized developing countries constituted a growing proportion of the Berne Convention and WIPO's membership, the U.S. sought to shift the locus of intellectual property standard setting from WIPO to the nascent WTO and convinced the EU and Japan to support their cause (see Sell 2003). The Quad considered the newly established WTO preferable to WIPO for two main reasons. First, moving negotiations to the trade regime played to the strengths of the EU, the U.S., and other developed economies, as this allowed them to combine regulatory initiatives with the incentive of market access. Second, the WTO promised to improve compliance with standards, as its Dispute Settlement Body provided a sanctioning mechanism that WIPO had lacked (Helfer 2004b, 19–23). Following this shift to the WTO, WIPO initially struggled to remain relevant.

However, WIPO reestablished itself as an important regulatory forum in the following years. Due to the broader scope of issues covered, WTO negotiations generally take a long time. While WTO member states have brought a number of issues to the specialized TRIPS Council, the WTO is not well equipped to handle regulatory duties. This made it difficult to adapt copyright rules to the technological changes of the 1990s that had a fundamental impact on the production and consumption of creative goods. Digitization, on the one hand, decreased the marginal cost of many creative goods to effectively zero. Increases in internet access and speed, on the other, facilitated the distribution of digital works on a worldwide scale (see Kemp 2006). These changes presented a challenge for the business models of a wide variety of copyright-based industries, including film studios, record companies, and software producers (Dobusch and Quack 2013, 63; see also Levine 2011). Facing the prospect of increasing media piracy, right holders sought additional protection for their assets. WIPO with its specialized committees and expert bureaucracy provided a more suitable forum for negotiating precise standards for copyright in the digital age. In 1996, a portion of WIPO's member countries agreed on the so-called Internet Treaties, the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty, to facilitate the enforcement of copyright in the digital realm (see von Lewinski 2008, chap.

[60] This is not to suggest that the interests of all software companies or those of microchip producers and publishers fully converged. In fact, these industries, to some extent, had competing visions of how to reduce piracy and improve the enforcement of intellectual property rights on a worldwide scale. Yet most of these businesses agreed on a lowest common denominator: They all sought a more stringent international standard of protection (Sell 2010b, 765).

17).[61] At the time, the Internet Treaties were considered to reflect a relatively balanced approach to copyright (see Samuelson 1997). Yet, controversially, the WIPO Copyright Treaty outlawed circumvention technologies for digital rights management.[62] The anti-circumvention provision reignited the debate on copyright flexibilities, as technological protection measures may prevent uses that are allowed by limitations and exceptions (see Bach 2004).

The debate on copyright in the digital age has continued until today. On the one hand, questions of how to balance access to knowledge, civil liberties, and a functioning digital market have increased the salience of international copyright regulation in the Western hemisphere and beyond. On the other, the question of how to facilitate knowledge transfer has remained high on the agenda of developing countries. On the initiative of Argentina and Brazil, in 2004, WIPO has begun discussing a work program that combines access to knowledge *and* development issues (Muzaka 2013a; Suthersanen 2008). In 2007, WIPO adopted the Development Agenda, a package of 45 recommendations for intellectual property governance, including for rulemaking that strengthens flexibilities and the public domain (WIPO 2007).

In this section, I have laid out the history of international copyright regulation to provide context for the analysis of two attempts to bring about regulatory change for the benefit of people with print disabilities. In the remainder of this chapter, I carry out the analyses of these reform attempts.

5.3 The First Reform Attempt, 1977-1982

International intellectual property regulators discussed the issue of copyright flexibilities for the benefit of people living with print disabilities for the first time between 1977 and 1982. Reacting to a call to action by Brazil and a disability rights NGO in late 1977, the executive committees of the WIPO Berne Convention and the UNESCO UCC established a joint working group to study the issue and develop solutions. In October 1982, after three years of deliberations, the working group made a series of propositions to facilitate access to copyrighted works by people living with visual or auditory disabilities. The working group came up with a set of non-binding model laws. These aimed to provide guidance to member states of the two treaties for designing national laws on limitations and exceptions in accordance with international standards of protection. However, even after this process,

[61] The Internet Treaties entered into force in 2002.

[62] Digital rights management, colloquially known as copy control, refers to a set of technologies aimed at controlling the use and distribution of digital media.

member states and other stakeholders' opinions on whether copyright needed to be fixed and further measures should be adopted varied wildly. For some of the challengers the proposals did not go far enough. They demanded a hard law instrument. Others pledged to implement the model provisions. Still others, powerful incumbents in particular, including France, the Federal Republic of Germany, and the UK, repudiated the proposals, arguing that copyright was not the issue and that WIPO and UNESCO, consequently, should abandon their work on the subject. Unsurprisingly, the topic was buried briefly afterwards and the model provisions had little effect going forward.

Instead of a legal instrument, WIPO and UNESCO adopted a discretionary approach. The 1982 Model Provisions Concerning the Access by Handicapped Persons to the Works Protected by Copyright (*Model Provisions*) provided states with guidance on how to design more or less far-reaching legislation on copyright flexibilities for the benefit of people living with visual disabilities. However, they lacked explicit legal bindingness and important aspects remained underspecified. Why were weaker actors unable to get what they wanted? In what follows, I apply the institutional opportunity approach to this episode of attempted reform. I argue that a coordinated institutional context made it difficult for challengers, as it conferred agenda control to incumbents. The division of labor between WIPO and UNESCO accounted for a narrow opportunity structure, as it prevented challengers from pursuing strategies of institutional selection.

5.3.1 Regulatory Outcome: The 1982 *Model Provisions*

The 1982 *Model Provisions* set out two alternatives for drafting legislation on copyright flexibilities in accordance with international standards of protection. Alternative A allowed for the reproduction and distribution of copyrighted works in accessible formats without authorization by and remuneration for the right holder. In legal parlance, Alternative A amounts to a statutory exception to copyright, which constitutes a substantial curtailment of the exclusionary rights of the creator. Alternative B does not go as far as Alternative A, as it provides for a right to compensation for the right holder. This could amount to a compulsory licensing scheme, where specific uses are permitted against the payment of a lump sum. However, Alternative B does not specify whether consent would be required for every instance of conversion and distribution and thus can be interpreted as a narrow limitation to copyright. To accommodate the interests of right holders, both alternatives required states to define the individuals or organizations that are authorized to convert works into accessible format copies and distribute them. Under the stipulations of the *Model Provisions*, these authorized entities must be not-for-profit and need to ensure that copies will be

made accessible to people with visual disabilities only. Finally, both alternatives addressed a wide variety of accessible formats, including Braille, large print, sound recordings, and broadcasts, such as radio-reading services for the blind.[63]

The outcome scores high on the indicator of scope but low on the indicator of depth. The model provisions apply to a wide range of beneficiaries and cover a variety of accessible formats. Yet the outcome is not particularly demanding. The options permit for a variety of approaches, ranging from a broad exception to a narrow limitation to the exclusionary right of the creator. While Alternative A comes close to what challengers demanded, changes under Alternative B would be marginal. Depending on how states choose to implement Alternative A in legislation, this approach does not significantly facilitate the work of institutions that provide services to people with visual disabilities. On the legal dimension, the *Model Provisions* score low on both indicators. They are explicitly designed as soft law and thus lack binding force. States are free to choose whether to implement the *Model Provisions* at all and, if so, how to implement them as long as they comply with their existing treaty obligations (either the Berne Convention or the UCC). Moreover, the *Model Provisions* are underspecified as to what conducts are permitted. This raises concerns of legal certainty, particularly as relates to the cross-border transfer of works in accessible formats. In sum, the *Model Provisions* fit the outcome of *minor reform*. Table 5.1 summarizes the assessment.

Table 5.1: The 1982 Model Provisions—Measuring the Regulatory Outcome

Dimension/ Indicator	Observation	Measurement	Outcome
Significance			
Indicator 1A: Depth	Stark difference between the two alternatives: A far-reaching/ B marginal	**Low**	**Minor Reform**
Indicator 1B: Scope	Wide range of beneficiaries and formats	**Broad**	
Legal Nature			
Indicator 2A: Obligation	Voluntary instrument without explicit legal bindingness	**Low**	
Indicator 2B: Precision	Important aspects underspecified/left to the discretion of states; little legal certainty with regard to cross-border transfer	**Low**	

[63] United Nations Educational, Scientific and Cultural Organization and World Intellectual Property Organization, Working Group on Access by the Visually and Auditory Handicapped to Material Reproducing Works Protected by Copyright, Report, UNESCO/WIPO/WGH/I/3 (January 3, 1983), http://unesdoc.unesco.org/images/0005/000539/053955eb.pdf.

5.3.2 Institutional Context

What explains this outcome? To answer this question, I start by analyzing the institutional context. During the 1970s and 80s, WIPO, as the administrator of the Berne Convention and UNESCO, as the administrator of the UCC, formed an institutional complex for copyright regulation. Since the end of the 1960s, incumbents had worked towards establishing a division of labor between the two institutions as well as a de facto hierarchy with WIPO as the focal institution for rulemaking. The institutional opportunity approach submits that a coordinated context makes it difficult for challengers to influence regulatory outcomes if incumbents are united in their opposition to regulatory change.

The conflict over the continued applicability of the Berne Convention for former colonies and the North-South divide over knowledge transfer had thrown the international system of copyright regulation into disarray in the 1950s and 60s. Yet developing countries' strategies of what Morse and Keohane (2014) term "counter-multilateralism" to challenge BIRPI, WIPO's predecessor and the focal institution for intellectual property regulation, proved unsuccessful. Plans to shift rulemaking to fora in the UN system, such as UNESCO, which developing countries considered more responsive to their preferences, largely fell apart. Contrary to developing countries' expectations, the 1951 UCC did not rival the standards set by the Berne Convention and UNESCO emerged as an inadequate platform to press for reform. In response to demands by powerful Berne Union countries, the UCC was designed as "a 'low staircase,' a low-standard convention that would be open to all and would not in any way exclude the addition of new steps later" (Sandison 1986, 97). Over time, BIRPI and UNESCO developed a division of labor, which intensified after BIRPI's recreation as WIPO and its accession to the UN system.

This division of labor was built on two features. First, the Berne Convention and the UCC displayed institutional complementarities. In effect, the UCC, instead of providing an additional forum to challenge the regulatory status quo to challengers, lowered the barrier to entry for developing countries to and promoted their cooptation in the multilateral copyright system. Specifically, its design facilitated the transition of developing countries without prior commitments to international copyright regulation to a stringent standard of protection and, in so doing, benefitted incumbents. While the Berne Convention and the UCC differ in a number of respects, most importantly in their overall stringency, they are essentially compatible. At a substantial level, the UCC allowed its members to retain fixed terms

of copyright protection whereas the Berne Convention required protection terms based on the life of the author.[64]

Beyond that, both treaties are based on the principle of national treatment. Member states need to grant the same level of protection to right holders from other contracting parties as that provided to domestic right holders. Importantly, the UCC precluded actors from engaging in regulatory arbitrage. The Appendix Declaration ensured that countries that were already members of the Berne Convention could not withdraw without prejudice. This led to the establishment of a hierarchy between the two treaties and the respective institutions, in which UNESCO and the UCC on the one side functioned as the entry point to the international system of copyright regulation and WIPO and the Berne Convention on the other as the focal point for further rulemaking.[65]

Second, after WIPO acceded to the UN system in 1974, it established a system of co-governance with UNESCO. After the turmoil of the 1960s and early 70s, a comprehensive treaty revision was increasingly out of reach. According to a former assistant director general of WIPO in order to advance copyright rulemaking, the WIPO secretariat and the leading members of the Berne Convention thus lay the focus on "interpret[ing] the existing provisions."[66] They promoted soft law to identify points of agreement and build consensus with developing countries (von Lewinski 2008, 428; Ricketson 1987, 919–21). During what was termed the "guided development" period, joint meetings of the Executive Committee of the Berne Union and the Intergovernmental Committee of the UCC were held roughly every other year. In a number of cases, joint working groups were formed to address pressing issues (Ficsor 2013c). This effectively cemented WIPO's role as the focal point for regulatory coordination, as it prevented challengers from targeting one of the institutions to put an issue on the agenda of that institution only.

[64] Under Article IV the UCC, contracting parties need to protect works for a minimum of 25 years from the date of first publication. See Universal Copyright Convention as Revised at Paris on 24 July 1971, with Appendix Declaration Relating to Article XVII and Resolution Concerning Article XI 1971, July 24, 1971, 1161 U.N.T.S. 30. Article 7 of the 1971 revision of the Berne Convention requires its member states to grant protection for fifty years after the death of the author of a work. See Paris Act Relating to the Berne Convention for the Protection of Literary and Artistic Works, July 24, 1971, 1161 U.N.T.S. 31.

[65] Throughout the 1960s and 70s, BIRPI concluded a number of copyright treaties with UNESCO and the ILO, including the 1961 Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations and the 1971 Convention for the Protection of Producers of Phonograms against Unauthorized Duplication of Their Phonograms. However, the involvement of these UN organizations was more of a symbolic concession, as the agreements remained firmly in the grip of WIPO.

[66] Interview with Former Assistant Director General of the World Intellectual Property Organization, June 15, 2016.

In sum, the WIPO-UNESCO complex neatly fits the concept of a *coordinated context*. WIPO and UNESCO developed a division of labor, which involved joint sessions of executive committees as well as joint working groups to minimize frictions and overlap in regulatory authority. Second, with regard to conflict, although the standards of protection diverged, the two conventions were clearly compatible and displayed few if any ambiguities. Instead, the UCC promoted the accession of countries without prior commitments to international copyright regulation to the Berne Convention. While WIPO's focality had been challenged by UN organizations, including UNESCO, throughout the 1960s, its accession to the UN system led to the emergence of institutional complementarities and solidified its dominance in the complex. To be sure, UN specialized agency status forced WIPO to give greater consideration to issues related to knowledge transfer and economic development than it had done before. However, this institutional configuration guaranteed that the WIPO secretariat and incumbents could set the tone of the negotiations.

With regard to the dimension of differentiation, the WIPO-UNESCO complex fits the concept of an *integrated context*. Both indicators clearly point in the same direction. The WIPO-UNESCO complex displays low institutional density, as it comprises only two institutions. Moreover, it displays low diversity, as both institutions are highly similar in terms of the sub-issues covered. While UNESCO addresses culture, education, and science in a broader sense than WIPO, this has few if any practical implications for copyright rulemaking. I assume that the integration of the context facilitated efforts by challengers to mobilize allies and sustain collective action. Table 5.2 summarizes the analysis.

Table 5.2: The WIPO-UNESCO Complex—Assessing the Institutional Context

Dimension/ Indicator	Observation	Measurement	Overall Assessment
Interaction			
Indicator 1A: Overlap	Division of labor (linked via appendix declaration); coordinated rulemaking in joint committee sessions and working groups	**Low**	**Coordinated**
Indicator 1B: Inconsistence	Consistent rules and principles (both part of the UN system)	**Low**	
Structure			
Indicator 2A: Diversity	Elemental institutions address similar issues	**Low**	**Integrated**
Indicator 2B: Density	Low number of institutions in the governance area	**Low**	

Based on this assessment, we should expect the opportunity structure to be *narrow*. Due to the coordination of the institutional context, challengers should be unable to pursue strategies of institutional selection. However, challengers should be able to mobilize third parties and sustain collective action due to the integration of the institutional context. In what follows, I assess these hypotheses empirically and use process tracing to explore the causal sequence that led to the outcome.

5.3.3 Venue Selection and Agenda Setting

Challengers first put flexibilities for the benefit of people with visual disabilities on the agenda of international copyright regulators in late 1977. At that year's joint meeting of the executive committees of the Berne Convention and the UCC, Brazil asked the other members of the two conventions to establish a working group to study how copyright affected blind people's access to printed material and develop solutions. The delegate asserted that "existing national and international copyright regulations and practices frequently serve as a barrier to the publication and international exchange of such books and publications as those required by visually handicapped people."[67]

Brazil's efforts trace back to an initiative by the World Council for the Welfare of the Blind, a now defunct transnational disability rights NGO. In the wake of technological advances that facilitated the conversion of printed material into accessible formats and their dissemination in the 1970s, the World Council for the Welfare of the Blind had identified copyright as a field of activity (see Bronson 1979). It had established contact with the Brazilian government and the UNESCO secretariat in the previous year. Having secured support from these actors, it was poised to address the issue at the international level (de Gouvêa Nowill 1979, 234–36). At the 1977 WIPO-UNESCO meeting, the World Council for the Welfare of the Blind then successfully requested observer status with the committees to be able to participate in the rulemaking process. It is safe to assume that Brazilian's involvement was at least somewhat coincidental because the responsible official of the World Council for the Welfare of the Blind was from Brazil. Yet Brazil's preferences were also clearly compatible with those of the NGO. Since the 1950s, Brazil had demanded from developed countries that greater consideration be given to the needs of developing countries and public interest concerns in intellectual property regulation. Fittingly, the

[67] Executive Committee of the International Union for the Protection of Literary and Artistic Works (Berne Union) and Intergovernmental Committee of the Universal Copyright Convention, 12th Session (4th Extraordinary Session)/2nd Session, Application of the Berne Convention and the Universal Copyright Convention to Material Intended Specially for the Blind: Proposal from the Delegation of Brazil, B/EC/XII/16-IGC(1971)/II/19 (November 29, 1977), http://unesdoc.unesco.org/images/0002/000297/029711eb.pdf.

World Council for the Welfare of the Blind in its address to the WIPO-UNESCO meeting highlighted the responsibility of "the developed countries to help such handicapped persons to overcome the obstacles of their disablement, especially in developing countries" (WIPO 1978, 113).

Why did challengers decide to put the issue on the agenda of WIPO? After all, WIPO had been dominated by European powers historically and was regarded as an instrument of colonial rule by many developing countries. Consequently, challengers had tried to shift rulemaking authority on copyright to UNESCO in prior reform attempts, where developing countries constituted the majority. From the perspective of challengers, UNESCO offered a number of further advantages over WIPO for discussing reform. One of UNESCO's core purposes is to contribute to the advancement, transfer, and sharing of knowledge, particularly in the field of education, which makes it to discuss issues of access to knowledge of marginalized groups like people with disabilities. In fact, UNESCO officials explicitly credited the organization with facilitating the international dissemination of works in accessible formats (Sundberg 1974, 252). In 1950, the Florence Agreement had been adopted under the auspices of UNESCO,[68] pledging it signatories to abolish tariffs for educational, scientific and cultural materials. In 1976, the treaty was followed up by the Nairobi Protocol,[69] which explicitly addressed the import of works in accessible formats for people with print disabilities. Thus, at first blush, it seems like UNESCO would have been the obvious choice of forum to discuss copyright flexibilities for the benefit of people with visual disabilities as well.

However, as discussed in the previous section, the institutional context had shifted towards coordination since the beginning of the 1970s. After WIPO assumed UN specialized-agency status, WIPO and UNESCO established a division of labor, which prevented challengers from strategically targeting one of the two institutions to advance their regulatory agenda, particularly if the Berne Convention was concerned. For Brazil, which had been a

[68] Agreement on the Importation of Educational, Scientific and Cultural Materials, November 22, 1950, 131 U.N.T.S. 25.

[69] In the Nairobi Protocol, "the contracting States undertake not to levy on the materials listed below any internal taxes or other internal charges of any kind, imposed at the time of importation or subsequently: […] Other articles specially designed for the educational, scientific or cultural advancement of the blind and other physically or mentally handicapped persons which are imported directly by institutions or organizations concerned with the education of, or assistance to, the blind and other physically or mentally handicapped persons approved by the competent authorities of the importing country for the purpose of duty-free entry of these types of articles," see Protocol to the Agreement on the Important of Educational, Scientific and Cultural Materials, November 26, 1976, 1259 U.N.T.S 3. While the Protocol did not address non-tariff barriers to the international dissemination of accessible format copies, such as copyright, this shows that UNESCO had considered the issue of access to knowledge for people with disabilities prior to this reform attempt.

member of the Berne Union since 1922, it must have been clear that if it wanted to discuss copyright flexibilities in a meaningful way, it needed to involve WIPO from the beginning. The WIPO secretariat and incumbents would have insisted on discussing a regulatory issue that had implications for the standards set by the two conventions in a joint session of the executive committees anyhow.

WIPO's admission to the UN system required the secretariat and incumbents to show greater concern for developmental and human rights issues and take into account the activities of other UN agencies. The agreement recognizing WIPO as a UN specialized agency stresses WIPO's role:

> The United Nations recognizes the World Intellectual Property Organization […] as being responsible for promoting creative intellectual activity and for *facilitating the transfer of technology related to industrial property to the developing countries in order to accelerate economic, social and cultural development,* subject to the competence and responsibilities of the United Nations and its organs, particularly the United Nations Conference on Trade and Development, the United Nations Development Programme and the United Nations Industrial Development Organization, as well as of the United Nations Educational, Scientific and Cultural Organization and of other agencies within the United Nations system.[70]

As a result, a number of issues, for which incumbents had shown little concern before the granting of specialized agency status, such as the protection of folklore and traditional knowledge, found their way on WIPO's agenda in subsequent years. Moreover, in 1976, the UN General Assembly had proclaimed 1981 to be the International Year of Disabled Persons, which put additional pressure on the WIPO executive committee to consider the issue of access to knowledge for people with visual disabilities.[71] These factors allowed challengers to involve WIPO in their reform attempt and add the issue to the WIPO-UNESCO agenda (WIPO 1978, 113).

Nonetheless, the co-governance between WIPO and UNESCO conferred significant control to incumbents over the terms, under which the issue would be discussed. Particularly the founding members of the Berne Convention envisioned WIPO as a forum to discuss

[70] UN General Assembly, Resolution 3346 (XXIX), Agreement between the United Nations and the World Intellectual Property Organization, A/RES/3346(XXIX) (December 17, 1974), http://undocs.org/A/RES/3346(XXIX), emphasis my own.
[71] UN General Assembly, Resolution 31/123, International Year for Disabled Persons, A/RES/31/123 (December 16, 1976), http://undocs.org/A/RES/3346(XXIX).

minimum standards of copyright protection and not flexibilities. They argued that limitations and exceptions were a national matter and that countries should pass legislation based on their needs as long as they complied with their international commitments. Thus, at this stage, incumbents did not make far-reaching commitments. The committees of the two treaties commissioned the World Council for the Welfare of the Blind to carry out a preliminary study and requested the member states to submit existing national level solutions. In accordance with the "guided development" approach, all parties agreed that a working group would provide the optimal instrument to build consensus and develop solutions if needed. Even right holders welcomed the proposal but requested inclusion in a working group (WIPO 1978, 114). In sum, the institutional context exacerbated venue selection by challengers and favored incumbents, as it enabled them to steer the debate and avoid any outcome that they fundamentally disagreed with.

5.3.4 Negotiations and Conflict Expansion

Negotiations on regulatory reform were slow to take off. At the joint meeting of the committees in 1979, the World Council for the Welfare of the Blind presented the commissioned study. It highlighted three major barriers that copyright imposes on access to knowledge for people with visual disabilities: time-consuming procedures for obtaining authorization for converting works into accessible formats from right holders, fees for converting works into accessible formats or producing additional copies in accessible formats, and issues related to the transfer of accessible copies between countries that share a language.[72] Finally, it assessed that the extent to which countries granted flexibilities to people with visual disabilities varied wildly and that at least some of these barriers existed in all countries studied.[73] This had an effect on the committees. In the final statement, all delegations agreed on the "importance of such problems and on the pressing need to take whatever action was appropriate, whether legislative—if such action had not already been

[72] India and other English-speaking developing countries in particular expressed their interest in the cross-border transfer of works in accessible formats, noting that U.S. laws did not permit the exportation of converted copies to other countries. In the German-speaking countries price-reduced international mailings for the blind (*Blindensendung*) have existed since the late 19th century. In the post-war period, the German Federal Post Office extended postage-free mailing to a number of accessible formats, including Braille, audiobooks, and, today, mediums in the DAISY format. While free matter for the blind has also been available in the U.S. for some time, the practice of exchanging works in accessible formats rights did not go along with the rights to reproduce or make available these copies to other potential beneficiaries. Even in the German-speaking countries, significant differences remained with regard to copyright laws and contractual arrangements with the collecting societies. See Interview with President of the *Mediengemeinschaft für blinde und sehbehinderte Menschen* [German Media Association for People Who Are Blind or Visually Disabled], March 31, 2016.

[73] Executive Committee of the International Union for the Protection of Literary and Artistic Works (Berne Union) and Intergovernmental Committee of the Universal Copyright Convention, 14th Session (5th Extraordinary Session)/3rd Session, Application of the Berne Convention and the Universal Copyright Convention to Material Intended Specially for the Blind, B/EC/XIV/13—IGC(1971)/III/16 (January 9, 1979), http://unesdoc.unesco.org/images/0003/000359/035960eb.pdf.

taken—or in the field of contracts, in order to solve these problems" (WIPO 1979, 87).[74] Yet the statement also makes clear that the committees did not deem necessary an international instrument. Instead, the committees expressed hope that the dissemination of the report would boost right holders' readiness to facilitate access without state intervention. The members should then decide independently whether they would take legislative action.[75]

Negotiations stalled for another two years until Brazil brought the issue up again at a joint committee meeting in late 1981. The Brazilian delegation pointed out that countries still made little use of the leeway provided by the international conventions to adopt limitations and exceptions to copyright. To help countries draft legislation for the benefit of people with visual disabilities in accordance with their international treaty obligations, Brazil requested WIPO and UNESCO to develop model laws. Moreover, Brazil asked the committees to consider developing an international licensing system based on bilateral agreements or additional protocols to the multilateral copyright conventions to improve access to knowledge for people with disabilities on a global scale. The U.S., at this point still only a member of the UCC and not the Berne Convention, supported Brazil's call to action. It presented a report by its Copyright Office, compiling the comments received from other members of the conventions on the 1979 study by the World Council for the Welfare of the Blind. The report confirmed the issues but it did not indicate a clear path forward, much less a need to revise the Berne Convention. Thus, at the suggestion of Brazil and the U.S. and with support from most other delegations, a working group was created to debate solutions (WIPO 1982, 73–74).

After establishing the issue on the agenda, challengers succeeded—at least to some extent—in defining the lack of accessible printed material for people with visual disabilities as a copyright issue. In so doing, the World Council for the Welfare of the Blind and Brazil were able to recruit a powerful ally in the U.S. Yet even among proponents of greater copyright flexibilities there was little agreement on what constituted an appropriate policy solution. The institutional context not only constrained challengers in their choice of forum, it also constricted them in developing reform proposals. On the one hand, the co-governance

[74] Intergovernmental Committee of the Universal Copyright Convention, 3rd Session, Report on the First Part of the Third Session of the Committee, IGC(1971)III/19 (March 30, 1979), http://unesdoc.unesco.org/images/0003/000353/035325eb.pdf.

[75] The committee also considered whether copyright imposed similar barriers on access to knowledge for people living with auditory disabilities. While the issue was addressed in subsequent discussions by the committees sporadically, it was considered much less systematically than the issue of access to knowledge for people with visual disabilities and no organization from the deaf or hard of hearing community was invited to participate.

arrangement between WIPO and UNESCO put incumbents in a position to retain control over every step in the rulemaking process. Consequently, challengers needed to adhere to the established guided development approach, which was geared towards producing recommendations instead of a legally binding instrument. On the other, the absence of rule conflict made it difficult for challengers to point out alternative paths of regulatory development.

Challengers were well aware of these difficulties. Thus, in the meantime, the World Council for the Welfare of the Blind had begun reaching out to other potential allies in an attempt to further politicize the issue and exert pressure on incumbents to give in to their demands. Specifically, it had contacted the International Federation of Library Associations and Institutions at the latter's council meeting in 1978, which resulted in the formation of a coalition between the two NGOs (see also WIPO 1980). The International Federation of Library Associations and Institutions swiftly adopted a position of support for the World Council for the Welfare of the Blind:

> Copyright is one reason for the insufficiency of materials for the handicapped, as it can delay, encumber, restrict or prevent the production and dissemination of alternate media materials. The IFLA [International Federation of Library Associations and Institutions, the author] Round Table on Libraries for the Blind deplores all barriers to the free flow of materials for the handicapped, and considers that regulations, practices and procedures which prevent or unduly delay handicapped individuals from reading copyrighted materials in alternate media, are discriminatory and in violation of the basic human right of free access to public information.[76]

In what followed, the two NGOs developed a strategy to achieve regulatory reform in the form of revisions of the Berne Convention and the UCC. However, as a joint report demonstrates, they knew that they could not circumvent the institutionalized regulatory process:

> At the international level recognition of the ideal solution would be that of revising the conventions to provide specifically for a special provision for the benefit of the handicapped. To have the Conventions revised for that purpose alone is most un-

[76] Executive Committee of the International Union for the Protection of Literary and Artistic Works (Berne Union) and Intergovernmental Committee of the Universal Copyright Convention, 19th Session (7th Extraordinary Session)/4th Session, Application of the Berne Convention and the Universal Copyright Convention to Material Intended for the Blind, B/EC/XIX/12—IGC(1971)/IV/15 (5 November 1981), http://unesdoc.unesco.org/images/0004/000467/046715eb.pdf.

> likely. […] Proposals for revision are seldom the result of one meeting or at the urging of one government. Rather, proposals result from a fusion of efforts taking place over several years in numerous meetings of various groups. […] Revision conferences require considerable preparatory work, cost large amounts of money and, normally, are held only when the direct interests of States are involved. […] It would be entirely appropriate for IFLA [the International Federation of Library Associations and Institutions] and W.C.W.B. [the World Council for the Welfare of the Blind] to initiate proposals advocating the putting forward a draft resolution for adoption by the General Conference. Such a resolution would identify the problem, and urge the necessity of adopting solutions. It could advocate particular solutions and be couched in terms of the General Conference calling upon Member States to solve the problems (Hébert and Noel 1982, 60–62).

Throughout the negotiations, the International Federation of Library Associations and Institutions collaborated with the World Council for the Welfare of the Blind to produce additional studies on the subject. In particular, the International Federation of Library Associations and Institutions' lawyers provided legal expertise, demonstrating that limitations and exceptions for people with visual disabilities, in principle, were compatible with both the Berne Convention and the UCC (Hébert and Noel 1982, 67–68). This demonstrates that challengers' efforts to expand the conflict and involve potential allies were at least somewhat effective.

This did little to alter the modus operandi of the working group, however. The working group met only once for a two-day session in October 1981. Incumbents were clearly better represented at the meeting than challengers. In addition to the member countries of the conventions, the meeting involved the World Council for the Welfare of the Blind and the International Publishers Association in advisory capacity. Beyond that, a number of NGOs were admitted as observers, including the International Federation of Library Associations and Institutions. Yet most participating non-state actors were right holder organizations or industry associations. This overrepresentation of business actors was no statistical fluke. The World Council for the Welfare of the Blind was one of the first civil society organizations to be accredited to the committees. As the attendance lists show, during the 1970s and 80s, on average, around twenty NGOs participated regularly in the committee meetings of the Berne Union and the UCC, practically all of which belonged in the camp of right holders and copyright-based industries. At the working group meeting, this translated into what participants perceived to be a mostly one-sided debate. According to the chair of

the working group, "the real discussion took place between the representatives of developing countries, some industrialized countries, and the industry" (Knowledge Ecology International 2012).

The composition of the working group also showed through in the final statement of the working group meeting, which made mostly superficial concessions to stakeholders. Again, the participants agreed on the importance of the issue. They recognized that a facilitation of the international exchange of accessible format copies could increase the availability of printed material for people with visual disabilities. Moreover, the participants deemed flexibilities for the benefit of people with visual disabilities mostly unproblematic from a business perspective, as the market for works in accessible formats was relatively small. Last, they acknowledged that limitations and exceptions would neither contradict the UCC nor the Berne Convention. However, the statement also noted that "the problem under consideration was of social nature and that the copyright owners should not be the only ones to bear the burden of its solution."[77] It made clear that solutions should not undermine the exclusive right of the author and that any provision would need to strike "a proper balance between the needs of handicapped persons and the legitimate interests of copyright owners."[78] In the end, the format of the negotiations played into the hands of the incumbents who were unwilling to engage in further standard-setting activities. Instead, incumbents agreed to the adoption of the *Model Provisions* as a compromise.

5.3.5 Adoption and Aftermath

As discussed at the beginning of this case study, the working group developed two alternative model laws, an outright exception and a less far-reaching limitation to copyright. The Model Provisions put no obligations on the members of the two conventions. Instead, they left it to the discretion of the member states to determine whether and, if so, what legislative changes they considered necessary. It was clear to all participants that this was a modest outcome for an issue that everybody had declared important. In the discussion of the working group report at the joint committee meeting in early 1983, the chair of the working group expressed his dissatisfaction with the result, noting that it could "endanger the positive image of copyright and the public support for solving the fundamental problems of copyright protection."[79] Similarly, the U.S. also criticized the result, arguing that "owners

[77] UNESCO and WIPO,Working Group on Access by the Visually and Auditory Handicapped to Material Reproducing Works Protected by Copyright, Report, UNESCO/WIPO/WGH/I/3, (January 3, 1983), http://unesdoc.unesco.org/images/0005/000539/053955eb.pdf.
[78] Ibid.
[79] Ibid.

of copyright should understand that the prerogatives conferred on them had to be accompanied by certain obligations if copyright were to retain its esteem in the eyes of the public, which is important to modernize copyright laws."[80] However, the U.S. was the only of the advanced capitalist economies favoring an international instrument. Incumbents sided with right holders who favored a negotiation-based approach, as they feared that an outright exception "would undermine the basic principles of the exclusive right of authors".[81] Most countries did not speak out in favor of one of the alternatives and only the Soviet Union took a clear stance in favor of a statutory exception for people with visual disabilities (WIPO 1984, 62–64).

The issue was addressed once again at a joint committee meeting in 1985. Actors remained divided over what constituted an appropriate solution. Surprisingly, however, the discussion turned more heated than it had ever been before. This was due to a number of countries, including Brazil, Guinea, Portugal, and the U.S., pleading the committees to undertake more work on the issue and consider the possibility of an international instrument. The secretariats of WIPO and UNESCO issued a report, supporting this proposal:

> Another solution to the dual problem of production and distribution is the suggestion to formulate an entirely new international instrument which would permit production of special media materials and services in member states, and the distribution of those materials and services amongst member states without restriction. […] This solution is recommended on the ground that it would solve both production and distribution problems by providing a legal mechanism for sharing materials and services for the handicapped around the world.[82]

This went counter to the interests of the incumbents. As one of the most forceful opponents of reform, the Federal Republic of Germany went so far as calling into question whether issues of access to and availability of accessible format copies of printed material were truly "a matter of copyright". Consequently, Germany argued that changes to copy-

[80] Executive Committee of the International Union for the Protection of Literary and Artistic Works (Berne Union) and Intergovernmental Committee of the Universal Copyright Convention, 22nd Session (8th Extraordinary Session)/5th Session, Model Provisions Concerning the Access by Handicapped Persons to the Works Protected by Copyright, B/EC/XXII/13—IGC(1971)/V/13 (October 17, 1983), http://unesdoc.unesco.org/images/0005/000568/056804eb.pdf.

[81] Ibid.

[82] Executive Committee of the International Union for the Protection of Literary and Artistic Works (Berne Union) and Intergovernmental Committee of the Universal Copyright Convention, 24th Session (9th Extraordinary)/6th Session, Copyright Problems Raised by the Access by Handicapped Persons to Protected Works, B/EC/XXIV/10—IGC(1971)/VI/11 (March 12, 1985), http://unesdoc.unesco.org/images/0006/000651/065169eb.pdf.

right laws and, particularly, revisions to the international copyright conventions would not solve the problems of people with visual or other disabilities. Instead, governments should spend more money on inclusion policies. Similarly, the UK deemed both solutions inacceptable. Along with France, the UK advocated for voluntary contractual arrangements between right holders and beneficiaries. Canada, which had also become staunch supporter of stringent standards of copyright protection during the 1970s (see Erola and Fox 1984), took a more nuanced position and argued that any limitations and exceptions needed to be drafted carefully in order not to be misused by unintended beneficiaries (WIPO 1985, 283–84).

Ultimately, incumbents were able to quash the suggestion of discussing an international instrument and the committees did not return to the issue after this session. Taken as a whole, after the adoption of the Model Provisions, the reform attempt broke down, as incumbents were able to block proposals to engage in discussions about treaty revisions or a new instrument. Challengers, by contrast, were unable to exert enough pressure on incumbents to force further negotiations on the issue in order to achieve a more binding outcome. The effect of the Model Provisions was limited. Little suggests that countries actually implemented one of the two model laws or oriented themselves towards one of the alternatives in drafting copyright legislation.[83]

What explains the failure of reform in this case? I argue that the coordinated institutional context provided only a marginal opportunity structure for challengers. To be sure, the accession of WIPO to the UN system required incumbents to give greater consideration to human rights and development issues and allowed challengers to put the issue on the agenda of international regulators. However, the co-governance arrangement between WIPO and UNESCO made it difficult for challengers to select a forum for negotiations and gave incumbents control over how the issue was discussed. As a result, incumbents were able to dictate the course of negotiations, which involved the creation of a working group where opponents of reform were overrepresented. While challengers were able to expand the conflict and mobilize a number of allies to join their effort, they could not exert enough pressure on incumbents to go beyond the *Model Provision*.

[83] In 1980, Australia had adopted an amendment to its copyright act that introduced an exception for people with visual disabilities. Yet legislative processes had already been underway before they were put on the agenda of international regulations and the influence of international-level discussions on these processes was probably minimal. Canada had also started discussing a revision of its copyright law in 1977. However, an exception for the benefit of people with perceptual disabilities was not adopted until 1997.

5.4 The Second Reform Attempt, 2002-2013

In 2002, a group of challengers put the issue of access to knowledge for people with disabilities back on the agenda of international copyright regulators. A coalition of NGOs, including Knowledge Ecology International, an influential access to knowledge advocacy organization, Electronic Information for Libraries, a global network of libraries and library consortia, and the World Blind Union, the successor organization of the World Federation for the Welfare of the Blind, reinitiated the debate at WIPO. Again, this prompted Brazil and a number of other Southern countries to support the effort. As in the earlier episode of attempted reform, these actors met strong opposition by powerful incumbents, in particular the EU and the U.S. To the surprise of everyone, eleven years later, all parties agreed on an effective standard for the benefit of people with print disabilities. Some right holders have continued to express reservations about the outcome and implementation has been notably slow in the EU and the U.S. Yet, all in all, this reform attempt has been widely successful.

The *Print Treaty* marks a break from an established pattern in international copyright regulation. Existing copyright standards had largely focused on setting rules for the protection of expressive works. The *Print Treaty* introduces a mandatory limitation to copyright. In marked contrast to the *Model Provisions*, the *Print Treaty* is legally binding and requires signatories to change their copyright laws in multiple ways. What explains the success of challengers in this case? The actor constellation and the problem structure are highly similar across cases. I argue that shifts in the institutional context accounted for an opening of the opportunity structure. The adoption of TRIPS and, as a consequence thereof, the emergence of the WTO as a forum for copyright regulation challenged WIPO as the focal institution for copyright rulemaking. The more competitive relationship between the elemental institutions in the governance area enabled challengers to choose a forum for pressing reform. At the same time, the institutional context remained integrated, facilitating challengers' efforts to mobilize allies and expand the conflict.

5.4.1 Regulatory Outcome: The 2013 *Print Treaty*

The *Print Treaty* changed the status quo in copyright regulation in a number of ways, two of which are of particular importance. First and foremost, it requires contracting parties to have a limitation or exception to copyright law for the benefit of people who are blind, visually disabled, or live with other print disabilities.[84] Specifically, it stipulates that member

[84] The *Print Treaty* uses the same definition of print disability that I have used at the beginning of the chapter.

countries need to allow "authorized entities" to make accessible format copies of published works and distribute these accessible format copies to the beneficiaries of the treaty. Authorized entities are government agencies or private non-profit organizations that are recognized by the government and provide services to print-disabled persons.[85] Along these lines, the treaty also permits print-disabled persons to make personal use copies of accessible format copies, granted they have lawful access to them. A member state can only confine these rights for works that can be "obtained commercially under reasonable terms for beneficiary persons" on the mass market only under very specific circumstances and needs to pass note to the WIPO Director General in case it chooses to do so.[86]

Second, the *Print Treaty* requires contracting parties to allow the cross-border transfer of accessible format copies via authorized entities without right holder authorization to other signatory countries. If an authorized entity is allowed to produce an accessible format copy of a work, it may instead import that work as an accessible format copy from another country to avoid duplication of efforts. This also applies to print-disabled users who are permitted to use the services of foreign authorized entities. Conversely, authorized entities are allowed to export accessible format copies to authorized entities or designated users in other member countries of the *Print Treaty*. With regard to the importation and exportation of accessible format copies, the treaty obliges its signatories and WIPO to cooperate and share information. Member states commit themselves to help domestic authorized entities in identifying peers in other countries to promote the cross-border transfer of accessible format copies.

Beyond that, the *Print Treaty* includes a soft provision on technological protection measures. It does not release contracting parties from other treaty obligations that require the prohibition of circumvention technology, such as the provisions in the 1996 WIPO Internet Treaties. However, the treaty requests members to ensure that print-disabled persons are not prevented from enjoying the limitations and exceptions provided for by the Print Treaty through technological means—even if they are lawful. In contrast to the two changes discussed above, this clause constitutes a declaration of intent and not a legally binding obligation.

[85] Authorized entities are required to ensure that they supply accessible format copies only to print-disabled users.

[86] Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled, June 27, 2013, https://wipolex.wipo.int/en/text/301019.

The *Print Treaty* breaks with multiple longstanding principles in international copyright regulation and, indeed, intellectual property regulation. Preexisting regulation in the governance area laid the focus on setting minimum standards of protection. Rulemaking almost exclusively has been about what legal protection states needed to grant to domestic and foreign creators and innovators. At most, some standards defined what flexibilities to national intellectual property laws were acceptable. In copyright regulation, the 1967 revision of the Berne Convention introduced the so-called "Three-Step Test" to determine whether a limitation or exception is appropriate:

> It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.[87]

The Three-Step Test has been the gold standard for limitations and exceptions in international copyright law ever since and has also been included in the TRIPS Agreement in semantically modified yet functionally identical form (see Geiger, Gervais, and Sentftleben 2013; Senftleben 2004). Opponents of binding rules for flexibilities have argued that these three criteria (the restriction of a limitation or exception to a clearly defined case, the absence of conflict with the normal commercial exploitation of a work, and the absence of prejudice to the legitimate interests of the author) are sufficient for countries to design laws that guarantee public access to knowledge.[88] However, the Berne Convention and TRIPS do not require states to introduce limitations or exceptions to their copyright laws for any cases.[89] Instead, there had been no copyright standard dedicated to setting rules for what is to be excluded from intellectual property protection prior to the adoption of the *Print Treaty*. Before the conclusion of the *Print Treaty*, even legal experts sympathetic with the idea of greater flexibilities to international copyright rules expressed skepticism as to whether an

[87] Berne Convention for the Protection of Literary and Artistic Works Revised at Stockholm (with Protocol Regarding Developing Countries), July 14, 1967, 828 U.N.T.S. 221.

[88] Opposition to a binding instrument has been pronounced in legal circles. Multiple legal experts have discounted a hard law solution as unnecessary. Hely (2010) and von Lewinski (2010), for instance, were outspoken critics of a legally binding solution and have advocated for soft law solutions instead. As some of these experts have participated in the negotiations on the *Print Treaty*, I return to this point in later parts of the analysis.

[89] As Okediji (2006) notes, the Berne Convention and TRIPS exclude certain matters from copyright protection, such as the "news of the day" or "miscellaneous facts having the character of mere items of press information." They also define certain uses for which no compensation is required, such as quotations for the purpose of book reviews, criticism, news commentary and the like, provided the user is in possession of a legitimate copy of the work in question. Finally, the Berne Appendix goes a step further and defines a number of conditions under which bulk access "that is, access to multiple copies of a copyrighted work at affordable prices" (Okediji 2006, 15) is possible. However, the Berne Appendix puts high requirements on countries that want to make use of its provisions and, as a result, has been used rarely.

international legal instrument on limitations and exceptions would be feasible or even desirable (see B. K. Baker 2013; Hugenholtz and Okediji 2008). Consequently, commentators from all sides of the legal debate agreed that the treaty is exceptional (Ficsor 2013a, 6–7).

In contrast to the *Model Provisions*, the *Print Treaty* scores high on both indicators of the significance dimension. The scope of changes is considerable. While the treaty targets a specific range of beneficiaries, i.e. people with print disabilities, their number is quite large, as discussed at the beginning of the chapter. The treaty introduces changes related to both access to a class of expressive works and the import and export of copies of these works. With regard to depth, the changes it requires are demanding, as they deviate significantly from what countries needed to do under the regulatory status quo ante. The differences to the *Model Provisions* are even more pronounced on the legal dimension. The outcome is an international treaty and, as such, explicitly binding. Furthermore, the most important changes it introduces are mandatory. It is also precise, as it unambiguously defines what conduct is required from its signatories and addresses how its provisions relate to obligations under other copyright treaties, including the Berne Convention, the Internet Treaties, and TRIPS, and ensuring its compatibility with the Berne Three-Step-Test. In sum, the *Print Treaty* fits the outcome of *major reform*. Table 5.3 summarizes the discussion.

Table 5.3: The 2013 Print Treaty—Measuring the Regulatory Outcome

Dimension/ Indicator	Observation	Measurement	Outcome
Significance			
Indicator 1A: Depth	Limitation/exception for the benefit of people with print disabilities; allows for cross-border transfer of copyright-protected works	**Deep**	**Major reform**
Indicator 1B: Scope	Wide range of beneficiaries and formats	**Broad**	
Legal Nature			
Indicator 2A: Obligation	Legally binding; requires signatories to adopt limitation/exception	**High**	
Indicator 2B: Precision	Expected behavior is clearly specified; relationship to other treaty obligations is clear (including with regard to technological protection measures)	**High**	

5.4.2 Institutional Context

What explains the more substantial outcome in this case as opposed to the outcome of minor reform in the first case? I argue that a shift in the institutional context of copyright regulation caused an opening of the opportunity structure for challengers. As discussed in

the analysis of the first reform attempt, the institutional context of the 1970s and 80s was characterized by a division of labor between WIPO as the host of the Berne Convention and UNESCO as the host for the UCC. This changed with the adoption of TRIPS in 1994. The entry of the WTO in the governance area challenged WIPO as the focal institution for copyright rulemaking. In subsequent years, UNESCO became irrelevant for copyright and rulemaking and WIPO and the WTO developed a competitive relationship, which allowed actors dissatisfied with the regulatory status quo to engage in strategies of institutional selection. In this section, I depict the WIPO-WTO complex for copyright regulation and elaborate on the opportunity structure it provides for challengers.

Paradoxically, the competitive relationship between WIPO and the WTO and the consequent opening up of the opportunity structure for challengers was the product of incumbents attempting to cement their control over rulemaking in the issue area. During the 1980s, the U.S. and other industrialized countries grew discontented with what they perceived as a lack of progress in intellectual property standard setting and enforcement. For this reason, they attempted to anchor rulemaking in the trade regime where they could leverage their market power more effectively. These states acted in concert to conclude TRIPS and, in so doing, substitute the ineffective WIPO "talking shop" with the WTO as the new focal point for international intellectual property rulemaking (Drahos 2002, 110–14; May 2009, chap. 3; Sell 2003, 2010b).

Ultimately, this plan did not come to fruition. On the one hand, it stirred opposition on behalf of developing countries and the WIPO secretariat, fearing that WIPO would lose its regulatory authority and devolve into a global royalty collecting society for the Global North. On the other, proponents of more stringent standards quickly realized that the encompassing nature of WTO negotiations made it unsuited for the intricacies of standard setting. From the perspective of beneficiaries, TRIPS provided only the baseline for further rulemaking in both copyright and patent regulation, as its provisions did not go much beyond what had already been codified in WIPO treaties (Sell 2010a). Moreover, the WTO with its relatively small secretariat was unable to replace WIPO as a provider of legal expertise and technical assistance for the implementation of intellectual property standards. Due to its stewardship of the Patent Cooperation Treaty WIPO has an additional stream of income available that allows the organization to preserve its independence from member states (May 2007, 32–35). Consequently, WIPO proved too valuable and, thus, could stay relevant despite the challenge from the WTO.

The counter-multilateralism of developing countries in the 1960s and 70s resulted in the establishment of a division of labor between WIPO and UNESCO. In marked contrast to this, the attempt at regime shifting by the developed countries to the WTO resulted in greater competition between the elemental institutions of the governance area (Helfer 2004a). To be sure, there have been efforts to establish a division of labor between WTO and WIPO, including through a formal agreement between the two organizations. In the 1995 WTO-WIPO Cooperation Agreement, the two institutions expressed their desire "to establish a mutually supportive relationship" as well as "appropriate arrangements for co-operation between them".[90] As a result, enforcement now clearly falls in the purview of the WTO with its Dispute Settlement Body. Technical assistance, by contrast, is exclusively carried out by WIPO, as its secretariat is uniquely equipped for this task. Yet severe tensions remained, since other governance activities of the two institutions intersect. Specifically, WIPO committees and the TRIPS Council both assert claims to rulemaking authority, which has resulted in a "highly antagonistic context" (Eimer and Schüren 2013, 547).[91] This is amplified by the fact that the two institutions practically have the same principals, as they share almost all of their members, resulting in contest for resources (May 2007, 34; Muzaka 2011).[92] By implication, however, this rivalry has also opened up new possibilities for challengers to engage in strategies of institutional selection.

Again, the two institutions display little conflict in terms of substantive rules. While there are some differences in patent rules, the copyright provisions in TRIPS are practically identical with the Berne Convention.[93] Yet WIPO and the WTO vary in terms of purposes and decision-making processes. WIPO as a UN specialized agency, is obliged by its statutes to address human rights and development concerns, specifically including the issue of knowledge and technology transfer.[94] As TRIPS requires WTO members to adhere to

[90] Agreement between the World Intellectual Property Organization and the World Trade Organization, December 22, 1995, https://www.wto.org/english/tratop_e/trips_e/wtowip_e.htm. See also Okediji (2008) and Salmon (2003).

[91] To be sure, the TRIPS Council is primarily responsible for monitoring members' compliance with the provisions of the TRIPS agreement. Yet, by design, it also permits member states to address problems that emerge during the implementation of the agreement and raise issues for rulemaking.

[92] This should come as no surprise as both institutions have near-universal membership. As of 2018, WIPO and the WTO share 149 member countries, which accounts for about 91 percent of the WTO's membership and 85 percent of the Berne Union.

[93] In fact, the Berne Convention was incorporated in TRIPS. There are some minor differences, however. With regard to limitations and exceptions, the wording of the three-step test in TRIPS deviates slightly from the Berne Convention. Despite the existence of a Dispute Settlement Body panel ruling, it is still subject to legal debate whether the two wordings are functionally identical (for an overview of the discussion, see Geiger, Gervais, and Sentftleben 2013, 8).

[94] To be fair, the WTO is committed to "the objective of sustainable development" and recognizes the "need for positive efforts designed to ensure that developing countries, and especially the least developed among them, secure a share in the growth in international trade commensurate with the needs of their economic

Berne Convention-level standards, the UCC quickly became irrelevant and UNESCO all but dropped off the radar in copyright regulation. This initially left developing countries wondering where to address grievances. At first, they raised matters of intellectual property rights and knowledge transfer in WTO talks. With the deadlock of the Doha Round, developing countries turned to WIPO again. While the WTO is an egalitarian institution on paper, its decision-making processes favor developed countries (Narlikar 2004; Steinberg 2002). WIPO, to some extent, filled the void UNESCO had left by opening up to civil society participation (May 2009, 95–97). Furthermore, WIPO's greater commitment to development concerns allowed actors to contest the uneasy compromises between private rights and public access to knowledge more effectively than they could have at the WTO (Muzaka 2011, 2013a). Taken together, these differences provide an opening for challengers to discuss alternative paths of regulatory development (see also Dinwoodie and Dreyfuss 2009).

With regard to the dimension of interaction, the WIPO-WTO complex, thus, fits the concept of a *competitive context*. WIPO and WTO clearly overlap in terms of activities and membership. While the WTO has taken over enforcement from WIPO, the two institutions compete for rulemaking authority. While WIPO and WTO do not conflict as much in terms of substantive rules, the two institutions vary in terms of purposes and decision-making processes. With UNESCO out of the picture, WIPO as a UN specialized agency has become the forum to address development and human rights concerns in intellectual property regulation.[95]

The complex is unchanged with regard to the dimension of structure. Density and differentiation have both remained constant. There has neither been an increase in fora in the governance area nor a greater differentiation of these fora into sub-issues. Table 5.4 summarizes these findings.

development," Agreement Establishing the World Trade Organization, April 15, 1994, 1867 U.N.T.S. 3. However, as Narlikar (2013, 862) puts it, the WTO's more recent "focus on development presents a far cry from the GATT, whose commitment to such concerns was minimal." This is not necessarily different for WIPO. However, WIPO as a part of the UN system cannot as easily ignore its commitment as the WTO can if its secretariat and developed countries do not want it to lose support from developing countries (Eimer and Schüren 2013, 547–48).

[95] UNCTAD continues to play a role in the governance area. Like WIPO, UNCTAD provides technical assistance on the implementation of intellectual property rules. UNCTAD's relevance for international copyright regulation, however, is limited due to its focus on patent rules and access to medicines.

Table 5.4: The WIPO-WTO Complex—Assessing the Institutional Context

Dimension/ Indicator	Observation	Measurement	Overall Assessment
Interaction			
Indicator 1A: Overlap	TRIPS and WIPO-administered treaties address copyright; both WTO and WIPO claim regulatory authority	**Low**	**Competitive**
Indicator 1B: Inconsistence	Consistent rules but divergent principles	**Low**	
Structure			
Indicator 2A: Diversity	Elemental institutions address similar issues	**Low**	**Integrated**
Indicator 2B: Density	Low number of institutions in the governance area	**Low**	

In conclusion, the WIPO-WTO complex fits the concept of a competitive and integrated complex. Consequently, it should provide an open opportunity structure for challengers. In what follows, I test the argument through process tracing.

5.4.3 Venue Selection and Agenda Setting

In May 2002, the World Blind Union renewed its attempts to reform international copyright regulation. At a session WIPO's Standing Committee on Copyright and Related Rights, the most important body for matters of copyright, it called upon the member states to consider again the issue of access to printed material for people with visual disabilities. The representative of the World Blind Union, David Mann, pointed out three major copyright-related issues for people with disabilities. First, Mann remarked that the copyright legislations of many developing countries did not include flexibilities for the blind and visually disabled. As a remedy, he suggested that WIPO should put greater emphasis on the subject of limitations and exceptions in its legal advice for developing countries. Second, Mann argued that digitized material, in principle, could be distributed on a worldwide scale, which would greatly improve the availability of works in accessible formats in many places. Persisting differences in national copyright laws and a lack of international rules on this issue created legal insecurity, impeding the exchange of accessible printed material across borders. Third, he highlighted that the spread of technological measures of protection and the anti-circumvention provisions in the Internet Treaties exacerbated the accessibility and availability of works for people with disabilities.[96] These three issues, the question of limitations and exceptions in the international copyright framework, the cross-border transfer of

[96] WIPO Standing Committee on Copyright and Related Rights, 7th Session, Report, SCCR/7/10 (May 31, 2002), p. 29, http://www.wipo.int/edocs/mdocs/copyright/en/sccr_7/sccr_7_10.pdf.

copies, and technological measures of protection, became the most important issues in the negotiations on the *Print Treaty*.

At this stage, it was unforeseeable whether any negotiations would take place, let alone whether a treaty would be adopted at some point in the future. NGOs only have observer status in WIPO and, thus, may only raise awareness for issues. Only member states may suggest agenda items and need to forge consensus with others members in order to establish an issue on the agenda. At that time, the member states were in the process of negotiating treaties on the protection of broadcasting signals and audiovisual performances. Little indicated that new issues would be adopted to the agenda in the near future.

The World Blind Union intervention coincided with two broader developments. First, developing countries had rediscovered limitations and exceptions as a field to oppose the ratcheting-up of international intellectual property regulation by developed countries. In the 1990s, a number of developing countries had adopted limitations and exceptions imitating the highly flexible fair use doctrine in U.S. copyright law in their national copyright legislations in an attempt to counteract the U.S. maximalist agenda towards international copyright regulation (Michael 2015). In the early 2000s, these and other countries started to explore the potential of WIPO as a forum to discuss flexibilities to copyright instead of ever more stringent standards of protection.

Due to the lack of an established division of labor between WIPO and the WTO, governments were able to make a choice regarding where to address their grievances. Now that developed countries could not turn to UNESCO to address developmental concerns in copyright anymore, developing countries shifted to the more influential WIPO to address these issues. A representative of the Third World Network, an NGO representing the interests of countries and civil society in the global south, later succinctly summarized the rationale for this move:

> WIPO is a UN agency and it is under the UN convention. So, it should follow sort of development-oriented principles and of course limitations and exceptions and the promotion of education and access to knowledge is, what a binding treaty for limitations and exceptions would do (Knowledge Ecology International 2014).

Second, the mid-1990s saw the emergence of a civil society movement for access to knowledge. This included NGOs like Knowledge Ecology International, which under its former name Consumer Project on Technology had been an important player in the cam-

paign for access to medicines. These actors quickly singled out WIPO as a forum to continue their reform agenda in the field of copyright. They recognized that the institutional context in copyright regulation differed from the institutional context in patent regulation and that successful reform would require a shift away from the WTO and TRIPS. In the campaign for access to medicines, the NGO network had been able to enlist the support of international organizations with powerful secretariats, including the United Nations Development Programme (UNDP), the World Health Organization (WHO), and the World Bank to challenge the WTO (Sell and Prakash 2004, 162–64). Moreover, challengers had generated public attention to exert pressure on the EU and the U.S. In copyright regulation, there were no natural institutional allies. Moreover, the topic did not involve physical harm and was thus unsuited for the same form of public mobilization (see Keck and Sikkink 1998, 27). Yet developing countries and civil society NGOs understood that WIPO, as an organization that competed with the WTO for regulatory authority, needed to open up to public good-related demands to remain relevant. Otherwise there would have been little incentive for developing countries to remain involved in WIPO (see Latif 2010; Latif and Roffe 2013).

Knowledge Ecology International quickly emerged as a key player in the negotiations on the *Print Treaty* and mobilized other NGOs to join the cause, including the well-financed Open Society Foundations. Open Society Foundations deputy director Vera Franz in a discussion with Knowledge Ecology International director James Love elaborated on the emergence of the access to knowledge movement and the strategic choice to focus on WIPO to pursue a reform agenda:

> There is a story before the treaty for the blind and that is really the campaign to reform WIPO and open up WIPO to civil society and the public interest. [...] It was when I first met you Jamie [Love], I think in 2003, and we had conversation somewhere at a conference and you mentioned that you were thinking about a project and you labeled it 'the takeover of WIPO.' […] And so we looked into it more closely as a foundation and very quickly realized that intellectual property but also specifically copyright law is not currently serving the public interest. Also that's when we set out to develop sort of a strategy that would help civil society to get engaged with WIPO specifically and try to reform these laws that govern how we access and use knowledge (Knowledge Ecology International 2013).

Southern countries and civil society organizations, most of which were based in developed countries, realized that many of their goals overlapped. In 2004, a group of academics and NGOs signed the Geneva Declaration on the Future of the World Intellectual Property Organization, urging the WIPO secretariat and member states to concentrate on the concerns of developing countries and the public interest (Geneva Declaration on the Future of the World Intellectual Property Organization 2005; see also International Centre for Trade and Sustainable Development 2004). The Geneva Declaration explicitly endorsed Argentina and Brazil's 2004 Proposal for the Establishment of a Development Agenda for WIPO, which addressed many of the same issues.[97] Similarly, the Consumer Project on Technology (2005) presented a draft treaty on access to knowledge. This treaty proposal was all-encompassing in nature, covering patents as well as copyright. It also already included a section on the issues faced by people with disabilities, which had been drafted with support from the World Blind Union.[98] Similarly, the International Federation of Library Associations and Institutions, as the organization representing the most important providers of accessible works, remained a close ally to the community of the visually disabled.[99] At the 2004 World Library and Information Congress, for instance, it conferred with the World Blind Union and the DAISY Consortium and started to develop a joint policy position on copyrights (see S. King and Mann 2004).

Nonetheless, discussions on copyright flexibilities for the benefit of people with disabilities were slow to take off and it took another couple of years until challengers were able to establish the issue on WIPO's agenda. At the Standing Committee session in November 2002, the member states discussed the issue of limitations and exceptions for the benefit of people with disabilities as a possible subject for review.[100] Limitations and exceptions had already been a prominent subject in Standing Committee debates relating to the implementation of the Internet Treaties, particularly with regard to the anti-circumvention provision. With developing countries pushing for making limitations and exceptions a standalone agenda item, developed countries grudgingly eased their position that WIPO should focus exclusively on setting standards of protection. Yet most developed countries expressed

[97] WIPO General Assembly, 31st (15th Extraordinary) Session, Proposal by Argentina and Brazil for the Establishment of a Development Agenda for WIPO, WO/GA/31/11 (August 27, 2004), http://www.wipo.int/edocs/mdocs/govbody/en/wo_ga_31/wo_ga_31_11.pdf.

[98] Interview with Director of Information Society Projects at Knowledge Ecology International (May 5, 2016).

[99] A representative noted that "WIPO would be able to show that it has the capability of producing a treaty for the benefit of users." Interview with Head of the International Federation of Library Associations and Institutions Delegation to WIPO (December 8, 2015).

[100] WIPO Standing Committee on Copyright and Related Rights, 8th Session, Report, SCCR/8/9 (November 8, 2002), p. 29–36, http://www.wipo.int/edocs/mdocs/copyright/en/sccr_8/sccr_8_9.pdf.

their preference to focus on the existing agenda items and that they were not inclined to discuss a new treaty instrument until a broadcasting treaty was concluded. WIPO convened an information meeting on digital content for the visually impaired in November of the same year, which led to some exchange of information between the member states, the World Blind Union, and the International Publishers Association, but did not culminate in any tangible measures.[101]

In November 2004, Chile presented a first proposal for establishing the issue of limitations and exceptions on the agenda of the Standing Committee.[102] Chile's delegate at that time stated in an interview that the Chilean government had been frustrated with U.S. attempts to raise the level of intellectual property protection in Chile through a bilateral trade agreement concluded in 2003.[103] Chile's initiative also echoed the aforementioned proposal for a WIPO Development Agenda. Thus, it has to be seen in the broader context of the developing countries' agenda to renegotiate the standards established under TRIPS and subsequent efforts by developed countries to ratchet up the international level of protection through TRIPS-Plus provisions in bilateral agreements (Drahos 2005; Muzaka 2013a; Sell 2010a). A were still in the midst of defining what they considered problematic and the boundaries of the issue were still subject to debate. Chile in its statement made people with disabilities (referring to hearing and visual impairment as well as intellectual disabilities) a priority but also addressed limitations and exceptions for educational purposes.[104] Support by other actors was still diffuse and no concrete solutions or policies were being discussed.

At this point, only the International Publishers Association voiced explicit concern. It questioned whether international coordination on limitations and exceptions would be feasible and, if that, reasonable, given the discrepancies between members of the Berne Union. The business interest group warned that "[s]oft copyright laws would probably harm international publishers, but it certainly would kill local publishing that served local needs. Exceptions were about balancing the needs of all stakeholders based on the local context, local traditions and local infrastructure." Consequently, the International Publishers Association "welcomed an exchange of information *under the understanding that it would be impossible to har-*

101 WIPO Information Meeting on Digital Content for the Visually Impaired, DIGVI/IM/03/DISCUSSION (November 3, 2003), http://www.wipo.int/edocs/mdocs/mdocs/en/digvi_im_03/digvi_im_03_discussion.rm.

102 WIPO Standing Committee on Copyright and Related Rights, 12th Session, Proposal by Chile on the Subject "Exceptions and Limitations to Copyright and Related Rights," SCCR/12/3 (November 2, 2004), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_12/sccr_12_3.pdf.

103 Interview with Director at Corporación Innovarte (May 9, 2016).

104 WIPO Standing Committee on Copyright and Related Rights, 12th Session, Report, SCCR/12/4 (March 1, 2005), p. 3–4, wipo.int/edocs/mdocs/copyright/en/sccr_12/sccr_12_4.pdf.

monize these areas internationally, due to different and often challenging circumstances, and that the focus should not be on weakening copyright but promoting cooperation and understanding."[105] In other words, publishers dismissed the claim of developing countries and NGOs' that flexibilities should be subject to an international standard. Publishers argued throughout the negotiations that states should adopt limitations and exceptions on a national basis within the boundaries permitted by international copyright law. Allan Adler (quoted in Lakshmi 2012), a representative of the Association of American Publishers later noted that "international treaties establish the minimal rights of the copyright owners first, and not the limitations and exceptions to those rights."

In response to these concerns, at the 13th session of the Standing Committee in November 2005, Chile put forward a more sophisticated proposal invoking the need to study national intellectual property systems and models of limitations and exceptions. What is more, Chile demanded an international agreement on the matter to set international minimum standards for limitations and exceptions but did not go into detail on any provisions.[106] Little progress was reached on the Chilean proposal and discussions on limitations and exceptions continued in parallel in the context of the negotiations on the Broadcasting Treaty.[107]

Due to persisting differences between the member states, negotiations on a broadcasting treaty reached a dead end in June 2007. Following two inconclusive special sessions of the Standing Committee, the WIPO member states agreed on a moratorium on further discussions.[108] The suspension of talks opened up room for challengers to establish limitations and exceptions as an independent agenda item. Broadcasting negotiations did not break down simply because developing countries were opposed to it. While developed countries supported a broadcasting treaty on the surface, even not all so-called Group B countries were convinced that it was necessary. Importantly, a number of information technology businesses from the developed world, such as AT&T, Hewlett-Packard, Intel, and Verizon

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[105] Ibid., p.7, emphasis my own.

[106] WIPO Standing Committee on Copyright and Related Rights, 13th Session, Proposal by Chile on the Analysis of Exceptions and Limitations, SCCR/13/5 (November 22, 2005), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_13/sccr_13_5.pdf.

[107] See WIPO Standing Committee on Copyright and Related Rights, 14th Session, Report, SCCR/14/7 (May 1, 2007), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_14/sccr_14_7.pdf; 15th Session, Report, SCCR/15/6 (May 15, 2007, http://www.wipo.int/edocs/mdocs/copyright/en/sccr_15/sccr_15_6.pdf; 1st Special Session, Draft Report, SCCR/S1/3 PROV (May 15, 2007), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_s1/sccr_s1_3_prov.pdf; 2nd Special Session, Draft Report, SCCR/S2/5 PROV (August 31, 2007), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_s2/sccr_s2_5_prov.pdf; see also 2nd Special Session, Proposal by Mexico Relating to Article 10 "Limitations and Exceptions," SCCR/S2/4 (June 19, 2007), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_s2/sccr_s2_4.pdf.

[108] WIPO, Negotiators Decide to Continue Discussions on Updating Protection of Broadcasting Organizations, PR/2007/498 (June 25, 2007), http://www.wipo.int/pressroom/en/articles/2007/article_0039.html.

Communications explicitly opposed a broadcasting treaty. Like access to knowledge NGOs, these businesses feared that a broadcasting treaty would have negative implications for the internet as a communications space where data can float freely. This allowed challengers to form an alliance with these business actors, providing them with legitimacy in the face of imputations from developed countries and other businesses that they were anti-property and anti-capitalist (Franz 2010, 523). The establishment of limitations and exceptions on the agenda of the Standing Committee as well as the adoption of the Development Agenda by the WIPO General Assembly in 2008 show that challengers had correctly identified these fault lines in international intellectual property regulation. They demonstrated that challengers had also recognized WIPO as a suitable forum to form new alliances and, in so doing, influence international intellectual property rulemaking.

However, the direction of these discussions was still unclear. At the March 2008 session of the Standing Committee, the chair commented that "[i]t was easy to see how demanding, challenging and time-consuming the norm-setting activity had become in the large community of WIPO members and observers, where such a diversity of opinions and traditions prevailed."[109] To determine whether rulemaking was necessary the WIPO secretariat commissioned experts to provide opinions on the relationship between limitations and exceptions and technological measures of protection[110] and on limitations and exceptions for people with visual disabilities.[111] The latter study proved to be instrumental. While it showed that the number of countries with limitations or exceptions for people with visual disabilities had increased since the 1980s, it also demonstrated a number of persisting copyright-related barriers to access. Most importantly, it made a case for international standardization with regard to the cross-border transfer of accessible format copies. Energized by these findings, Brazil, Chile, Nicaragua, and Uruguay jointly put forward a proposal for "work related to exceptions and limitations." The document reiterated the need to analyze existing national models and discuss the international standardization of limitations and

[109] WIPO Standing Committee on Copyright and Related Rights, 16th Session, Report, SCCR/16/3 PROV (September 5, 2008), p. 2, http://www.wipo.int/edocs/mdocs/copyright/en/sccr_16/sccr_16_3_prov.pdf.
[110] WIPO Standing Committee on Copyright and Related Rights, 1th Session, Automated Rights Management Systems and Copyright Limitations and Exceptions, SCCR/14/5 (April 27, 2006), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_14/sccr_14_5.pdf.
[111] WIPO Standing Committee on Copyright and Related Rights, 15th Session, Study on Copyright Limitations and Exception for the Visually Impaired, SCCR/15/7 (February 20, 2007), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_15/sccr_15_7.pdf.

exceptions to copyright by means of identifying best practices, creating "a prescriptive minimum global framework," as well as "mandatory minimum exceptions and limitations."[112]

While many countries and NGOs expressed their support for the initiative, the U.S. delegation immediately objected to the proposal, arguing that limitations and exceptions were neither necessary to promote creativity and innovation, nor should they be a subject of WIPO rulemaking. Consequently, the EU and the U.S. tried to amend the proposed conclusion in order to take limitations and exceptions off the agenda of the Standing Committee again (International Centre for Trade and Sustainable Development 2008b).[113]

To break the impasse Knowledge Ecology International prepared a more detailed proposal. In June 2008, the NGO invited multiple premier copyright experts as well as representatives of the World Blind Union for a drafting session at its headquarters in Washington, DC. The proposal included far-reaching provisions that appealed to access to knowledge NGOs. It would have allowed to make copies in accessible formats from protected works and to distribute these copies digitally or via lending, provided the individual or organization supplying the copy had legal access to the source and was doing so on a non-commercial basis. Knowledge Ecology International, the World Blind Union, and other allies then distributed the proposal to governments and other stakeholders to gauge whether it would find enough support to be discussed in the WIPO standing committee.

Incumbents took the proposal badly. They feared that any international agreement on the matter would create a precedent with the potential to undermine international copyright standards for digital goods. Developed countries and right holders reacted swiftly at the 17th session of the Standing Committee before the challenger coalition even had a chance to find a sponsor for the World Blind Union proposal. At the suggestion of the International Federation of Reproduction Rights Organizations, developed countries along with the WIPO secretariat set up a stakeholder platform as an alternative, voluntary mechanism to facilitate dialogue between rights holders, blind people's associations, and libraries (International Centre for Trade and Sustainable Development 2008a).[114] Challengers felt that the platform was not a genuine attempt to increase access to printed material. They

[112] WIPO Standing Committee on Copyright and Related Rights, 16th Session, Proposal by Brazil, Chile, Nicaragua and Uruguay for Work Related to Exceptions and Limitations, SCCR/16/2 (July 17, 2008), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_16/sccr_16_2.pdf.

[113] WIPO Standing Committee on Copyright and Related Rights, 16th Session, Report, SCCR/16/3 PROV (September 5, 2008), p. 15–16, 38–39, http://www.wipo.int/edocs/mdocs/copyright/en/sccr_16/sccr_16_3_prov.pdf.

[114] WIPO Standing Committee on Copyright and Related Rights, 17th Session, Report, SCCR/17/5 (March 25, 2009), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_17/sccr_17_5.pdf.

perceived it as a tactical move to keep limitations and exceptions off the agenda and divide the emergent challenger coalition between civil society actors and developing countries. In an interview, the director of Knowledge Ecology international noted:

> The feeling at the time was that an NGO-draft was dead on arrival. […] You can write it but then you have to find somebody to put your name on it to make it a country proposal. […] So finally I said: 'Look at this. The World Blind Union has a different status than regular NGOs.' And I said: 'Let's just see how it goes if they have it.' It goes out as a World Blind Union draft, or I guess DAISY Consortium was part of it, but the idea was that it comes out as an NGO draft but from the disability community. […] And it turned out the countries were very happy with that, which surprised us. When the moment came that it was first circulated as an NGO-draft, people knew it was coming. It was circulated to the WIPO secretary and to all important delegations ahead of time. U.S. had it. Europeans had it. We were open about it. We sent it around to people. So I got to the first meeting where it was presented by Chris Friend [a World Blind Union representative], formally as an NGO-document. Then, within thirty seconds, the collecting societies put up an alternative proposal or a stakeholder platform to investigate the issue. For a couple of years that became the main battle, to shoot it down. It was a cynical, diversionary tactic by the publishers, supported by the [WIPO] secretariat.[115]

Developing countries and emerging economies, particularly from the Latin American and Caribbean Group, welcomed the proposal. At the 18th session of the Standing Committee, Brazil, Ecuador, and Paraguay adopted the World Blind Union draft without changes, which firmly established the issue on WIPO's agenda (New 2009).[116] Incumbents maintained that the WIPO-administered treaties (the Berne Convention and the Internet Treaties) and TRIPS provided a sufficient degree of flexibility for member countries to adopt limitations and exceptions as needed. Despite incumbents' continued efforts to relegate discussions to the stakeholder platform, however, a large majority of countries supported the proposal and expressed their preference to consider international rulemaking on the issue of limitations and exceptions.[117]

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[115] Interview with Director of Knowledge Ecology International (November 11, 2015).
[116] WIPO Standing Committee on Copyright and Related Rights, 18th Session, Proposal by Brazil, Ecuador and Paraguay, Relating to Limitations and Exceptions: Treaty Proposed by the World Blind Union, SCCR/18/5 (May 25, 2009), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_18/sccr_18_5.pdf.
[117] WIPO Standing Committee on Copyright and Related Rights, 18th Session, Report, SCCR/18/7 (December 1, 2009), p. 11–20, http://www.wipo.int/edocs/mdocs/copyright/en/sccr_18/sccr_18_7.pdf.

This episode illustrates how the shift to a more competitive institutional context permitted challengers to select a venue for discussions and put reform on the agenda of international regulators. In the earlier episode, the division of labor between WIPO and UNESCO had provided incumbents with exclusive agenda control. Since the emergence of TRIPS, incumbents were no longer able to refer challengers to UNESCO as the forum for developmental concerns. Incumbents and the WIPO secretariat were now required to take WIPO's UN-specialized agency status more seriously and open up to the demands of challengers. Incumbents were also unable to minimize the political dimension of copyright rulemaking by shifting the debates to a technical working group. Negotiations took place in the Standing Committee, which examines all matters of substantive law or harmonization in the field of copyright and reports directly to the WIPO General Assembly. This allowed challengers to threaten to derail negotiations in areas that were important to right holders, such as the protection of broadcasting signals. While challengers were able to establish the issue of limitations and exceptions on the Standing Committee's agenda in 2008, its status remained contested at least initially.

5.4.4 Negotiations and Conflict Expansion

After having established the issue of copyright flexibilities on WIPO's agenda, challengers intensified their efforts to mobilize potential allies and bystanders to join the reform initiative. Mobilization efforts concentrated on non-state actors and other developing countries. The group around Knowledge Ecology International and the Open Society Foundations called upon other civil society NGOs to become involved in the negotiations and take part in WIPO Standing Committee meetings. The World Blind Union, financially supported by the Open Society Foundations, sent representatives to Geneva to increase moral pressure on incumbents. At the same time, Brazil and its allies from the Group of Latin American and the Caribbean sought to convince countries from the Asian Group and particularly the African Group to associate themselves with their proposal.

Standing Committee discussions under the agenda item "Limitations and Exceptions" continued to cover a range of issues beyond access for people with disabilities, including flexibilities for educational institutions, libraries, and archives. In addition to convincing incumbents that a solution was necessary, challengers also needed agree among themselves whether these problems should be addressed in an encompassing manner or on a one-for-one basis. Most civil society actors and countries from the Group of Latin America and Caribbean Countries favored a narrow focus on limitations and exceptions for people with print disabilities. These actors argued that it would be more likely to reach consensus on a

more circumscribed issue than for a general-purpose solution. They also pointed out that even a narrow agreement on limitations and exceptions for one group of beneficiaries could open up the space for broader discussions on copyright flexibilities afterwards. The African Group, by contrast, preferred an encompassing approach. It feared that the issue of limitations and exceptions for education, which they prioritized, would fall off the agenda again once WIPO agreed on a solution for people with print disabilities.

Incumbents remained opposed to the discussion of flexibilities at WIPO and to the adoption of legally binding rules on limitations and exceptions. Rights holders cautioned against the politicization of WIPO. As observed by other students of international standardization bodies (Loya and Boli 1999, 196–97; Mattli and Büthe 2003, 40), beneficiaries of the status quo emphasized the technical rationality of the standardization process to delegitimize distributional claims. Due to the longstanding monopolization of intellectual property rulemaking by legal practitioners and scholars, it came as no surprise that many members of the copyright community also called for a return to a technical-legal discourse (see Dobusch and Quack 2013, 53).[118] Copyright expert Silke von Lewinski (2010, 57), who advised the German delegation, criticized NGOs on the ground that they "often prefer political arguments over legal ones." She also objected with

> the predominantly political nature of [the developing countries'] new agenda: it seems to be more important for developing countries to show their strength, not least as a reaction to their experiences during the TRIPS negotiations and other trade treaty negotiations, rather than to fight for any particular substantive issues (von Lewinski 2010, 61).

While WIPO has always been a political forum, there is indeed evidence for an increasing politicization of the Standing Committee in the sense that challengers were able to mobilize a broader variety of actors to participate in sessions. To visualize the expansion of the conflict, I have compiled data on attendance by non-state actors and changes in composition of attending non-state actors over time. In a first step, I have collected data on the total number of attending non-state organizations, drawing on the attendance lists in all official reports of the Standing Committee between 1998 and 2015 (session 1 through 31). Second,

[118] In international copyright regulation, the line between scholars and practitioners is blurry. Many legal scholars in the field work as lawyers or legal advisers and have played an active part in the regulatory process by expressing an opinion or providing expertise at some point. For instance, one of the foremost authorities in the field, Ruth Okediji, a professor of law at the University of Minnesota with an extensive publishing record on intellectual property law, has acted as a negotiator for Nigeria. The same applies to Justin Hughes, a professor at Loyola Law School, who represented the U.S. throughout large parts of the negotiations.

I have coded organizations based on whether they represent right holder interests or civil society, drawing on organizational websites and databases that gather information on NGOs (e.g. UNESCO n.d.).[119] Third, I have coded for each session whether an organization was represented by at least one lawyer, using personal information in the list of participants in the official Standing Committee reports and other sources, such as LinkedIn profiles as well as corporate and personal websites.[120]

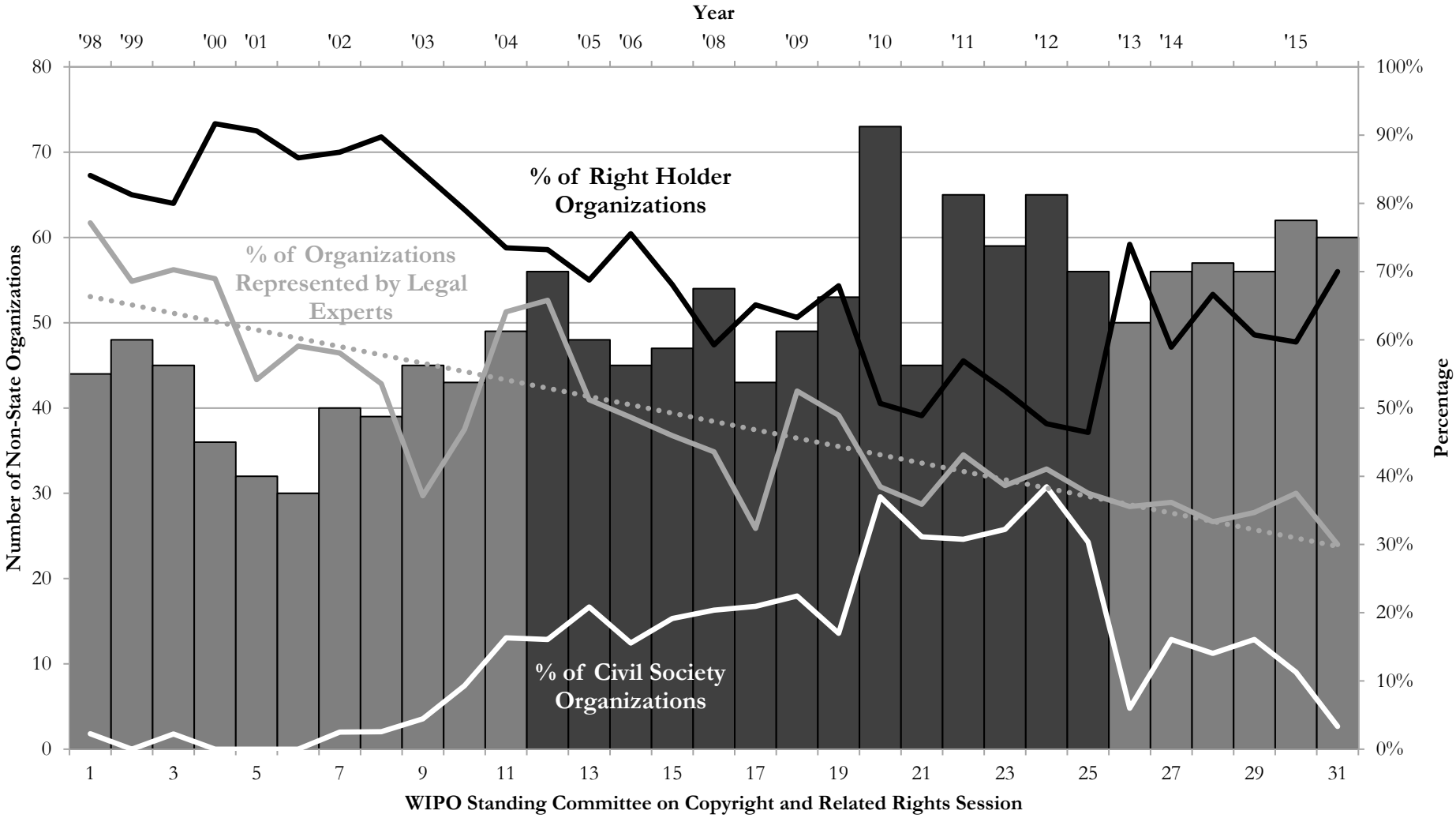
As Figure 5.2 illustrates, the overall participation of NGOs has increased over time. While almost no civil society organizations attended the Standing Committee in the first years after it was established in 1998 (light grey bars), the number of participating civil society organizations reached a spike during the negotiations (dark grey bars). After the adoption of the Marrakesh Treaty, the number plummeted again (light grey bars). This indicates a temporary spark in interest by civil society actors in the Standing Committee as a forum during the negotiations on limitations and exceptions for people with print disabilities. Attendance by right holder organizations has remained fairly constant over the years.

These data show that, after the issue had been established on the Standing Committee agenda in 2008, challengers were in fact able to convince a critical number of stakeholders to send representatives to Geneva. Largely, this is attributable to WIPO being relatively open to the participation of civil society actors. While WIPO has traditionally been dominated by industry and right holder groups, it is, in principle, more accessible to non-state actors than the WTO, which lacks a formal accreditation process (Matthews 2006, 29). The questions as to whether this indicates that the discourse in the WIPO standing committee has become "less technical and more political," as suggested by incumbents, of course cannot be answered by looking at attendance figures alone. This would require an in-depth content analysis of the debates at the Standing Committee. However, the data suggest that a formal legal education became less of a requirement for participation in Standing Committee discussions, as the number of organizations represented by at least one legal expert decreased over time. This drop is not reducible to the increased participation of NGOs, since rights holder organizations constituted the majority of non-state actors and the decline continued even after the number of civil society organizations dropped again.

[119] I use "civil society" as a proxy for potential allies of the challenger coalition. This is a simplification that can be subject to inaccuracies. I argue that it is a relatively good approximation of the actual distribution of preferences across non-state participants. While the number of actors that actively supported the challenger proposal may be a bit lower than the number of civil society actors, this figure should provide a good indication.

[120] I could only compute the proportion of non-state organization delegations, for which such data was available.

Figure 5.2: Participation of Civil Society NGOs and Representation by Legal Experts in Standing Committee on Copyright and Related Rights Sessions, 1998-2015



The challenger coalition understood that expertise remained an important factor nonetheless. For this reason, it enrolled critical lawyers who could make a legal argument that limitations and exceptions for the benefit of people with print disabilities were compatible with the existing international framework of copyright protection. The participation of experts on behalf of the challenger coalition stood in marked contrast to earlier regulatory disputes on international intellectual property standards, as highlighted by the lead negotiator of the Nigerian Delegation, a law professor herself:

> Very different from TRIPS you had developing countries with copyright expertise, not just the African Group but South America as well. That was a critical difference because a coalition with no expertise means that somebody can block its position that is not really necessary to block just for political reasons or just because you don't understand the subject matter or something else. So the expert capacity of the developing countries made a big difference. It ended up being a much better treaty. You had the registrar of copyright, you've had two copyright law professors. The expert from Senegal was a copyright professor, director of the copyright office. I mean, you've had real experts. It was a universe away from what happened at TRIPS, a universe away, galaxies away.[121]

In contrast to earlier campaigns and what the transnational advocacy network approach suggest, challengers did little to mobilize public attention. There are at least two reasons for this. First, as discussed above, challengers believed that the issue was not suited for the same kind of public mobilization as in the HIV/AIDS case. While the World Blind Union in their "Right to Read" campaign framed the scarcity of accessible printed material as a "book famine," the issue clearly revolved around unequal participation opportunities and not bodily integrity. Second, domestic disability rights organizations could rely on established channels of contact with their respective governments, as stated by a representative of the World Blind Union:

> We concentrated, purposefully concentrated our campaign at the direct link with the copyright office. So the national blind organization in each country was trained up with a toolkit and lobbied directly into the copyright office of each country and used parliamentarian support for that thing. So it was very focused, it wasn't a wide

[121] Interview with Lead Negotiator for the Nigerian Delegation at WIPO (July 1, 2016).

> broadcast issue. […] We targeted our energies and efforts very, very precisely on the decision-makers and influencers.[122]

As a result, WIPO talks were subject to very little media coverage. Only a handful of articles, one in *The Guardian* (US Film Industry Tries to Weaken Copyright Treaty for Blind People 2013) and two in *The Washington Post* (Kindy 2013; Lakshmi 2012) addressed topics related to the negotiations.[123]

Instead of raising public awareness challengers concentrated on building a large and diverse coalition, involving actors from both the Global South and the Global North. As the statistical analysis shows, challengers were quick to mobilize a variety of non-state actors to support their cause and participate in Standing Committee sessions. Coalition building proved to be more difficult at the inter-state level. In June 2010, the African Group, the EU, and the U.S. put forward competing proposals on how to address copyright flexibilities for people with disabilities. Challengers expected that the EU and the U.S. would attempt to dilute their reform proposal. The African Group, by contrast, was a potential ally, and needed to be brought in line for challengers to reach a critical mass of reform demanders.

As late as in 2010, the African Group continued to promote its comprehensive approach for a treaty, including limitations and exceptions for educational purposes, libraries, and archives.[124] The coalition that had formed around Brazil and civil society actors was careful to separate these issues into multiple agendas in order to avoid a watering down of the original proposal. The EU and the U.S, by contrast, each on their own presented watered down alternatives to the World Blind Union draft (International Centre for Trade and Sustainable Development 2010a). The EU proposal was clearly intended to be a recommendation and not a legally binding instrument. The U.S. proposal also remained fuzzy with regard to what legal nature an instrument should take. Its provisions were much softer than the World Blind Union proposal, stating that copyrighted material in accessible formats for people with visual disabilities should be available at "a reasonable price," understood as "a similar or lower price than the price of the work available to persons without

[122] Interview with Chair of the Global Right to Read Campaign at the World Blind Union (June 17, 2016).
[123] Negotiations have been featured to a larger extent in specialized technology media outlets, such as *Ars Technica* (Anderson 2009; Lee 2013) and *Wired* (Kravets 2009b, 2009a, 2013).
[124] WIPO Standing Committee on Copyright and Related Rights, 20th Session, Draft WIPO Treaty on Exceptions and Limitations for the Disabled, Educational and Research Institutions, Libraries, SCCR/20/11 (June 15, 2010), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_20/sccr_20_11.pdf.

print disabilities in that market the same."[125] Both proposals were shallow in terms of cross-border transfer of accessible format copies, with the U.S. proposal only allowing for the transfer of physical Braille-format copies and the EU requiring a compatible exception in the received country or "a specific export license granted by the rights holder."[126]

Throughout 2010, the member states of the Standing Committee continued discussions on the merits of the three competing proposals. Again, Brazil took the lead and pushed for the adoption of a timetable for negotiations with the aim of holding a diplomatic conference in 2012.[127] While incumbents kept opposing a legal instrument, they agreed to maintain the issue on the Standing Committee's agenda and pursue text-based discussions on the existing proposals. In late 2010, WIPO members adopted a work program to discuss the issues of limitations and exceptions for education on the one hand as well as libraries and archives on the other in separate sessions of the Standing Committee (International Centre for Trade and Sustainable Development 2010b).[128] While this move allowed the challenger coalition to accommodate some of the demands of the African Group, it did not fully resolve the conflict.

At around the same time, the U.S. adopted a more conflictual stance. While the U.S. had expressed openness to permitting cross-border transfer of accessible copies in late 2009, it revoked its position in 2010 due to rights holder lobbying and changes in its representation at WIPO. The U.S. also pressured domestic blind people's associations and developing country governments to abandon their claim for cross-border transfer (Love 2011). In 2011, the World Blind Union thus decided to suspend its participation in the WIPO Stakeholders' Platform (Saez 2011). Initially, the World Blind Union had welcomed and actively participated in the Stakeholders' Platform as part of a "twin-track approach."[129] However, it had come to realize that publishers exploited the Stakeholders' Platform to advocate against a legally binding standard. Moreover, the World Blind Union argued that proposed

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[125] WIPO Standing Committee on Copyright and Related Rights, 20th Session, Draft Consensus Instrument, SCCR/20/10 (June 10, 2010), p. 3, http://www.wipo.int/edocs/mdocs/copyright/en/sccr_20/sccr_20_10.pdf.

[126] WIPO Standing Committee on Copyright and Related Rights, 20th Session, Draft Joint Recommendation Concerning the Improved Access to Works Protected by Copyright for Persons with a Print Disability, SCCR/20/12 (June 17, 2010), p.6, http://www.wipo.int/edocs/mdocs/copyright/en/sccr_20/sccr_20_12.pdf.

[127] WIPO Standing Committee on Copyright and Related Rights, 20th Session, Report, SCCR/20/13 (December 7, 2010), p. 7–10, 20–21, 39–-46, http://www.wipo.int/edocs/mdocs/copyright/en/sccr_20/sccr_20_13.pdf.

[128] WIPO Standing Committee on Copyright and Related Rights, 21st Session, Report, SCCR/21/12 (June 24, 2011), p. 28, 40–45, 53–54, http://www.wipo.int/edocs/mdocs/copyright/en/sccr_21/sccr_21_12.pdf.

[129] WIPO Standing Committee on Copyright and Related Rights, 20th Session, Report, SCCR/20/13 (December 7, 2010), p. 22, http://www.wipo.int/edocs/mdocs/copyright/en/sccr_20/sccr_20_13.pdf.

pilot projects on databases for accessible works would be "too onerous and the cost benefits too unclear" (World Blind Union 2011), especially in low-income countries. The withdrawal of the most important stakeholder put additional legitimizing pressure on the proponents of the regulatory status quo. They could no longer credibly argue that alternatives to a legal instrument were being explored jointly with losers under the regulatory status quo.

Other members of the challenger coalition increased pressure at the U.S. domestic level. They pointed to the puzzling discrepancy between what U.S. copyright and disability laws permitted under its fair use provision and the country's stance in the negotiations. Challengers subsequently redrafted the proposal in a way that echoes the 1996 Chafee Amendment to the U.S. Copyright Act, which allows for the unauthorized reproduction of protected works for people with visual disabilities.[130] They also focused on the highly flexible U.S. legal doctrine of fair use to make a case for more far-reaching limitations and exceptions at the international level.

This caused a massive backlash by the U.S. film industry. In one of the few press accounts of the negotiations, *The Washington Post* reported that "Hollywood is strongly resisting language in the draft that mirrors the concept of 'fair use,' long embodied in U.S. copyright law" (Kindy 2013).[131] Patent-based industries also intervened against an international agreement that made explicit reference to the legal principle of fair use, fearing a slippery slope. In a letter to the Director of the U.S. Patent and Trademark Office, the Intellectual Property Owners Association rejected the incorporation of fair use and expressed its concern "about the potentially negative, precedential effect that a one-sided, exceptions focused VIP [visually impaired persons, the author] treaty may have on parallel developments at WIPO and in other international negotiations" (Phillips 2013, 1).[132] In a different letter, the Global Intellectual Property Center at the U.S. Chamber of Commerce criticized "the VIP negotiations as a vehicle for advancing a broad and vague concept of 'fair use'. This effort has little to do with the goals of the proposed instrument, but has strong potential to

[130] Interview with Head of the Delegation to WIPO of the International Federation of Library Associations and Organizations (December 8, 2015).
[131] In an interview, representatives of the Motion Picture Association of America dismissed this portrayal but argued arguing that access to knowledge groups had effectively captured the negotiations, which is problematic as the negotiations between right holders and access to knowledge groups tend to be zero-sum. Interview with Representatives of the Motion Picture Association of America (June 9, 2016).
[132] Intellectual Property Owners Association members Google and Microsoft stood aloof from the letter and Intel stated that it did not take a position (Kravets 2013). In 2009, the American Association of People with Disabilities had sided with Google in the legal dispute over Google Books mentioned at the beginning of the chapter (Singel 2009).

undermine the rights of authors significantly" (Hirschmann 2013, 2). In an interview, a representative of the American Association of Publishers underscored this assessment:

> There was a sense that some people were exploiting the process to try to make changes about copyright policy more generally internationally than they were focused what was necessary to do in the treaty in order to address the issue of the availability of accessible reading materials for people with print disabilities all around the world.[133]

In another interview, a lawyer who was involved in drafting proposals for the Marrakesh Treaty went as far as characterizing the Print Treaty as a "Trojan Horse" for access to knowledge groups.[134] In what followed, right holders attempted to raise doubts about the sincerity of challengers' intentions to improve the situation of people with disabilities. For them, limitations and exceptions for people with disabilities were a politically acceptable vehicle to weaken copyright and overturn WIPO. Right holders were not entirely wrong in their assessment. As early as in 2009, a Brazilian delegate had stated that, indeed, the "objective is to set a precedent in intellectual property norm-setting through an instrument on limitations and exceptions relating to the rights of users" (quoted in International Centre for Trade and Sustainable Development 2009, 3). Yet challengers also pointed out that they considered access to printed material for people with disabilities a humanitarian issue, which needed to be judged on its own merits.[135] To avoid being associated with the access to knowledge movement, the World Blind Union in a public statement stated that it was clearly not opposed to copyright and did not have "views on matters outside of our remit—neither for nor against" (World Blind Union 2013a).

In an attempt to sway U.S. and EU negotiators, who had equally opposed the incorporation of fair use in any international document, challengers backed away from the concept of fair use and focused on a number of technical issues. Most importantly, after a series of informal meetings involving the EU, the U.S., and Brazil as the nucleus, challengers were able to convince the African Group to drop the demand for an encompassing treaty. In June 2011, member states agreed on negotiations on an instrument for limitations and exceptions for people with print disabilities only (International Centre for Trade and Sustainable Development 2011). This resulted in the adoption of a consolidated negotia-

[133] Interview with Vice President of the American Association of Publishers (May 12, 2016).
[134] Interview with Copyright Lawyer at UK Law Firm (April 4, 2016).
[135] Interview with Chief Negotiator for Brazil (June 2, 2016); Interview with Delegate for Paraguay (December 7, 2015).

tion document.[136] While the nature of the instrument (hard or soft law) was still subject to debate, incumbents realized that some sort of an outcome was inevitable. Consequently, they sought to avoid any sort of ambiguity that challengers would be able to exploit to demand further flexibilities at a later point in time. Challengers, in turn, made sure to avoid the pitfall of agreeing to a standard that would undercut what states so far could do domestically. While using the template of the Chafee Amendment, the legal experts in the change coalition tried to determine how they could make their proposal compatible with EU law, particularly the 2001 Copyright Directive.

In the EU, the Council and the Commission vehemently opposed any binding outcome. The challenger coalitions thus focused their lobbying on the European Parliament to put pressure on the Commission, which had the negotiating mandate. For this purpose, the European Blind Union worked in association with the Transatlantic Consumer Dialogue, another influential NGO, to have the commission justify its position in front of the Parliament.[137] In February 2012, following a petition by the European Blind Union, the European Parliament's Petition Committee discussed the issue with the head of the copyright unit of the Directorate-General Internal Market and Services (New 2015). The European Parliament subsequently summoned then-Commissioner for Internal Market and Services Michel Barnier to discuss the issue further. In a letter to the European Blind Union, Barnier (2011) had argued that a recommendation could be more swiftly negotiated. Moreover, a recommendation would serve as an authoritative interpretation of the Berne Convention, and thus apply to all Berne Union countries instead of only those that would ratify a treaty. Members from almost all groups of the European Parliament spoke out in favor of a treaty and against a non-binding recommendation and adopted of a resolution in support of a legally binding treaty.[138] As a result, Barnier put on record that he was open to both, a treaty or a recommendation. He went on saying that "a number of states, for other governmental reasons, do not yet share this line of thinking".[139] The chair of the Global Right to Read campaign for the World Blind Union argued that the outreach of the coalition to all geographical regions was crucial in achieving this kind of support:

[136] WIPO Standing Committee on Copyright and Related Rights, 22nd Session, Report, SCCR/22/18 (December 9, 2011), p. 7–13, 20–26, 85–86, http://www.wipo.int/edocs/mdocs/copyright/en/sccr_22/sccr_22_18.pdf.

[137] Interview with President of the European Blind Union (April 11, 2016).

[138] European Parliament, Resolution on Petition 0924/2011 by Dan Pescod (British), on Behalf of European Blind Union (EBU)/Royal National Institute of Blind People (RNIB), on Access By Blind People to Books and Other Printed Products, 2011/2894(RSP) (February 2, 2012), http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+MOTION+B7-2012-0062+0+DOC+PDF+V0//EN.

[139] European Parliament, Blind Persons' Access to Books (Debate), CRE 15/02/2012 – 17 (May 20, 2012), http://www.europarl.europa.eu/sides/getDoc.do?type=CRE&reference=20120215&secondRef=ITEM-017&language=EN.

> We got the oral question and recommendation and that's when Barnier was first brought to the parliament in Strasburg. […] He was followed with 25 exceptionally well briefed by WBU MEPs who shot his argument down in flames. And in his closing remarks he completely reversed his position and promised to take action on the delegation in Geneva. So it was the relationship with the parliament, that we had a very close relationship with both the Justice Committee and with the Petitions Committee and still do.[140]

While the Commission softened its stance, some EU member states remained opposed to the idea of a legally binding instrument for limitations and exceptions. The EU sought to weaken the draft proposal by introducing a "commercial availability" requirement in the draft text. Under such a provision, organizations that transfer accessible format copies to other countries would need to check whether the work is already commercially available in that country in the format requested. Challengers rebuked this idea, arguing that it would create significant bureaucratic costs for libraries for the blind and other providers of accessible format copies and, in doing so, undermine the purpose of the instrument (World Blind Union 2013b). While the U.S. did not share the EU's quest for a commercial availability requirement, it took issue with other provisions in the negotiation document, including the definitions of the terms "work" and "authorized entity," i.e. the criteria for establishing organizations that may distribute accessible format copies. Challengers needed to demonstrate that their proposal was compatible with other copyright treaties, in particular the Internet Treaties, and did not infringe on the Three-Step Test. Despite these differences, Standing Committee negotiations in 2012 continued in a constructive manner, focusing on the outstanding technical differences.[141] According to reports and interviews with participants, negotiators addressed the legitimate concerns of member states with regard to national laws and international treaty obligations, with the aim of devising legal solutions (see International Centre for Trade and Sustainable Development 2012; Saez 2013d).

This is not to suggest that this last step was apolitical. The question of the legal nature of the proposed instrument remained unresolved until late 2012. To break the standstill, the European members of the challenger coalition continued to exert pressure on negotiators via the European Parliament. In May 2013, the European Parliament again asked the European Commission to support a treaty and drop a number of demands for safeguards,

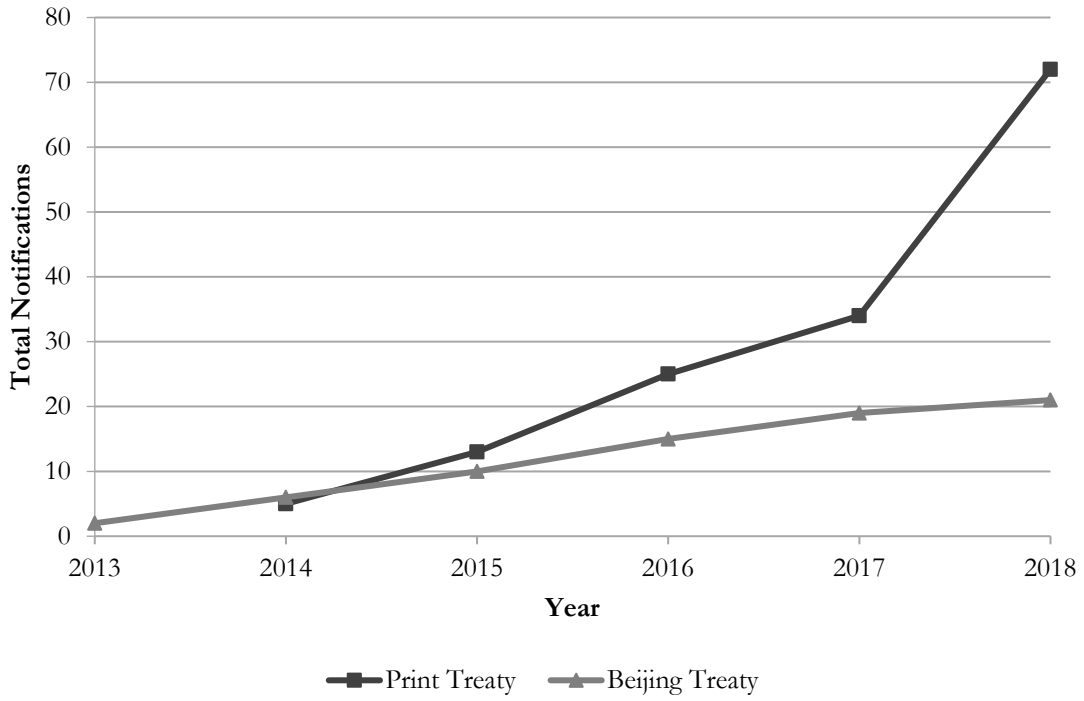
[140] Interview with Chair of the Global Right to Read Campaign at the World Blind Union (June, 17, 2016).
[141] See WIPO Standing Committee on Copyright and Related Rights, 23rd Session, Report, SCCR/23/10 (July 20, 2012), p. 5–10, 55–58, 89–93, http://www.wipo.int/edocs/mdocs/copyright/en/sccr_23/sccr_23_10.pdf.

including an anti-circumvention provision (Ermert 2013). Moreover, the African Group at WIPO played a pivotal role at the international level. Nigeria took the lead and became part of the core group around Brazil, the EU, and the U.S. that had large parts of the treaty in informal sessions. With the support of the African Group, the challenger coalition was able to isolate the EU and the U.S. as the only remaining holdouts to what it had successfully framed as a humanitarian issue. Even some smaller developed countries, including Australia, now supported a treaty, making it increasingly difficult for the EU and the U.S. to justify their opposition. Beyond that, the African Group brought additional expertise and negotiating prowess to the table, facilitating the resolution of legal-technical issues that dominated bargaining at this stage.

Challengers' efforts paid off in December 2012. At the 42nd session of the WIPO General Assembly, the member states of WIPO agreed to convene a Diplomatic Conference in Marrakesh in June 2013 with the aim of negotiating a treaty (Saez 2012).[142] Between late 2012 and April 2013, the negotiating parties made progress in a series of special meetings but could not revolve some of the technical issues until the Diplomatic Conference (International Centre for Trade and Sustainable Development 2013b, 2013c).[143] While discussions in Marrakesh took place behind closed doors, civil society was present and continuously briefed and consulted by countries from both the challenger and the incumbent coalition. The fact that a diplomatic conference had been convened put immense pressure on both incumbents and the WIPO secretariat. After the collapse of the negotiations on a broadcasting treaty, they feared that another failure would damage WIPO's reputation irrevocably. The WIPO secretariat thus revoked its negative stance from the beginning of the negotiations to encourage incumbents to make reasonable compromises with challengers. After a 12-day marathon session, on June 28, 52 countries agreed on an international treaty that contained many of the demands that had been prioritized by challengers. These include a mandatory limitation or exception for people with print disabilities, a definition of authorized entities that organizations in developing countries can conform with, no commercial availability requirement, and a soft provision on technological protection measures (International Centre for Trade and Sustainable Development 2013a; Saez 2013f).

[142] WIPO General Assembly, 42nd (22nd Extraordinary) Session, Report, WO/GA/42/3 (May 13, 2013), p. 16, https://www.wipo.int/edocs/mdocs/govbody/en/wo_ga_42/wo_ga_42_3.pdf.
[143] WIPO Standing Committee on Copyright and Related Rights, 24th Session, Draft Report, SCCR/24/12 PROV (July 27, 2012), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_24/sccr_24_12.pdf; WIPO Standing Committee on Copyright and Related Rights, 25th Session, Draft Report, SCCR/25/3 PROV (January 23, 2013), http://www.wipo.int/edocs/mdocs/copyright/en/sccr_25/sccr_25_3_prov.pdf.

Figure 5.3: Ratification of Print Treaty and Beijing Treaty in Comparison, 2013-2018



Sources: Author's illustration based on data from WIPO (2019a, 2019c).

In conclusion, this case shows how the more competitive context allowed challengers to select a forum for discussing reform and mobilizing a reform to exert pressure on incumbents. During the negotiations, challengers benefitted from the diminished agenda control by incumbents, allowing them to push negotiations in the direction of a legal instrument instead of another voluntary initiative. Challengers were also able of taking advantage of WIPO finding its proper niche in the governance area. While the secretariat had been avid to avoid negotiating limitations and exceptions at the beginning, it later understood that it needed to give greater consideration to the demands of developing countries, if it wanted to remain relevant. Finally, the integration of the institutional context facilitated the sustained involvement of potential allies from the civil society spectrum.

5.4.5 Adoption and Aftermath

The *Print Treaty* was swiftly adopted by India and a number of South American countries, including longstanding supporters Paraguay, Uruguay, Mexico, Brazil, Peru, Chile, Ecuador, and Guatemala. Almost to the day three years after the adoption of the Marrakesh Treaty, on 30 June 2016, Canada became the twentieth nation to accede. As a result, the treaty entered into force on 30 September 2016. In 2018, the number of ratifications soared to 72, counting all member countries of the EU individually. Figure 5.3 illustrates that the ratifica-

tion process has been much faster than in the case of the Beijing Treaty on Audiovisual Performances, another WIPO agreement, which had been concluded a year before the *Print Treaty*.[144] As of 2019, the Beijing Treaty still has not reached the threshold of 30 ratifications to become effective. Considering the Beijing Treaty is a more typical case of a copyright treaty setting standards of protection, this gives an indication of the shifting priorities at WIPO.

The EU and the U.S. have been holdouts in the implementation of the *Print Treaty*. While both actors in principle expressed their commitment to ratifying the agreement, domestic actors have slowed down the implementation process in both legislations. In the EU, a number of member states have advanced a legal argument against exclusive ratification by the EU since early 2015. They argued that the Marrakesh Treaty constitutes a "mixed agreement," which means that the competence for ratification would be shared between the EU and its member states (Ramalho 2015). The Commission objected to this assessment and referred the question to the European Court of Justice. In late 2015, the European Blind Union (2015) called out Germany and Italy as the main holdouts in the European ratification process (see also Germany, Italy Leading Resistance To EU Ratification Of Marrakesh Treaty, Blind Union Says 2015). In January 2016, the European Parliament adopted a resolution, urging the swift ratification of the Marrakesh Agreement.[145] Member of the European Parliament Julia Reda (2016), a driving force in EU copyright reform, in a statement criticized the blocking minority, referring to the UK and Germany as its leaders.[146] Again, it is difficult to determine whether and to what extent right holders have stalled the ratification process. Ultimately, resistance proved futile. In early 2017, the European Court of Justice ruled that the EU was exclusively competent to ratify the treaty (Saez 2017a). Another year later, in late 2018, the EU ratified the *Print Treaty* and effectively became a party to the agreement on January 1, 2019 (Saez 2018b).

[144] The Beijing Treaty expands the economic and moral rights of audiovisual performers. In contrast to earlier copyright treaties, the Beijing Treaty provides protection for performances delivered to an audience irrespective of their nature or fixation. Consequently, it is more relevant for artists and performers than it is for corporate right holders. Some access to knowledge groups, including Knowledge Ecology International, have actively supported a treaty whereas others, such as the Electronic Frontier Foundation, have opposed it. Here, it serves as an example to illustrate the varying speeds of ratification for two similar WIPO treaties, which have been adopted at a similar point in time.

[145] European Parliament, Resolution on the Ratification of the Marrakesh Treaty: Based on Petitions Received, Notably Petition 924/2011, B8-0168/2016 (January 1, 2016), http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+MOTION+B8-2016-0168+0+DOC+XML+V0//EN.

[146] Interview with Member of the European Parliament for the European Pirate Party (May 10, 2016).

In the U.S., publishers had insisted that specific recordkeeping provisions for libraries be included in the amendment to U.S. copyright law to minimize the risk of malpractice.[147] Former U.S. president Obama transmitted the Marrakesh Treaty to the U.S. Senate for ratification in 2016 (President Obama Sends Two WIPO Copyright Treaties To US Senate For Ratification 2016). In 2018, the *Print Treaty* finally passed the Senate and the House of Representatives and was signed into law by President Trump.

Participants and commentators from all camps of the debate agreed that the *Print Treaty* represented a milestone in international copyright regulation. Representatives of the print disabled community and providers of accessible works praised the encompassing definition of print disability. In many countries, limitations or exceptions for the benefit of people with visual disabilities had previously existed. Yet copyright laws (including in some member countries of the EU) often had not included print disabilities other than blindness or visual impairment, such as dyslexia and other learning disorders.[148] Once fully implemented, these people will see the availability of works in formats accessible to them greatly increased. Beyond that, stakeholders commended the solution found for the international transfer of copyrighted material in accessible formats.[149] Even many opponents of the treaty argued that was balanced and would not increase the risk of piracy. According to a representative of the Royal National Institute of Blind People, advocates of a treaty-based solution were positively surprised that the outcome was legally binding and were satisfied with most of the provisions in the agreement:

> We as the negotiations got more towards the sharp end, towards Marrakesh, in 2013, there were so many square brackets in the text even with a week and a bit of Marrakesh gone. […] And people were saying: 'You've got to back off on a lot issues now in order to get an agreement.' And we were very keen not to do that, frankly not because we were trying to be annoying but because we really desperately wanted a law that would work for the people that this is for. Otherwise this is just a bit of a waste of time. So we did dig in quite strongly on the things we needed the treaty to cover. And I think we got most of what we would have wished for within the treaty and avoided most of the worst things that could have happened within the text of the treaty. There are one or two things that are not necessarily perfect

[147] Interview with Vice President of the Association of American Publishers (May 12, 2016); Interview with Government Affairs Specialist at the National Federation of the Blind (May 20, 2016).
[148] Interview with Director of the *Deutsche Zentralbücherei für Blinde zu Leipzig* [German Central Library for the Blind in Leipzig] (March 22, 2016).
[149] For the treaty to fulfill its potential, in many developing countries capacity building will be necessary (Saez 2013c).

> but it is very much a workable treaty that can be used to significantly increase the number of books in the hands of blind and partially visually disabled people. We're very satisfied with the actual text even though […] it's longer and it's more difficult to read than we would have liked for and we proposed. But, you know, if you're negotiating in an international committee of people that's always the way of these things. [..] Yes, we're happy with the text by and large.[150]

Nonetheless, some important differences remained. Access to knowledge NGOs and developing countries highlighted the improvements that the treaty offers for people with print disabilities. Some also pointed to the more far-reaching implications of the outcome for international copyright regulation. A representative of the Open Society Foundations noted:

> The treaty is also very, very important for a second reason. That's for copyright. I think it's a revolution for copyright, for international copyright. And the reason is because this is the first agreement that puts users' rights first and actually mandates globally the protection of user rights in copyright (Knowledge Ecology International 2013).

Right holders repudiated this assessment. They had agreed to the treaty on the ground that it constituted a sui generis solution for a clearly specified group of beneficiaries and would not be simply transferable to any other public goods conflict in copyright regulation. A representative of the Motion Picture Association warned that "[t]here was, and continues to be, an effort to [revisit] the foundation of WIPO. [...] This particular negotiation was a flagship for that. […] Our job is to ensure the foundation on which the successes [of the copyright system] is built are not [unnecessarily] undermined" (New 2013). In 2014, right holders also asked the European Council, Commission, and Parliament to request "that WIPO's Standing Committee on Copyright and Related Rights (SCCR) clarifies its mandate before committing to further work with regard to copyright limitations and exceptions" (Stokkmo 2014).

So far, the spillovers to other discussions on limitations and exceptions have been modest. Both the African Group remains committed to reaching a similar agreement for educational institutions. On the other, the International Federation of Library Associations set its goal to achieve a treaty on flexibilities for the benefit of libraries. Progress has been slow, however, and challengers still need to jump many hoops to come to an agreement with

[150] Interview with Campaigns Manager at the Royal National Institute of Blind People (December 15, 2015).

incumbents who, again, adamantly oppose a legally binding instrument for either case (see Saez 2013a, 2013b, 2015, 2017b, 2018a).

Why is that? Has the institutional context changed again, leading to a closure of the opportunity structure? The answer is more complicated. First, participation by civil society organizations has abated again after the conclusion of the *Print Treaty*. While this does not take away from the outcome reached, it shows the temporary nature of challenger coalitions. The lack of resources and the issue-specific nature of mobilization make it difficult for challengers to continue their reform agenda beyond a specific outcome, even if the institutional opportunity structure, at least in principle, remains open.

Second, reform outcome may indeed affect how incumbents perceive a specific forum and create incentives for them to use their structural power to attempt to recalibrate rulemaking institutions in their favor. An official of the US Patent and Trademark Office argued in an interview that WIPO remains a relevant rulemaking venue for IP and trade issues. Yet the official also noted that multilateral negotiations have become more difficult. Although legal-technical expertise has increased in developing countries, negotiations can be complicated by the fact that it is often diplomats rather than substantive experts that negotiate in Geneva.[151] According to actors in this vein, the UN and Geneva context for this reason are characterized by a political calculus rather than substantial conversations. Here, actors often try to play chess across a number of venues and often do not take the same position in every forum. Proponents of stringent intellectual property regulation may thus feel compelled to move to the bilateral and the plurilateral level to set new standards, particularly as they related to trade (see Sell 2011).

5.5 Discussion

In this chapter, I have analyzed two episodes of attempted reform in international copyright regulation. In both cases, challengers demanded flexibilities for the benefit of people living with print disabilities. While the earlier episode (1977-1982) resulted only in an outcome of minor reform, in the later episode, challengers achieved a legally binding treaty on limitations and exceptions (2002-2013). Both cases are similar on the variables identified by other approaches to international economic regulation. The distribution of capabilities is similar across both episodes. Materially weaker challengers, specifically developing countries and NGOs, were opposed by powerful incumbents, including the EU, the U.S., and copyright-based industries. Moreover, the problem structure is similar. Despite technologi-

[151] Interview with Senior Official at the U.S. Patent and Trademark Office (June 30, 2016).

cal changes, the nature of the access problem remained effectively the same and actors discussed the issue similarly in both episodes. Why then were challengers more successful in the second episode than they were in the first?

The analysis in this chapter finds that shifts in the institutional context caused an opening of the opportunity structure for challengers. Consequently, regulatory processes played out differently across the two reform episodes. In the *coordinated* institutional context of the 1970s and 80s, challengers were unable to select a responsive institution to pursue their reform agenda. Moreover, the rules were consistent, which made it difficult for challengers to develop solutions based on alternative interpretations of rules. In the *competitive* context of 2000 and onward, challengers were able to target WIPO and exploit ambiguities at the level of principles between WIPO and the WTO. Three findings are of particular importance:

- In principle, any constellation involving multiple institutions enables strategies of institutional selection. The analysis shows that opportunities for institutional selection are not only determined by how many institutions are available but by how these institutions interact specifically. An established division of labor among the institutions of a governance area will make it difficult for actors to engage in forum shopping.
- Even where rules are consistent, actors may make strategic use of differences between the principles that different institutions in a governance area enshrine.
- In both cases, challengers were able to mobilize allies—albeit to varying extents—and sustain mobilization. This underscores that collective action problems are mainly related to the structure of an institutional context. Importantly, there are some historical differences in the mobilizing structure between the two cases. Most notably, there were fewer transnational NGOs, addressing access to knowledge issues in the 1970s and 80s than there were in the 2000s. I also assume that other factors, such decreases in airfare and technological advances, most importantly the internet, account for the increasing participation by non-state actors.

Table 5.5 summarizes outcomes, control and explanatory variables, as well as regulatory processes of the two cases.

Table 5.5: Reform Attempts for Access to Printed Material—Analyzed with Regard to Control Variables, Explanatory Variables, and Causal Mechanisms

Case	Reform Attempt 1977-1982	Reform Attempt 2002-2013
Outcome	*Model Provisions Concerning the Access by Handicapped Persons to the Works Protected by Copyright*	*Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled*
	Minor reform	Major reform
Control Variables		
Great powers	Opposed	Opposed
Business interests	Opposed	Opposed
Public awareness	No	No
Expert consensus	No	No
Explanatory Variable		
Institutional context		
Relevant institutions	WIPO and UNESCO	WIPO and WTO
Interaction	Coordinated	Competitive
Structure	Integrated	Integrated
Opportunity structure	Narrow	Open
Causal Mechanisms		
Venue selection		
Observable implication	Impossible due to division of labor between WIPO and UNESCO; agenda control by incumbents	Purposeful and successful agenda setting at WIPO; diminished agenda control by incumbents
Conflict expansion		
Observable implication	Mobilization of allies but within parameters set by incumbents	Mobilization of a large and diverse coalition of allies from the Global North and the Global South

What are the implications of these findings? First, they confirm the central claim of institutionalist approach that institutional context is key to explaining regulatory outcomes. Second, they corroborate the core hypothesis of this book that broader institutional configurations shape actors' strategies and, more importantly, determine the opportunities for challengers to change the regulatory status quo. Most existing analyses, particularly the transnational advocacy network literature, explain outcomes of weaker actor influence with successful public mobilization campaigns. My findings suggest that public attention is not a necessary condition for reform. This is not to discount public mobilization as an explanatory factor. It may very well be a sufficient condition for change in various cases. However,

these findings suggest that institutional conditions deserve closer attention. Third, with regard to the regime complexity literature, the analysis shows that institutional complexes need to be more carefully conceptualized. Considering only a single factor, such as the density of institutions in a governance area, tells us little about the inner workings of an institutional complex. In the two cases studied in this chapter, for instance, the number of institutions has remained largely constant. However, the relationship between WIPO and UNESCO on the one hand and between WIPO and WTO on the other varied greatly. This highlights that the mode of institutional interaction has an important effect on what strategies actors can adopt to pursue their preferences.

In this chapter, I have focused on the dimension of interaction. Despite what some contributions suggest, not all institutional settings become more fragmented over time. In the cases studied in this chapter, variation of institutional complexity. In the subsequent chapter, I will systematically address how variation on the axis of differentiation affects the opportunity structure for challengers. In the case of plant variety protection and access to seeds for smallholder farmers, the institutional context grew increasingly competitive *and* fragmented over time.

6 Plant Variety Protection and Access to Seeds

There is a great irony in the germplasm controversy: in a world economic system based on private property, each side in the debate wants to define the other side's possessions as common heritage.

—*Jack Ralph Kloppenburg, Jr. and Daniel Lee Kleinman* (1988, 188)

In late 2001, the Food and Agriculture Organization of the United Nations (FAO) adopted the International Treaty on Plant Genetic Resources for Food and Agriculture (*Seed Treaty*). This represented a stunning reversal of the trend towards the extension of property rights for plants at the international level. The *Seed Treaty* established a commons for genetic resources, making available 64 crops and forages that together account for 80 percent of all human consumption for all members of the treaty through a multilateral system of access and benefit sharing. In addition, it codified the concept of farmers' rights, a set of flexibilities directed at rewarding smallholder farmers for their past, present, and future contributions "in conserving, improving and making available these resources."[152] At this point, the *Seed Treaty* had been under negotiations for a little longer than seven years with the dispute over access to plant genetic resources dating back to the late 1970s. In marked contrast to a precursor agreement, the 1983 International Undertaking on Plant Genetic Resources (*Seed Undertaking*), the *Seed Treaty* exhibits a greater degree of legal bindingness. While a number of stakeholders have chided its vagueness, the *Seed Treaty* constitutes an important turning point in the international regulation of plant genetic resources, potentially improving access to seeds for a range of beneficiaries.

At its heart, the *Seed Treaty* addresses a longstanding conundrum: Since the 1950s, developed countries and plant breeding companies have sought to set an international standard for the protection of improved plant varieties. In 1961, these efforts culminated in the creation of an international treaty, the International Union for the Protection of New Varieties of Plants (UPOV).[153] UPOV provided the basis for a system of "plant breeders' rights" or plant variety protection, a patent-like but sui generis form of intellectual property protection for "worked" genetic resources. At the same time, these actors continued to see "raw"

[152] International Treaty on Plant Genetic Resources for Food and Agriculture, November 4, 2002, www.fao.org/3/a-i0510e.pdf.

[153] UPOV is the acronym for the official French designation *Union internationale pour la protection des obtentions végétales*.

genetic material, including wild relatives of crops as well as traditional landraces,[154] as the common heritage of humankind, a freely available resource for the use of everyone. Technology-poor but often biodiversity-rich developing countries opposed this unequitable treatment of raw and worked genetic resources. From their perspective, developed countries and commercial interests from the developed world had exploited plant genetic resources from the Global South at their expense since colonial times. Absent a commercial breeding industry, developing countries sought to preserve access to worked genetic resources, including the elite cultivars[155] of commercial breeders, while defining as sovereign property domestic germplasm[156] to make plant breeders in the Global North pay in exchange for access and as a means of sharing benefits arising from its use. In 1992, developing countries' demands resulted in the adoption of the Convention on Biological Diversity, which formally recognized the sovereign rights of states over their natural resources. Although the portrayal of the Global North as technology-rich but diversity-poor and vice versa of the Global South as technology-poor but diversity-rich is a simplification, it has served as potent imagery for coalition building.

I build on existing research on the regulation of plant genetic resources but move beyond this work, using primarily official records, press reports, and published accounts of participants of the negotiations as well as some interviews. A significant share of the literature on regime complexity has drawn on empirical examples from this governance area to develop and illustrate new theoretical arguments, including but not limited to Raustiala and Victor's (2004) seminal article on the subject (see also Faude 2015; Gehring and Faude 2014; Helfer 2004a, 2004b; Oberthür and Stokke 2011; Rabitz 2017). This case study advances these arguments, focusing in a systematic manner on outcomes at one forum, the FAO.

In this chapter, I explore this conflict and identify the factors that allowed challengers to achieve an outcome of regulatory reform through process tracing. For this purpose, I fol-

[154] Landraces are domesticated, varieties of crop species that are adapted to the local environmental conditions of cultivation and used in traditional agriculture. They are distinct from wild and weedy species, including the wild relatives of agricultural crops, on the one hand and cultivars on the other. The term cultivar, a portmanteau word of "cultigen" or "cultivated" and "variety," refers to a plant variety that is improved through selection or crossing and displays distinct traits, which are maintained during propagation. Landraces are somewhat genetically uniform but display a greater variability of traits than cultivars. While wild relatives of crops and landraces are unsuited for cultivation in industrial agriculture, they may possess traits that breeders look to incorporate in cultivars to react to environmental changes or the outbreak of a specific pest (see Andersen 2008, 10–15).

[155] Elite lines are bred to possess a multitude of desirable traits, including but not limited to disease resistance, herbicide resistance, plant architecture, stress resistance, and yield.

[156] Germplasm refers to seeds or other forms of living tissue that contain genetic information, such as "a leaf, a piece of stem, pollen or even just a few cells" (Seed Biotechnology Center n.d.), from which new plants can be grown. It can be collected and stored in seed banks for purposes of breeding, preservation, and research.

low the template of the previous chapter to test and refine the argument for institutional opportunity structures, studying two varying regulatory outcomes. In the subsequent section, I begin this process by discussing what is at stake and who wants what in the international regulation of intellectual property protection for plants. In the third section, I briefly sketch the history of intellectual property protection for plant genetic resources, focusing on the emergence of an institutional complex in the governance area. Fourth, I analyze why initial efforts to preserve access to plant genetic resources at the international level in the early 1980s have resulted only in an outcome of *minor reform*, the *Seed Undertaking*. Here, challengers found themselves in a coordinated institutional context, which provided only a narrow opportunity structure for collective action. Fifth, I show why a renewed push by challengers for reform has been more successful, resulting in an outcome of *moderate reform*, the *Seed Treaty*. My analysis reveals shifts in the institutional context that allowed challengers to exert greater influence on the regulatory outcome. Here, the emergence of a number of competing international fora, specifically of the WTO and the CBD, has allowed challengers to pursue strategies of institutional selection. Consistent with the expectations of the institutional opportunity approach, however, the increasing fragmentation of the institutional context has also made coalition building and sustaining collective action more difficult, leading to a less sweeping reform outcome than in the copyright case. In the sixth and final section, I discuss the results, comparing the two case studies, and draw conclusions for evaluating the explanatory power of the institutional opportunity approach.

6.1 The Demand for Farmers' Rights and a Global Seed Commons

The conflict over intellectual property standards for plant varieties revolves around access to plant genetic resources for food and agriculture. Today, various forms of property rights constrain access to seeds and other forms of germplasm, which farmers use to cultivate crops and on which breeders draw to adapt plant varieties to an ever-changing environment. As I show in this section, all of these may have adverse consequences for agriculture, plant breeding, environmental conservation, and ultimately food security. In what follows, I explicate the existing and potential social costs of the advancing enclosure of plant genetic resources. In so doing, I lay out actors' different motives for engaging in this regulatory dispute and their policy preferences.

What is meant by plant genetic resources precisely? The concept is a political one that originated in debates at the FAO in the late 1960s (see Frankel and Bennett 1970).[157] The *Seed*

[157] For an extensive discussion of the concept of plant genetic resources see Hammer and Teklu (2008).

Undertaking provides a definition that is commonly accepted among stakeholders. Here, plant genetic resources are defined as "reproductive or vegetative propagating material […] of all species of economic and/or social interest, particularly for agriculture at present or in the future, and has particular reference to food crops."[158] In other words, the concept of plant genetic resources highlights the current or potential value of *all* crop plant species, particularly nutritional plants, including the wild relatives of crops, traditional landraces, and modern elite lines. It underscores the distributional implications surrounding the use and conservation of crop species.

The rationales for granting intellectual property in plant genetic resources are largely the same as in industrial property and expressive works. As discussed in Chapter 2, intellectual property rights protect knowledge goods, which are in principal non-rival and for which it is difficult to exclude others from obtaining access to them. Since plants reproduce themselves, it is difficult to exclude others from using the germplasm of a specific variety once it is in circulation (barring it is sterile). For conventional crops, farmers may collect seeds and reuse them in the following season. In fact, for roughly 12,000 years, replanting farm-saved seeds has been the principal technique of crop growing and development. In traditional agriculture, farmers have relied on (and, where it is practiced, continue to rely on) the selection of what appear to be the healthiest and most productive plants to lay the foundation of the upcoming harvest (Center for Food Safety and Save our Seeds 2013; Fowler and Mooney 1990).[159] Since the 1930s and progressively so after the Second World War, lawmakers in the developed world began to introduce systems of intellectual property protection for plant varieties (Kloppenburg, Jr. 2004, 9–11).

Current national and international legal arrangements provide up to three different forms of intellectual property protection in plant genetic resources, plant variety protection, plant patents, and "traditional" utility patents. All developed countries and a significant number of developing countries have adopted systems of plant variety protection in accordance with the UPOV convention. Fewer countries also grant plant and/or utility patents to plant breeders.

Similar to patents, "breeders' rights" obtained under plant variety protection systems award the owner between 20 and 25 years of exclusive control over a plant variety, including for its production or reproduction, its commercialization, importing and exporting, and nowa-

158. FAO Conference, Resolution 8/83, International Undertaking on Plant Genetic Resources (November 23, 1983), http://www.fao.org/docrep/x5563E/X5563e0a.htm#Resolution8.
159 Interview with Science Policy Analyst at the Center for Food Safety (June 24, 2016).

days stocking. In order to qualify for protection, plant varieties need to be new, distinct, uniform, and stable. This means that a variety receiving protection must not have been available in the applicant's country or any other country prior to the application (at least within a specified timeframe), that it must be easily distinguishable from other varieties, and that it must not display variation in relevant characteristics in one generation and following propagation (Winter 2010, 229–32).

In contrast to patents, plant variety protection arrangements provide important limitations and exceptions for research and farming. Typically, plant breeders' rights (as codified by UPOV) provide for a breeders' exemption or research exemption. This exception allows researchers to use a protected variety as a source of germplasm for breeding new varieties without authorization by the right holder. This is to ensure the freedom of research. At least in the past, plant variety protection has also acknowledged the farmers' privilege, a right to safe and reuse seeds. Again, as in other areas of intellectual property, the depth and scope of these limitations has decreased over time in most national legislations and at the international level, particularly with regard to the farmers' privilege (Helfer 2004a, 28–29).

Some countries also grant plant patents, but usually only in specific classes of plants.[160] In some jurisdictions, plant breeders may even receive utility patents for plants, elements of plants, such as portions of plant genomes, or processes used in the manufacture of these plants (K. Aoki 2004, 417–27; Fowler 1994, chaps. 3–5).[161] Patents for plant varieties remain the exception rather than the rule outside of the U.S., however. Yet where rule-makers have curtailed flexibilities to plant breeders' rights, plant variety protection has become more patent-like, advancing the enclosure of plant genetic resources (see Blakeney, Cohen, and Crespi 1999; Dutfield 2008, 32; Haugen, Ruiz Muller, and Narasimhan 2011, 120–25; Rabitz 2017, 60–61).

Beginning in the 1970s, the increasing commodification of seeds has sparked opposition within countries of the developed world and even more so at the international level between developed and developing countries. Intellectual property in plant genetic resources contentious is contentious for at least four interrelated reasons:

[160] The U.S. Plant Patent Act applies only to asexually reproducing plants, excluding tuber-propagated plants. It applies mainly to ornamental plants and, with the exception of fruit tree varieties, is not that relevant for nutritional plants.

[161] Generally speaking, the requirements for utility patents are higher than for plant variety protection, which makes it difficult for varieties that have been bred using traditional methods. Beyond that, the costs of obtaining a utility patent exceed those of other forms of intellectual property protection. Thus, utility patents are mostly relevant for varieties that are created through genetic engineering.

First, intellectual property protection for living matter raises a host of legal- and moral-philosophical questions. From the perspective of legal doctrine, intellectual property protection for plants and plant parts blurs the line between discovery and invention. Generally, a patent can only be awarded for an invention. While inventions apply natural laws in new ways to create something that is commercially usable, a scientific discovery itself is not patentable (see Freie Universität Berlin n.d.).[162] Yet plant variety protection, at least in principle, can be awarded for a discovered variety, as long as it is novel, distinct, homogeneous, and stable, albeit most wild varieties fail to fulfill the requirements of homogeneity and stability. The extension of the scope of patentability for plants and genes and, for that matter, the increasing convergence of plant variety protection and utility patents make a renewed examination of this principle necessary. Ideally, such a discussion would involve perspectives from biology and the philosophy of science. According to Feldman (2013), in practice, however, lawmakers often answer these questions on political economy grounds, which may have unforeseeable consequences for both the development of law and companies that base their business models on these decisions in the future.[163] Intellectual property rights for genetic resources also raise a fundamental normative question: Should life forms be owned through patents? A number of actors object to this idea categorically, either on moral or religious grounds. In public discourses, this question often overlaps with the question of what biotechnology should be allowed to do.[164] In the context of this chapter, the question matters, as it mobilizes (or can be used to mobilize) constituencies to invest political capital and other resources in international regulatory disputes.

Second, crop plant varieties are essential knowledge goods. Since the Green Revolution of the 1960s and 70s, developed and developing countries have come to rely on high-yielding varieties to feed an ever-growing world population. Industrial agriculture is dependent on elite cultivars that allow for mechanized harvest and the application of large amounts of synthetic fertilizer and pesticides. These varieties need to be continuously adapted to new pests and environmental changes. Concerns about overly stringent protection have caused fear on behalf of financially weaker countries that they would be unable to purchase new

[162] For an extended legal discussion, see also Tilford (1998, 399–405).

[163] Feldman criticizes the "bad science" and "shaky reasoning" involved in the 2013 U.S. Supreme Court's decision on Association for Molecular Pathology v. Myriad Genetics, Inc. In this landmark case, the Supreme Court answered the question of whether genes are patentable by introducing a distinction between naturally occurring and synthetic genes. According to the decision, the former are discovered and, thus, cannot be patented. The latter, however, are invented and, thus, can be patented. Feldman argues that this distinction oversimplifies and even misrepresents the scientific process by which sequences of complementary DNA are isolated.

[164] For an extensive discussion of the philosophical underpinnings of different property conceptions in plant genetic resources, see Stenson and Gray (1999).

generations of intellectual property-protected seeds, threatening their food security (Barton 1982, 1074–75).[165] An expert commission set up by the British Government, for this reason, concluded in its final report that "[d]eveloping countries should generally not provide patent protection for plants and animals." Instead, they should "consider different forms of *sui generis* protection for plant varieties" (Commission on Intellectual Property Rights 2002, 66, emphasis in original; see also Paarlberg 2001, 14; Rangnekar n.d.). Developing country governments, the seed industry, and UPOV, by contrast, argue that stringent intellectual property protection facilitates the transfer of technology from the Global North to the Global South (UPOV n.d.). While there is some evidence that regimes of plant variety protection have led to greater private expenditures on research in developed countries (Blakeney, Cohen, and Crespi 1999, 225), civil society actors and a number of experts criticize that investments are not equally distributed across species. Thus, private research and development may not always lead to quality improvements but incentivize the development of pseudo-varieties, which offer no greater resistance to pests (Kloppenburg, Jr. 2004, 144–46).

Third and relatedly, the expansion of intellectual property rights in plant varieties has raised antitrust concerns in the seed industry. As discussed in Chapter 2, intellectual property rights give the owner a temporary monopoly and, thus, significant market power, which may promote cartelization and the formation of monopolies (Burk 2012, 401). The market for seeds has in fact become more concentrated over time and is today dominated by a small number of seed and agrochemical conglomerates, including BASF, Bayer (as of 2018 the owner of Monsanto), Dow AgroSciences (a subsidiary of Dow Chemical Company), DuPont, and Syngenta. This development has drawn public attention, particularly from consumer and environmental organizations. Their criticism often implicates the business models of seed corporations as a whole. Civil society organizations also question the safety and environmental sustainability of fertilizer and pesticide intensive agriculture and of genetically modified foods. While these issues are not directly related to the issue at hand, they are important to bear in mind, as they serve as catalysts in coalition building.[166] In India and many developing countries, the introduction of new intellectual property legislation has caused protests by broad societal coalitions of activists of farmers, cautioning against

[165] According to the World Food Summit Plan of Action, food security necessitates that "all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life," see FAO World Food Summit, Rome Declaration on World Food Security and World Food Summit Plan of Action, WFS 96/3 (November 13, 1996), http://www.fao.org/docrep/003/w3613e/w3613e00.htm.

[166] For an overview of developed and developing country perspectives on biotechnology, see Pinstrup-Andersen and Cohen (2001).

market concentration and advocating for the preservation of traditional agriculture (see Rajshree 2016; Rangnekar 2013).[167]

Fourth, there is substantial disagreement about how the benefits arising from the use of plant genetic resources should be distributed and what roles the market and the state should play in allocation processes. There is a significant post-colonial dimension to consider. For most of human history, both raw and worked germplasm have been treated as something that cannot be owned. When developed countries began to advance the notion of improved plant varieties as something, for which private actors can claim ownership and which can be traded as a commodity, this raised strong objections on behalf of developing country governments and activists. Developing countries and activists accused developed countries of monetarizing new crops varieties, for the development of which they were heavily reliant on germplasm from the developing world, without ever compensating the countries of origin. Moreover, developing countries criticized that the former imperial powers had exploited their biodiversity for financial benefit during the colonial age. The introduction of intellectual property rights for improved varieties would allow developed countries to continue doing so and keep developing countries in a state of dependence. Because of that, developing countries rejected the idea of private ownership for plant varieties and advanced the notion of sovereign rights over plant genetic resources instead (see Rabitz 2017, chap. 4).

Different regions of the world vary in terms of their endowments in biodiversity. A number of regions, most of which are located in the Global South, are considered centers of origin or centers of diversity. Due to climatic conditions, these regions are particularly rich in biodiversity, including in wild crop plant relatives and landraces.[168] Importantly, many of today's essential crops, such as maize and potatoes, do not originate from Europe or North America but from Africa, Asia, and notably South America. A significant portion of these crops has been introduced by colonizers in the process of what Crosby, Jr. (2003) has termed the "Columbian exchange" and throughout colonial times. In fact, plant genetic

[167] The seed industry has also looked for technological solutions to circumscribe the farmers' exemption. So far, however, civil society actors have successfully opposed these efforts. The development of genetic use restriction technology or terminator technology, which causes second-generation seeds to be infertile, has generated controversy among consumers, farmers, and NGOs. Such technology would block farmers from reusing farm-saved seeds, even if they were legally allowed to do so. In response to widespread public outrage, in 2000, the Conference of the Parties of the CBD has recommended a moratorium on field-testing and commercialization of terminator technology with many countries following suit (see Blakeney 2009, chap. 7).

[168] The extent, to which the world's biodiversity originates from what used to be called "Vavilov centers of genetic diversity" (named after the Russian botanist Nikolai Vavilov, who pioneered the idea) has come under review in recent years. Yet there is substantial agreement that some regions in the Global South, particularly in South America, constitute large reservoirs of unexplored biodiversity.

resources have been a central interest of colonial rule. The imperial powers exploited the biodiversity of their territories for their commercial benefit and with no regard for the livelihood of indigenous communities. Botanical gardens, such as the Kew Gardens in the UK, played a key role in colonial expansion, acting "as an institution generating information about plants of economic value" (Brockway 1979, 449, see also 1988).

Developed countries insisted on a differentiation between raw germplasm on the one hand and worked plant genetic resources on the other. Raw plant genetic resources include wild species and traditional landraces that have been adapted to changing conditions by local communities over generations but are not the product of systematic breeding. Worked plant genetic resources include all forms of elite varieties. For the developed countries, only the latter were to be protected by intellectual property rights, as raw plant genetic resources were not commercially viable. Developing countries opposed this distinction for two reasons. First, they argued that many traits of commercial varieties were the result of breeding with foreign germplasm. Raw germplasm, thus, has significant potential commercial value, as it provides a source of potentially useful traits. Second, the classification of landraces as raw germplasm disregards the contribution by farmers in developing countries, from which many landraces originate and who act as custodians of traditional knowledge about crop varieties and wild species. For this reason, developing countries initially advocated for making all plant genetic resources, raw and worked, freely available. When they realized that this plan was destined to fail, they argued that plant genetic resources belonged to the states, from which they originated. Other states and private entities that sought to utilize germplasm from a foreign territory would have to respect the sovereign right of that state to grant or refuse access to its plant genetic resources, as in the case of other natural resources (Raustiala and Victor 2004, 281–83).

The concept of sovereign rights quickly became as controversial as the idea of plant variety protection. TNCs from the Global North had been exploring biodiversity in the Global South for commercial applications at least since the 1970s. Yet it is difficult to estimate the commercial value of diversity upfront, which has complicated the negotiation of compensation agreements. Second, useful traits are often found in native varieties or in germplasm that is already stored ex situ, i.e. outside of the natural habitat in seed banks or other collections (Brown 1988). Developing countries have been equally reliant on seed banks for research and development. However, many large collections are located in the developed world, which in the case of an escalating dispute, left them at risk of losing access to this source of germplasm. In other words, developed countries met developing countries' threat

of cutting off access to their biodiversity with the threat of cutting off access to seed banks (K. Aoki 2010, 134–36).

To balance between the diverse societal interests in guaranteeing access to seeds and germplasm, rewarding innovation, and sharing the benefits thereof with countries of origin and holders of traditional knowledge, challengers in the two cases studied in this chapter advanced the concept of farmers' rights. Farmers' rights are related to but distinct from the farmers' privilege mentioned above. Like the farmers' privilege, farmers' rights provide an exception to intellectual property rights for saving, using, exchanging, and selling farm-saved seed. Moreover, they include measures on integrating farmers in decision-making processes on the conservation and sustainable use of plant genetic resources as well as for sharing the benefits that arise from the commercialization of traditional varieties and knowledge. The underlying idea is to reward smallholder farmers and local communities for their past, present, and future contributions to preserving agricultural biodiversity and their stewardship of traditional animal and plant varieties (Helfer 2004a, 17–18). Finally, farmers' rights acknowledge the importance of traditional agriculture for nourishing local communities, particularly in developing countries.[169] In recent years, attempts to codify farmers' rights have been coupled to demands for a seed and germplasm commons to ensure that essential crop species are publicly available for purposes of breeding and cultivation (see Halewood and Nnadozie 2008).

In sum, this regulatory conflict essentially boils down to three questions: Should intellectual property rights be granted to breeders and, if so, under what conditions? Should all plant genetic resources be freely available for the benefit of everyone? And, finally, should plant genetic resources be under the control of states? Stakeholders in the issue area answer these questions quite differently. Particularly developed countries and the breeding industry advocate for stringent plant breeders' rights to create a global market for seeds. Developing country governments advance claims for sovereign rights to plant genetic resources instead. They argue in favor of a larger role for the state in allocating plant genetic resources and distributing the benefits that arise from their use. Finally, a number of activist organizations and scientists favor more flexible property rights (both sovereign and private) and a larger germplasm commons in order to encourage research and preserve traditional forms of agriculture.

[169] For a critical discussion of the concept of farmers' rights, see Borowiak (2004) and Haapala, Jr. (2004).

6.2 The Evolution of Intellectual Property in Plant Genetic Resources

In comparison to patents and copyrights, plant breeders' rights have recent origins. While a number of countries adopted legislation to protect commercially bred varieties as early as in the 1930s, the movement for intellectual property rights gathered steam only in the 1950s. The institutionalization of plant variety protection in its current form was an international project from early on. In 1961 a small club of European countries adopted the UPOV convention, which until the adoption of TRIPS functioned as the focal point for intellectual property regulation of plant genetic resources. Efforts to expand the regulatory depth and geographical scope of these standards have met significant opposition. This section sketches the evolution of international intellectual property standards for plant genetic resources to provide context for the analysis of two attempts at regulatory reform in the FAO in the following two sections.

Plant breeders' rights arose as "an offshoot of patent law" (Heitz 1987, 54). Their genesis is the product of changes in the political economy of agriculture and breeding between the late 19th and early 20th century. It reflects the emergence of an economically powerful and increasingly well-organized breeding industry. Until the early 20th century, crop development for the most part had been the domain of farmers. While the private sector had begun to take a more active role in plant breeding in the late 19th century, it took a while until commercial breeders were able to crowd out the state and farmers as the primary suppliers of seeds and establish a viable market for seeds.

The rediscovery of Gregor Mendel's selection rules at the turn of the century played a critical role in this process, sparking an unprecedented enthusiasm for genetics.[170] Maize cultivation in the U.S. highlights the impact of the introduction of scientific breeding methods. In the second half of the 19th century, corn acreage increased fourfold and the crop became one of the most important from both a nutritional and an economic perspective. During pre-Mendelian times, farmers as the principal breeders were encouraged to select plants for cultivation based on aesthetic criteria. In contests called "corn shows," juries of scientists selected the finest corn based on its ears. Commercial seed companies sponsored these shows to boost their sales of varieties with decorated strains. This incentive system, however, was largely counterproductive and led to a decline in yields. The size of ears is not necessarily correlated to performance in the field. Where formerly a great variety of corn landraces had existed, each adapted to local conditions, there was now genetic uniformity.

[170] Mendel published his discoveries in 1866 but they remained largely unappreciated by the scientific community until around 1900 (Fowler 1994, 48).

Moreover, inbreeding resulted in the reduction of plant vigor (Kloppenburg, Jr. 2004, chap. 4).

Even when the shortcomings of this approach became apparent, agronomical research informed by Mendelian genetics was initially unable to fulfill its promises and corn yields remained stagnant until the 1930s. Around 1910, however, scientists began to make significant advances to hybridization. This technique made a breakthrough in subsequent years, since it allowed for the systematic breeding of far superior varieties. Hybrids often show heterosis or hybrid vigor, producing larger of taller offspring. The innovation of hybridization transformed agriculture for two reasons. For one, this method of breeding was too complex to be undertaken at the farm level, foreshadowing the subsequent division of labor between cultivation and crop development (Fowler 1994, 51). Second, hybrids are often at least economically sterile. In the case of corn, seed collected from hybrid varieties exhibits a considerable reduction in yield. Consequently, farmers then needed to purchase seeds every year anew, if they wanted to cultivate the higher-yielding hybrid varieties. As Berlan and Lewontin (1986) summarize, "the adoption of hybrid corn transformed seed into a commodity." Due to the absence of intellectual property protection for seeds up to this point, it had been difficult for the seed trade to develop a viable business model. Hybrid seed, at least in principle, made this possible.[171]

From the perspective of the seed industry, two obstacles remained. On the one hand, it faced unwanted competition from the state, which, at that time, played an active role in crop improvement and seed distribution. Until well into the 20th century, public research centers and universities were significantly involved in breeding and distributed seed at no cost to farmers in a number of technologically advanced countries. In the U.S., seed companies had thus been urging an end to congressional distribution of seeds since the late 19th century. The efforts of the increasingly well-funded seed industry paid off in 1924 when the practice was abolished (Kloppenburg, Jr. 2004, 71).

On the other hand, due to the lack of intellectual property protection, companies that invested heavily in research and development ran the risk of being outcompeted by free riders. Consequently, commercial breeders began to lobby for an extension of patents to

[171] Critical scholars of agricultural history dispute the extent to which hybrid varieties are superior to open-pollenated varieties. It is an open question whether same success would have been possible, if researchers had focused on the improvement of open-pollenated varieties instead. Clearly, seed companies had an incentive to push research of hybridization, as this technique gave them greater control over the distribution of seed, and succeeded in framing it as the superior alternative (see Berlan and Lewontin 1986; Fowler 1994, 52–58; Kloppenburg, Jr. 2004, 94).

plants to defend their assets. Pressure on legislators came not only from hybrid seed producers. As Fowler (1994, 84, emphasis in original) put it, in the U.S., flower and tree nurseries also sought to "gain legal control over varieties *as varieties*". In 1930, Congress adopted the Plant Patent Act for breeders of ornamental plants and fruit trees (K. Aoki 2008, 30–33; Fowler 1994, chap. 3; Kloppenburg, Jr. 2004, chap. 6). However, the U.S. did not extend intellectual property protection to other plant species until it passed the Plant Variety Protection Act in 1970 (K. Aoki 2010, 98). Germany was another early adopter of intellectual property protection for plant varieties. The Patent Act from 1877 did not explicitly exclude the possibility of patent protection for plants. During the imperial period, however, the patent office interpreted the law in a narrow sense. It reversed course in the Weimar Republic, allowing patents for a number of plant varieties. During National Socialism, the *Reichsnährstand* (the regulatory body of the agricultural industry) opposed patents for ideological reasons and a first legislative proposal for plant variety protection from Weimar days was put on hold (Neumeier 1990, 13–24).

After the Second World War, the institutionalization of intellectual property protection for plants continued at an increasing pace. In the consolidated market economies of Europe and the U.S., industrial agriculture firmly established itself as the dominant form of organization in farming. Only the elite varieties by commercial breeders guaranteed that the booming populations could be fed, spurring industry's interest in the commodification of seeds. This trend also reached the international level. Around 1950, the U.S. began working towards transforming agricultural production at a worldwide scale. In what became known as the "Green Revolution," the U.S. Agency for International Development with the assistance of the Rockefeller Foundation and other private actors introduced high-yielding varieties of rice and wheat in a number of developing countries, including Mexico and India (Kloppenburg, Jr. 2004, 157–58). These initiatives were aimed at the eradication of hunger on the one hand. On the other, they were part of a strategy to protect U.S. corporate interests and counter the rise of communism in these fragile states (Oasa and Jennings 1982, 35–36, 39; Stenson and Gray 1999, 11; Winter 2010, 228–29).

While the Green Revolution did significantly increase food production in the developing world, it had a mixed or negative impact in other fields.[172] For one, new varieties were heavily reliant on chemical fertilizers and other agrochemicals, particularly pesticides, which contributed significantly to the environmental degradation of cropland. The adoption of

[172] For a discussion, see Hazell (2009).

elite cultivars also had an adverse effect on the gene pool, as it led to the abandonment of low-yielding but genetically diverse landraces in favor of more scale-efficient monocultures. Landraces as well as wild crop relatives, however, are an important source of input in breeding. As the international community became aware of genetic erosion, the FAO convened a series of international conferences on the matter throughout the 1960s and 70s. In 1971, a group consisting almost exclusively of advanced capitalist nations decided to establish an international network of research centers, called Consultative Group for International Agricultural Research (CGIAR), to store germplasm samples from all over the world and coordinate research efforts. Contrary to developing countries' expectations, however, the CGIAR was placed largely outside of the control of the FAO (and the UN system for that matter). What is more, most seedbanks were also located in the Global North (Fowler and Mooney 1990, 156, 159–60). As a result, many developing countries, founded or unfounded, criticized that the CGIAR would allow developed countries to determine collection priorities and continue the colonial exploitation of plant genetic resources from the Global South (K. Aoki 2010, 129–33).[173]

Demands for the international protection of intellectual property in plants further fueled this conflict. The introduction of elite varieties during the Green Revolution opened up the markets of developing countries to seed producers from the developed world. Before, there had not been a breeding industry in developing countries and the market entry by U.S. seed producers was thus met by suspicion (Kloppenburg, Jr. 2004, 169–70). In 1961, five European countries, Belgium, France, the Federal Republic of Germany, Italy, and the Netherlands, established UPOV in an attempt to harmonize plant variety protection internationally. These countries decided to make UPOV a standalone convention rather than a protocol to the BIRPI/WIPO-administered Paris Convention for the Protection of Industrial Property. Yet UPOV was designed to maintain close organizational ties with BIRPI and its successor WIPO. In 1978, the convention underwent its first major revision. Subsequently, developed countries increasingly used UPOV as a platform to promote plant variety protection to other countries and create a global market for seeds (Sanderson 2017, 49–51). Business associations, particularly from the seed industry,[174] had recognized UPOV's

[173] For a critical perspective, see Kloppenburg, Jr. (2004, 162–66). For a perspective from CIGAR, see Swaminathan (1988).

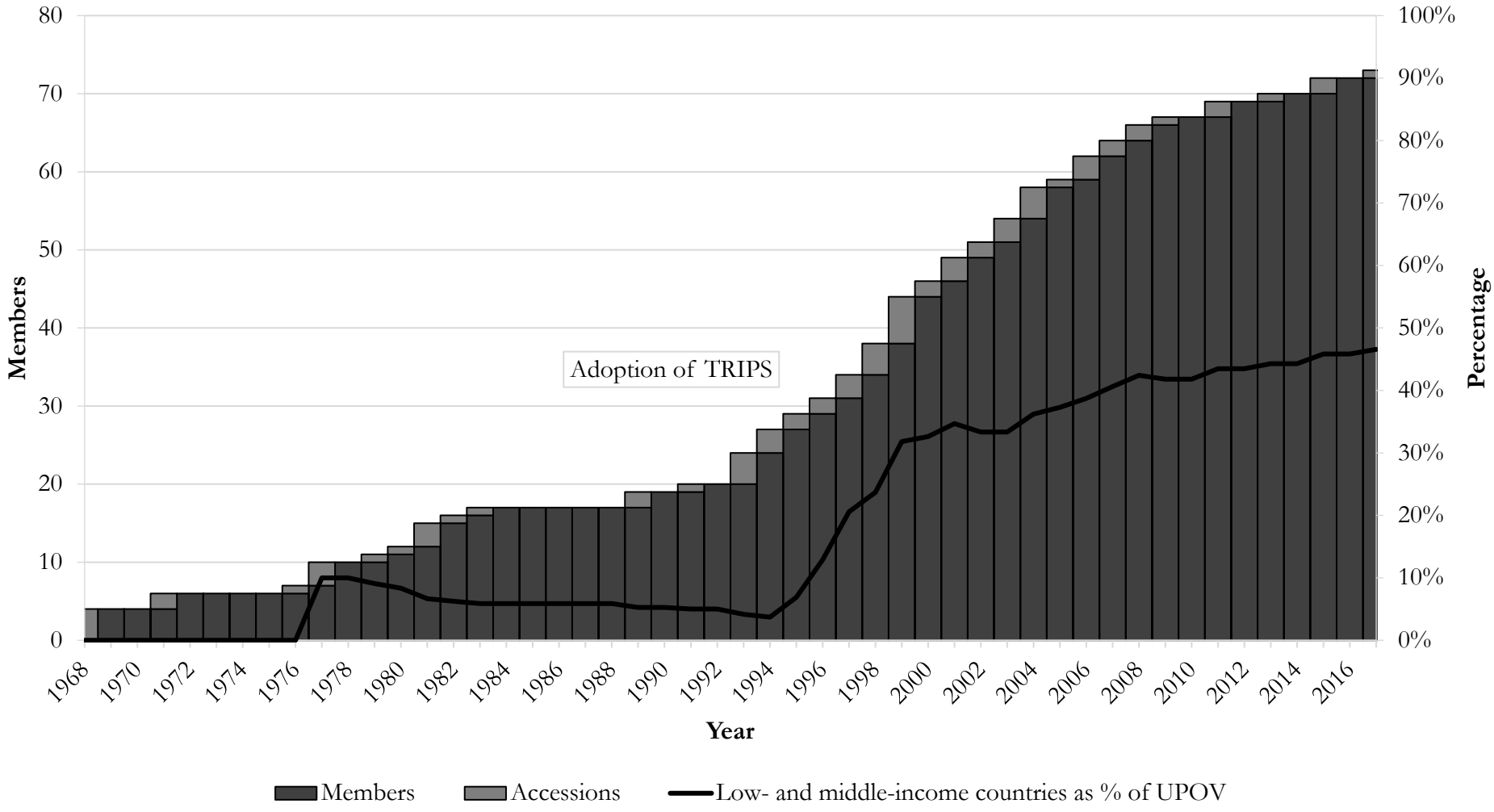
[174] These include the *Association internationale pour la protection de la propriété industrielle* (International Association for the Protection of Intellectual Property), the *Association internationale des selectionneurs pour la Protection des Obtentions végétales* (International Association of Plant Breeders), the *Communauté internationale des obtenteurs de plantes ornementales et frutières de reproduction asexuée* (International Community of Breeders of Asexually Reproduced Ornamental and Fruit Plants), the *Fédération international du commerce des semences* (International Federation of the Seed Trade), and later the International Seed Federation.

potential as a vehicle to pursue their goals at the international level, and went on to shape its development over the years (Dutfield 2008, 32–34). In the beginning, their efforts were largely unsuccessful. While a number of economically important countries joined the convention, including the U.S. in 1981, membership increased only slowly over the course of its first twenty years from four in the year of UPOV's entry into force in 1968 to 19 in 1989 (see Figure 6.1).[175]

Although UPOV did not immediately affect developing countries, many feared that developed countries would ultimately coerce them into adopting plant variety protection as well. With the emergence of biotechnology in the 1960s and 70s, the financial stakes involved in the dispute had grown even larger, as it allowed for a more targeted approach to breeding than traditional methods. The development of recombinant DNA technology allowed for the exchange of genetic material between organisms from different species. As a result, in the 1980s TNCs from the Global North became more and more active in bioprospecting, i.e. in exploring biological material for commercially valuable properties (Kloppenburg, Jr. 2004, 336). From the perspective of developing countries, TNCs were exploiting their biodiversity without sharing any of the benefits. Instead, developing countries criticized, developed countries even wanted to tax them through intellectual property protection (Drahos 2002, chap. 10; see also Reid et al. 1993).

[175] Original signatory Italy only ratified the convention in 1977.

Figure 6.1: Less Developed Countries in the UPOV Convention, 1968-2017



Sources: Author's illustration based on data from the UN (2016, 162) and UPOV (2017).

By the end of the 1970s, open conflict ensued between developed and developing countries over the control of plant genetic resources, which observers called the "seed wars" (see K. Aoki 2008; Kloppenburg, Jr. 2004, 184; Sutherland 1998). At first, developing countries denied the claim for private property in plant genetic resources and demanded unmitigated access to germplasm both raw and worked. This dispute largely took place in the context of the FAO. It is the subject of the two case studies, which I will carry out in the following sections of this chapter. Subsequently, in somewhat of a reversal of their initial position, developing countries asserted that each country had sovereign rights over its plant genetic resources (Raustiala and Victor 2004, 288–90). To exert pressure on developed countries, they threatened to cut off the supply of germplasm, if corporate interests were not ready to pay in exchange for access or engage in any other form of benefit sharing (Fowler 1994, 196). Through the maneuvering of civil society activists and governments these demands were linked to concerns over the erosion of biodiversity and incorporated in the CBD, which was adopted in 1992. While these issues are not functionally related, the recognition of sovereign rights allowed for a compromise between developed and developing countries. The former sought to protect biodiversity, particularly in the newly industrializing countries. For them, benefit sharing and other forms of financial compensation provided an incentive mechanism to encourage the latter to act sustainably (Bragdon, Garforth, and Haapala, Jr. 2008, 82–85; Rabitz 2017, 60). While this solution noticeably contributed to the calming of the conflict, sovereign rights further complicated the picture in the medium term. Stakeholders quickly became aware that benefit sharing agreements were difficult to negotiate and that this additional layer of property rights raised the barrier for scientific and innovative activity (K. Aoki 2008, 90–97).

Meanwhile, developing countries tightened the screws on plant variety protection. In 1991, the members of UPOV adopted a second major revision to the convention, which circumscribed its flexibilities and raised the overall level of stringency (for an overview, see Jördens 2005). Whereas the 1978 UPOV revision at least implicitly recognized the farmer's privilege, UPOV 1991 reduced this principle to an exception that members may, but need not, grant (Dutfield 2008, 38–39). Fundamentally, UPOV 1991 also expanded breeders' exclusive rights to include not just the production or reproduction, marketing, and sale but also the stocking and conditioning of plant material for the purpose of propagation (i.e. the saving of seeds and acts of preparation, such as cleaning, for reusing them). In practice, this change made it so that countries that implemented UPOV 1991 needed to redraft their legislation if they wanted to continue to give farmers the right to save, reuse, exchange, or even sell seeds produced from a protected variety. Finally, the 1991 revision extended

UPOV's scope of protection from varieties of nationally defined species to varieties of all genera and species, its minimum term of protection from 15 to 20 years, and curtailed the breeders' exemption (see also Deere 2008, 86–87).

In parallel, developing countries at the behest of their domestic biotechnology industries negotiated the protection of intellectual property for plants into TRIPS (Fowler 1994, 174–79). Membership in the world trade regime now required the adoption of either patent protection or of a sui generis system of intellectual property protection for plant varieties.[176] Developing countries successfully opposed that TRIPS made any mention of UPOV. As a result, TRIPS, at least in principle, allows its members to adopt a tailor-made system. Yet the EU and the U.S. maintained that only UPOV 1991-compliant legislation provided for an effective system of protection (Roffe 2008, 59–62). A number of developing countries followed suit and went on to join UPOV in the years after the adoption of TRIPS. With the exception of South Africa, which had already acceded to UPOV in 1977, no developing country had become party to the convention until 1994. In subsequent years, UPOV's membership exploded and the proportion of developing countries increased abruptly.

As of 2018, UPOV has 73 members (not counting institutional members) and developing countries make up almost 50 percent of the membership. This rise to prominence is clearly attributable to TRIPS and specifically to the approach taken by the EU and the U.S., which made joining UPOV a prerequisite in a number of bilateral trade agreements (Drahos 2005; Morin 2009, 189–90). However, a number of countries were granted a period of grace to join UPOV 1978 instead of UPOV 1991 to encourage them to become members in the first place. Today, roughly three out of four (54 out of 73) UPOV members are parties to the 1991 Act whereas one-fourth (19 out of 73) remains a party to the 1978 Act. The latter group includes mostly Latin American countries, such as Argentina, Bolivia, Brazil, Colombia, Chile, Ecuador, Mexico, Nicaragua, and Uruguay, but also Kenya, South Africa, and China. Finally, a number of countries have adopted UPOV but chose to preserve a farmers' exemption (including India and Pakistan) or adopted a different sui generis approach towards plant variety protection (e.g. Thailand) (Deere 2008, 86–90; Kloppenburg, Jr. 2004, 169–70; Sanderson 2017, 51–58).

[176] TRIPS Article 27.3(b) states: "Members may also exclude from patentability: […] plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof," Agreement Establishing the World Trade Organization, April 15, 1994, 1867 U.N.T.S. 3.

Over time, the conflict over access to and control over plant genetic resources has resulted in the creation of a multiplicity of international institutions, many of which have conflicting mandates and rules. These conflicts continue to play out in a variety of fora. The adoption of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the CBD in 2010 marks the most recent change to regulation. In the following two sections, I explore how shifts in the institutional context of the governance area have enabled or constrained challengers of the regulatory status quo in their pursuit of reform at different points in time. In the next section, I begin this process by analyzing an initial attempt at reform at the FAO.

6.3 The First Reform Attempt, 1979-1983

In the late 1970s, a group of Western NGOs for the first time attempted to convince the international community that the existing international regulation of plant genetic resources was neither sustainable nor fair. A number of developing countries, primarily from Latin America, followed their lead. In subsequent years, the emergent challenger coalition succeeded in putting the issue on the agenda of international regulators. The coalition put forward two principal reform demands: First, it argued that the existing international regime for the coordination of conservation efforts was designed to benefit only the U.S. and other Western nations and could be used to withhold germplasm samples from recalcitrant countries. Challengers claimed that global conservation efforts should be put under the supervision of an impartial authority instead. Second, challengers opposed UPOV-style plant variety protection, arguing that it allowed the technologically most advanced countries to exploit genetic material from the biodiversity-rich Global South for commercial purposes without sharing any of the benefits. The challenger coalition strategically selected the FAO, a UN specialized agency where developing countries were in majority, to advance their demands. Incumbents, developed countries and the seed industry, vehemently objected to these demands and the attempted forum shift. In 1983, the FAO adopted the *Seed Undertaking*, declaring all plant genetic resources—raw and worked—as the common heritage of mankind, i.e. as part of a global commons. While this outcome stood in contrast with UPOV, incumbents ensured that the outcome would be ineffective, denying it any legal bindingness.

What explains challengers' failure to achieve more far-reaching reform in this case? In this section, I trace the process that led to the adoption of the *Seed Undertaking*, showing that the coordinated institutional context allowed incumbents to maintain control over the negotiation process. I argue that while challengers were able to switch to the FAO to initiate

discussions on regulatory reform, the established division of labor among the institutions in the governance area made it difficult for them to shift rulemaking to the FAO entirely.

6.3.1 Regulatory Outcome: The 1983 *Seed Undertaking*

The agreed objective of the *Seed Undertaking* is to promote the exploration, preservation, evaluation, and documentation of plant genetic resources and to ensure their availability for breeding and scientific purposes. To achieve said aims, its signatories pledge to foster cooperation and to center international efforts at the FAO. This represents an attempt to shift the responsibility for the collection, conservation, and study of threatened crop species from CGIAR and the associated International Board for Plant Genetic Resources (IBPGR) to the UN system and the FAO specifically. In 1974, the IBPGR was established under the aegis of CGIAR research network to promote conservation in the face of rapid biodiversity losses. While the FAO acted as the executive secretariat for the IBPGR, like CGIAR, it was created with "no constitution, no legal personality and no rules of procedure," as noted in the report of the 1983 FAO conference leading up to the *Seed Undertaking*.[177] There were thus concerns on behalf of developing countries that CGIAR and the IBPGR could become subject to power politics. The *Seed Undertaking* seeks to increase legal certainty, providing for a coordinative function for the FAO at the center of conservation activities.[178] Yet it does not spell out a course of action on how to achieve this restructuring (D. Cooper 1993, 166).

In addition, the *Seed Undertaking* declares all plant genetic resources to be the *common heritage of mankind*.[179] Common heritage is a contested principle of international law, which had first been used in 1970 to define the deep seabed as a territory outside of sovereign control, for the preservation of which all states have a shared responsibility. At the time, developed and developing countries fought over the exact meaning and applicability of the principle to additional territories, such as the Antarctica, the moon, and the outer space. Developing countries advocated for an extension of the common heritage principle, as they felt that the technologically most advanced countries and Western corporations would exploit the re-

[177] FAO Conference, 22nd Session, Plant Genetic Resources: Report of the Director-General, C83/25 (August 1983), p. 17, see also p. 18–19 https://core.ac.uk/download/pdf/132696306.pdf (July 14, 2019).
[178] Article 7 (a) specifically declares the intention to create "an internationally coordinated network of national, regional and international centres, including an international network of base collections in gene banks, *under the auspices or the jurisdiction of FAO*," see FAO Conference, Resolution 8/83, International Undertaking on Plant Genetic Resources (November 23, 1983), http://www.fao.org/docrep/x5563E/X5563e0a.htm#Resolution8, emphasis my own.
[179] Article 1 states that the *Seed Undertaking* "is based on the universally accepted principle that plant genetic resources are a heritage of mankind and consequently should be available without restriction," ibid.

sources found in these territories without consideration for them or future generations (see White 1982).

Notably, the definition of plant genetic resources provided in the second article encompasses not just wild crop species or peasant-developed landraces (what developed countries consider raw germplasm) but also "special genetic stocks (including elite and current breeders' lines and mutants)" (i.e. worked germplasm).[180] The declaration of all plant genetic resources as common heritage entails a number of consequences. It prevents both private and public appropriation of plant genetic resources and, by implication, prohibits the commercial exploitation even of elite lines. Moreover, common heritage obliges all nations to share the benefits arising from the use of plant genetic resources and to work together to preserve them for the current and future generations. Finally, the implementation of the common heritage principle necessitates some form of shared management of these resources.[181] In other words, the *Seed Undertaking* establishes a global commons for crop plants.

While the *Seed Undertaking* does not explicitly reference UPOV, this stands in direct opposition to UPOV-defined plant breeders' rights, which grant private property over plant genetic resources. Yet again, it remains unclear what should follow from this. At this point, most signatories of the *Seed Undertaking* were not party to UPOV anyways. Moreover, the 1979 revision of UPOV explicitly allowed for a breeders' exemption and left open the possibility of a farmers' exemption. Finally and most significantly, in contrast to UPOV, the *Seed Undertaking* is not a legally binding treaty or convention, as reflected in its designation as an undertaking, and is based on principles rather than prescriptive rules, urging states to "give effect" to it voluntarily.[182] Consequently, states would not deposit instruments of ratification but declare their intention to adhere to it to the director-general of the FAO (Bordwin 1985, 1068–69).

In sum, the *Seed Undertaking* fits the outcome of *minor reform.*[183] With regard to the significance dimension, it is broad in scope, as it links conservation activities and issues of access and availability of germplasm. Yet it scores low on the indicator of depth, as it does not specify what kind of changes are required to reach its goals. With regard to the legal dimen-

[180] Ibid.
[181] For a legal discussion of the principle, see Noyes 2012.
[182] Ibid.
[183] The *Seed Undertaking* failed to garner support from all relevant parties. As I will show, most developed countries, which had initially reserved their position, supported the agreement after the adoption of multiple amendments and agreed interpretations. It thus passes the significance test and constitutes a case of reform.

sion, the *Seed Undertaking* scores low on both indicators. It is explicitly designed as a soft law instrument and does not put any obligation on its signatories in terms of implementation. The *Seed Undertaking* also lacks precision, as it operates on the level of vague principles. The common heritage principle, if it were to apply to all plant genetic resources would quash UPOV. However, lawyers cast doubt on its legal status, asking whether it forms part of customary international law, constitutes a philosophical idea, or belongs in the realm of political rhetoric (see Mgbeoji 2003). Table 6.1 summarizes the analysis.

Table 6.1: The 1983 Seed Undertaking—Measuring the Regulatory Outcome

Dimension/ Indicator	Observation	Measurement	Outcome
Significance			
Indicator 1A: Depth	Far-reaching commitments; however shallow in terms of required changes	**Low**	
Indicator 1B: Scope	Comprehensive treatment of a range of issues, ranging from conservation to access to crop genetic resources	**Broad**	**Minor Reform**
Legal Nature			
Indicator 2A: Obligation	Voluntary undertaking not a convention; not legally binding on signatories	**Low**	
Indicator 2B: Precision	General principles rather than clear prescriptive rules	**Low**	

6.3.2 Institutional Context

I argue that challengers' inability to achieve a more consequential reform outcome is largely a function of the institutional context, in which the *Seed Undertaking* was negotiated. In this section, I thus provide an overview of the institutional complex for plant genetic resources in the late 1970s and early 80s and analyze the opportunity structure that it provided for challengers. Three international institutions, the CGIAR, UPOV, and the FAO, shared regulatory authority for issues relating to agriculture and plant genetic resources, with each of these institutions having a clearly defined governance function. CGIAR/IBPGR had the responsibility for collecting raw plant genetic resources at risk of extinction. UPOV regulated private property rights for worked plant genetic resources. The FAO's remit included development issues, such as the modernization of agriculture in developing countries, the alleviation of hunger, and rural development.

At the end of the 1970s, the institutional configuration in the area of plant genetic resources almost exclusively reflected incumbents' ideas about access to germplasm. The mandates of and rules enshrined in the CGIAR and UPOV gave formal recognition to the

then prevalent understanding among developed countries that raw germplasm should be freely available whereas worked germplasm should be ownable by private legal persons.

As recounted above, the CGIAR network had emerged as a byproduct of the Green Revolution, comprising of some of the most important research institutions involved in the development of high-yielding varieties for cultivation in developing countries (see Oasa and Jennings 1982).[184] During the1970s, conservation was not only motivated by environmental concerns. Instead, there was a material interest in ensuring a constant influx of fresh germplasm, since it was the basis for CGIAR's research and crop improvement activities (Pistorius 1997, 69). Setting up the IBPGR under CGIAR's auspices on the one hand allowed for economies of scale, as it put preservation activities in the hands of an already existing agency. On the other, this also ensured that this crucial task was removed from the discussions held in UN organizations, which incumbents perceived to be "politicized."[185] As two activists, Cary Fowler and Pat R. Mooney (1990, 151), note:

> Suffering from political overexposure in the Third World, the institutes hoped to find solace and security with pseudo-UN protection. CGIAR set up housekeeping at the World Bank headquarters in Washington. This pseudo-UN status was all important. The foundations [the Ford Foundation and the Rockefeller Foundation, the author] could give the appearance of moving the IARCs into the UN fold while at the same time creating a donor driven forum which virtually excluded normal North-South political realities—the best of all possible worlds.

While the FAO acted as a secretariat for the IBPGR, its budget was provided not by the FAO but by a group of predominantly advanced economies. The FAO and its members were also not involved in the board's decision-making, which had its own informal procedural rules. Maintaining administrative ties facilitated the allocation of tasks between the CGIAR and the FAO and prevented the occurrence of inter-institutional competition or

[184] Of particular importance were the Mexico-based International Maize and Wheat Improvement Center and the Philippines-based International Rice Research Institute.

[185] As Pistorius (1997, 10–19, 51–56, 62–63) argues in his account of the debate on plant genetic resources, the sidestepping of the FAO was not driven by political calculus alone. While the FAO had been a player in the earliest days of conservation in the 1950s and 60s, it was notoriously short on funds and the secretariat struggled to allocate resources to conservation activities later on. When the International Board for Plant Genetic Resources was discussed, a number of developing countries suffered from acute food shortages and preferred the FAO to focus its regular budget on the provision of food security. Yet there is strong indication that developed countries seized this opportunity to create the board outside of the UN system. If extra-budgetary funds were required, according to later-secretary of the FAO's Commission on Plant Genetic Resources José Esquinas-Alcázar (quoted in Pistorius 1997, 64), this "meant that the initiative tended to be pushed towards a few rich countries, and the donors then naturally sought more control over funds for genetic resource conservation."

conflict. Beyond that, the association with the FAO increased the legitimacy of CGIAR/IBPGR and permitted incumbents to preserve the free availability of raw germplasm at a global scale (Fowler and Mooney 1990, 192–93; Kloppenburg, Jr. 2004, 163–66; Mooney 1983, 66–67, 79–80).

The international regime for plant breeders' rights was located outside of the UN system for similar reasons. However, UPOV established close administrative ties with a UN specialized agency, in this case WIPO. Although the two institutions are formally independent, to this day, UPOV and WIPO headquarters are based in the same building in Geneva, WIPO's Director-General serves as the Secretary-General of UPOV, WIPO has a say in the appointment of the Vice Secretary-General of UPOV, and WIPO provides a number of administrative support services for UPOV (Dutfield 2008, 33–34; Sanderson 2017, 48). At the time of UPOV's negotiation, intellectual property rights were already subject to a deeply entrenched North-South divide, which played out at WIPO (Tilford 1998, 405–6). This cooperative arrangement allowed incumbents to create a forum that did not compete with WIPO for regulatory authority and develop an intellectual property standard for plant varieties that was compatible with existing rules while being unaffected by the political conflict within WIPO. From the perspective of incumbents, UPOV also complemented the functions of CGIAR/IBPGR. While CGIAR and the Board ensured the free flow of raw germplasm, an important input factor in breeding, UPOV laid the foundation for a global market for worked germplasm (Stenson and Gray 1999, 17).

Finally, the FAO largely served as a forum for development issues. It did not acquire regulatory authority over plant genetic resources once these began to surface on the agenda. While the FAO had branched out in the direction of rulemaking in the 1960s through its involvement in the design of the food safety standard Codex Alimentarius (Pernet and Ribi Forclaz 2019), it did not seek a more active role in the regulation of plant genetic resources. In fact, the FAO secretariat thwarted attempts from within the organization to become more involved in collection efforts (Fowler and Mooney 1990, 150). As Jachertz (1990) shows in her account of the FAO's early years, the organization was shaped by U.S. interests and, following substantial infighting over its development in the 1960s, tried to "stay out of politics." Thus, in the 1970s, the FAO continued to focus on what it had defined as its main purpose, the eradication of hunger, instead.

In sum, the CGIAR-FAO-UPOV complex for plant genetic resources fits the concept of a *coordinated context*. CGIAR and UPOV are founded on the premise that different forms of

plant genetic resources are subject to different principles, free access in the case of raw and private property in the case of worked germplasm. These institutions enshrine consistent rules and operate in complementary ways in an established division of labor. While the FAO, at least in principle, provides a more responsive forum to developing countries, it did not acquire any competencies for plant genetic resources until challengers' put the issue on the agenda at the end of the 1970s.

With regard to the dimension of expansion, the complex displays all features of an *integrated context*. The governance area is populated by only a small number of institutions, corresponding to low institutional density. Other institutions than those discussed in this section, such as WIPO, did not play a large role if any. The elemental institutions are somewhat diverse, addressing different subject matters, including environmental protection, and intellectual property. However, all these subject matters are ancillary to and not yet independent from the issue of agriculture. Table 6.2 summarizes the analysis.

Table 6.2: The CGIAR-FAO-UPOV Complex—Assessing the Institutional Context

Dimension/ Indicator	Observation	Measurement	Overall Assessment
Interaction			
Indicator 1A: Overlap	Established division of labor, sharing of institutional resources instead of competition	**Low**	**Coordinated**
Indicator 1B: Inconsistence	Consistent rules and principles prior to adoption of *Seed Undertaking*	**Low**	
Structure			
Indicator 2A: Density	Relatively small number of institutions in the governance area	**Low**	**Integrated**
Indicator 2B: Diversity	Elemental institutions address somewhat different subject matters that are, however, ancillary to agriculture	**Low**	

The institutional approach argues that such as coordinated and integrated context translates into a narrow opportunity structure for challengers. On the one hand, this should make it difficult for challengers to put the issue on the agenda of one institution, as incumbents can determine the terms of the debate. On the other, this context should allow for some form of concerted action. I explore this argument in the remainder of this case study, using process tracing.

6.3.3 Venue Selection and Agenda Setting

The 1970s saw issues relating to plant genetic resources, including biodiversity protection and intellectual property rights for plant varieties, rise on the agenda of the international community. Until the end of the decade, however, these issues were still discussed separately in different fora and almost exclusively by technical experts. Due to the established division of labor among the elemental institutions in the governance area, the FAO only played a minor part in these debates. It took the advocacy work of a group of Western NGOs concerned with the adverse effects of industrial agriculture to link these issues and create a broader demand for reform. These actors understood that they needed to forge a coalition with countries from the Global South and shift the debate to a more responsive venue to advance their aims internationally. Thus, in a first step, the emergent challenger coalition demonstrated to developing countries that the advancing commodification of plant genetic resources almost exclusively benefitted business interests from developed countries. Once a critical mass of state actors supported reform, in a second step, the emerging challenger coalition sought to establish the issue on the agenda of the FAO. In what follows, I will detail this process, trying to uncover whether the evidence supports the causal mechanisms hypothesized by the institutional opportunity approach.

Among the civil society organizations that became involved in the reform attempt, the International Coalition for Development Action and the Rural Advancement Foundation International stood out the most. A group of committed individuals, including the above-cited Fowler and Mooney, had begun working on the issue after the UNCTAD conference in 1976, where agricultural issues had been high on the agenda. In late 1977, they intensified their work on the issue of "'[s]eeds', which arose from a concern that the genetic base of the world's food supply was quickly disappearing and that restrictive legislation was making it possible for agribusiness to gain control of this vital segment of the total food system" (Harmston 1980, vi). Going forward, these policy entrepreneurs were pivotal in framing the issue.

Mooney in particular caused ripples with the publication of his book "Seeds of the Earth: A Private or Public Resource?" in 1979. In what Mooney had developed as a report for the UNCTAD conference of that year, he denounced corporate influence on agriculture and detailed the genetic dependence of the Global North on the Global South. Specifically, he provided data in the form of estimates of the worth of plant genetic resources from the Global South to agribusiness in developed countries. In doing so, Rural Advancement Fund International and allies were able to demonstrate to biodiversity-rich developing

countries that their plant genetic resources often enough had economic value. Moreover, they showed that CGIAR/IBPGR on the one hand and UPOV on the other played key roles in promoting the germplasm flow from the Global South to the North and in the commodification of plant genetic resources (Pistorius 1997, 70–71). Naturally, this aroused opposition from various sides, particularly business. For instance, William L. Brown (1988, 219), who served in various leading functions for Pioneer Hi-Bred, complained that Mooney's books "consist of a clever mix of fact and fiction and contain controversial and unsubstantiated claims." Conservationists also felt unjustly treated, arguing that Mooney and others misrepresented their work at the IBPGR as a ploy of developed countries to exploit the developed world (see Frankel 1988, 40–41).

Whatever the factual authenticity of "Seeds of the Earth" and similar reports, these publications functioned as an important vehicle for articulating the demand for regulatory reform. Through this narrative, the emergent challenger coalition managed to link the issues of conservation, intellectual property protection, and commodification of plant genetic resources, which so far had been discussed independently. While challengers had yet to agree on all parts of the problem definition and even more importantly a solution, they shared on one central reform objective, which Mooney (1980, 105–6, emphasis my own) formulated in "Seeds of the Earth:"

> We recommend that the United Nations—through such organizations as the UNDP, FAO, and World Intellectual Properties Organization—take appropriate steps to ensure that *plants be regarded as resources of common heritage to all peoples and unsuitable for any form of exclusive control through patents, trademarks, etc.*—i.e. that access to plant material be considered a basic human right.

The UN system and the FAO in particular played a dual role in the plans of the emergent challenger coalition. As the quote shows, in the medium to long run, challengers envisioned the FAO as the central forum for the coordination of international conservation activities and the regulation of plant genetic resources in general. In the short run, the FAO provided, as Fowler (1994, 180) put it, "a new but potentially friendlier area" for negotiations. According to Fowler (1994, 180), he and his allies had actively reflected on "how new arenas can help radically alter power relationships, encouraging various responses from the disadvantaged." From the perspective of these actors, the FAO was the superior venue to advance regulatory reform due to the large proportion of developing country members and the lack of formal procedural rules at the IBPGR. Yet it was also clear to them that shifting

discussions to the FAO would not be without difficulties. Barring a few notable exceptions, developing country delegations at the FAO lacked the technical expertise to negotiate on equal footing with their developed country counterparts (Coupe and Lewins 2007, 12). In fact, "[f]ew FAO delegates knew what 'genetic resources' meant" (Fowler 1994, 182). The picture was not much better for potential civil society allies. With the exception of the International Coalition for Development Action and Rural Advancement Fund International, "[f]ew NGOs had been to Rome" (Fowler 1994, 182) and participated in FAO meetings (see also Fowler 1994, 206–7).

Despite these apparent obstacles, the advocacy work of Fowler, Mooney, and others did not fail to have an effect on FAO member states. At the 20th session of the FAO Conference in 1979, the highest decision-making body of the organization, the Spanish delegation in its opening remarks drew attention to the issue of plant genetic resources and floated the idea of an international gene bank under the auspices of the FAO (see also Pistorius 1997, 79–80):

> Another of the areas, in which FAO could develop a very important and significant activity in the coming years, is the issue of the conservation of genetic resources. […] My delegation considers that these resources are truly an international heritage and therefore we would welcome the study and the possible creation of an International Genebank for crops of agricultural interest under the umbrella of the FAO, where all countries that wish to do so may deposit duplicates in the form of genetic material, ensuring their preservation, use and indiscriminate enjoyment, both in the present and in the future and for the benefit of the countries that need it.[186]

Following the 1979 Conference, a number of developing countries backed Spain's demands. Mexico in particular renewed the call for the creation of an international seedbank at the subsequent session of the FAO Conference in 1981 as part of a broader resolution proposal. This led to heated debates at the Conference, as the conflict over plant genetic resources had developed into a tense diplomatic standoff in the meantime. Two events were of particular importance:

[186] FAO Conference, 20th Session, Verbatim Records of the Plenary of the Conference, C 79/PV, p.69, http://www.fao.org/3/a-ak660e.pdf, author's translation. FAO's involvement in the area of plant genetic resources was also subject to discussion in Commission II of the Conference, which was in charge of the organization's program and budget. The chairperson of Commission II in his address to the plenary argued that the FAO should take a larger role in conservation, which a number of delegates from developed countries dismissed. See FAO Conference, 20th Session, Verbatim Records of Commission II of the Conference, C 79/II/PV, p. 172, http://www.fao.org/3/a-ak662e.pdf.

First, in the run-up to the 1981 Conference, an exchange between the IBPGR and the U.S. Department of Agriculture had been leaked to the public. In that letter, the chairperson of the IBPGR asked the U.S. to formally accept global base storage responsibility for a number of crop species. The U.S. official (quoted in Mooney 1983, 29, see also 30-31) agreed, highlighting that any material the U.S. received "would become the property of the US Government," however. Moreover, the official freely admitted that "political considerations have at times dictated exclusion of a few countries" (see also Kloppenburg, Jr. 2004, 171–72). It became known that the U.S., which at this point held an estimated 22 percent of the world's germplasm, had imposed embargos over countries, such as Afghanistan, Albania, Cuba, Iran, Libya, Nicaragua, and the Soviet Union (Mooney 1983, 29). The U.S. was probably not alone in denying sample requests for political considerations. Similar allegations had been raised inter alia against the Soviet Union. What came as a shock to other governments was that the IBPGR did not object to the U.S. position (Mooney 1983, 31–33; Mooney and Fowler 1990, 194–95).

Second, a number of Southern governments had threatened to cut off the germplasm exchange with other countries or imposed actual embargoes on the export of specific crops. Ethiopia, for instance, had embargoed the export of coffee germplasm. Restrictions on specific crops by Brazil, India, Indonesia, Malaysia Thailand, and Turkey had also been documented (Mooney and Fowler 1990, 193–94). Both developments—the "genegate" revelations and talk about germplasm embargoes—pointed in the same direction. A number of governments had come to understand raw germplasm as a sovereign resource rather than as a common good. This shift alarmed many stakeholders, as it put into question the free flow of germplasm among countries, threatening agricultural innovation.

Mexico's resolution proposal called for the establishment of an international network of seedbanks under the auspices of the FAO and the adoption of a legally binding resolution on plant genetic resources, declaring all plant genetic resources, raw and worked, the common heritage of mankind. Other governments mostly from the Latin American and Caribbean Group, lobbied by the International Coalition for Development Action and Rural Advancement Fund International, backed these claims (Pistorius 1997, 80). Then-prime minister of India Indira Gandhi featured prominently, giving an address to the plenary, in which she argued that "[t]he genetic resources of plants and animals constitute a common heritage and deserve to be conserved and utilized in a cooperative manner."[187] Developed

[187] FAO Conference, 21st Session, Verbatim Records of the Plenary of the Conference, C 81/PV, p. 59, http://www.fao.org/3/a-ak664e.pdf.

countries, in contrast, fought tooth and nail to remove the resolution proposal from the agenda. The UK and U.S. delegations at first tried to kill the motion and then worked towards weakening it, deleting all references to germplasm embargoes and plant breeders' rights from the draft. The discussion also highlighted divisions within the FAO secretariat. On the one side, officials who were involved in the administration of the IBPGR assisted the North's efforts in thwarting the proposal. On the other, then-FAO director general Edouard Saouma supported the tabling of the resolution and ensured that it passed largely intact (Esquinas-Alcázar, Hilmi, and López Noriega 2013, 137; Mooney 1983, 25, 33).

To the surprise of many, Resolution 6/81 ultimately was adopted and included two of the core demands of the challenger coalition. First, it urged for the adoption of an

> international convention, including legal provisions designed to ensure that global plant genetic resources of agricultural interest will be conserved and used for the benefit of all human beings, of this and future generations, without restrictive practices that limit their availability of exchange, whatever the source of such practices.[188]

Second, it requested the FAO secretariat to "prepare a study on the establishment of an international bank of plant genetic resources of agricultural interest under the auspices of FAO."[189] While the adoption of the resolution did not require the FAO to take any immediate consequences, it showed that challengers had successfully established the issue of plant genetic resources on the agenda of the FAO. Fowler (1994, 181–82) in his account of the history of the *Seed Undertaking* aptly summarizes:

> The 1981 conference thus marked the beginning of a shift toward new arenas and new actors and toward an initiative from certain Third World governments to gain more control over plant genetic resources. To a certain extent this shift in arenas marked the first time NGOs, or opponents of plant patenting, had taken the initiative with their own proposals. Moving the debate to the FAO allowed for this to happen because it shifted the power base from American to Third World interests. Furthermore, it extended the debate beyond patenting in the narrow sense, and thus moved the debate onto territory NGOs are most comfortable with—the con-

[188] FAO Conference, Resolution 6/81, Plant Genetic Resources (25 November, 1981), http://www.fao.org/docrep/x5564E/x5564e07.htm#Resolution6

[189] At the 1983 FAO Conference, the number of participating NGO representatives increased to around twenty (Mooney 2011, 139).

nections between patenting and genetic conservation, and between these and development issues.

In analytical terms, this section has shown that the existence of a multiplicity of institutions in the governance area allowed the challenger coalition to select a more responsive institution to advance their reform agenda. The FAO provided a number of distinct advantages over the CGIAR/IBPGR and UPOV. It had a larger proportion of developing country members and clear procedural rules. Nonetheless, the analysis in this section has also demonstrated that the established division of labor between CGIAR/IBPGR, the FAO, and UPOV benefitted incumbents. As the FAO had no formal rulemaking authority on the subject of plant genetic resources, challengers at first needed to carve out policy space to put the issue on the agenda, which required great mobilization efforts. Moreover, due to the FAO's constrained budget, which was heavily dependent on subscription payments from developed countries, incumbents had significant veto powers. As I show in the following section, this allowed incumbents to attenuate the reform proposal and, by implication, made it difficult for challengers to achieve more far-reaching reform.

6.3.4 Negotiations and Conflict Expansion

With the adoption of Resolution 6/81, challengers and incumbents faced a new conflict. The resolution had been a call to action for the FAO. Yet it was largely declamatory and did not provide a clear way forward. The provisions of the resolution continued to be highly controversial. It was obvious to all stakeholders that the creation of an international gene bank under the auspices of the FAO would encroach on the jurisdiction of the IBPGR. Moreover, as Mooney (1983, 35) notes, "[t]he possibility of conflict between an International Convention at FAO and Plant Breeders' 'Rights' at UPOV was bluntly recognized." In the aftermath of the 1981 FAO Conference, in order to increase pressure on incumbents in the struggle over the interpretation and implementation of the resolution, the NGO side of the challenger coalition attempted to mobilize broader support. Incumbents, by contrast, tried to depoliticize the issue to regain control over the rulemaking process.

In accordance with the expectations of the institutional opportunity approach, in a first step, challengers sought to involve a wider range of supporters. An open letter from Clarence Dias and Ward Morehouse (quoted in Pistorius 1997, 82) of the U.S. NGO Council on International and Public Affairs published after the 1983 FAO Conference reflects this approach:

> As matters involved in the discussions are of a global nature and they have implications to millions of people we must politicize the issue on a mass scale. I suggest that we should get in touch with peasant movements and farmers associations in some Third World countries and internationalize the issue from below.

The letter also discussed mobilization tactics, including mass marches and signature campaigns. These ideas were never carried out, however. This is symptomatic of the difficulties that challengers encountered as they tried to shift the debate on plant genetic resources to the FAO. As discussed in the previous section, the International Coalition for Development Action and Rural Advancement Fund International had broken uncharted territory when they initiated the debate on plant genetic resources at the FAO. Practically no other NGOs had participated in FAO meetings before. The core tasks of providing expertise and mobilizing governments relied on only a few shoulders. Consequently, resources were too constrained to mobilize a broader range of actors from civil society.

Incumbents enjoyed a head start in this regard. Business interest groups immediately took notice of Resolution 6/81. They saw the resolution as a significant threat to plant breeders' rights. Subsequent to its adoption, important associations thus began to work behind the scenes to ensure that governments opposed an international convention. Throughout the negotiations, the International Association of Plant Breeders for the Protection of Plant Varieties maintained a watching brief on developments at the FAO and advised its members on lobbying opportunities. Scandinavian breeding companies were particularly successful in seizing these. In a meeting with government representatives of the Nordic countries, they defined their position on the resolution and requested that delegates to FAO meetings be well-informed experts from the respective ministries instead of diplomats. Similarly, the International Association of Plant Breeders kept UPOV members informed and urged UPOV's then-vice secretary Heribert Mast to attend the first regular FAO at which the resolution was discussed, the Committee on Agriculture session in March 1983 (Mooney 1983, 34–35).

As a result, business interests and developed countries presented a unified front against the South's position. At the 1983 Committee on Agriculture session, incumbents teamed up to defend the IBPGR as a "purely scientific entity" (Kloppenburg, Jr. 2004, 173). The U.S. took "the lead role in 'depoliticizing' the issues of genetic resource ownership, the implications of new interpretations of patent law, and the character of the policies of the IBPGR" (Grossmann 1988, 264). Important support came from the UK and even developed coun-

tries that challengers had assumed would take a more sympathetic position towards developing countries, including Australia and the Nordic countries, all of which attacked the proposal for the creation of a new seed bank (Fowler 1994, 187–88; Mooney 1983, 36). Moreover, incumbents were again assisted by members of FAO's staff. For one, meeting documents now referred to the IBPGR as "FAO/IBPGR,"[190] emphasizing the link between the two institutions. This designation had not been used previously, which indicated to challengers that at least an important faction within the FAO secretariat sought to strengthen the incumbent side by portraying the IBPGR as an FAO institution (Mooney 1983, 37). Beyond that, the FAO secretariat presented a study that showed little evidence of export restrictions on germplasm, reinforcing the challengers' impression that the FAO was biased towards incumbents. The International Coalition for Development Action had collaborated on the study and concluded that germplasm restrictions were actually widespread and often had a political background (Coupe and Lewins 2007, 13; Mooney 1983, 37–40, 69–70).

Challengers had a much harder time mobilizing additional stakeholders and bystanders to join their cause. Admittedly, at the Committee on Agriculture session, a larger number of countries spoke out in favor of regulatory reform than at the 1981 FAO Conference, including not only Mexico and delegations from other Latin American countries but also from African and Asian countries, such as Angola, India, Libya, and Pakistan (Mooney 1983, 37). Nonetheless, support remained limited to developing countries. Mooney (2011, 138) reports that he was the lone NGO representative at the March meeting. What is more, the challenger coalition could not match the institutional power of the incumbent coalition. At the conclusion of the March meeting, the Committee on Agriculture at the behest of Colombia agreed to form an advisory group of government representatives to assist the FAO Director-General in preparing a draft for the November 1983 Conference. In the debate over the composition of this working group, incumbents assisted by Assistant Director-General Dieter Bommer from Germany were able to score an important victory. The group included the most vocal opponents of regulatory reform, Sweden, the UK, and the U.S. While Mexico was invited to participate on behalf of Southern countries, other important proponents of reform were excluded (Mooney 1983, 44).[191]

The dispute culminated in a heated showdown at the 1983 FAO Conference. To have any chance of reaching an outcome, challengers moderated some of their core demands. In-

[190] See FAO Committee on Agriculture, 7th Session, Report, CL 83/9 (April 1983), p. 28, http://www.fao.org/docrep/meeting/027/m5342e.pdf.
[191] Ibid., p. 29.

cumbents were wary of "duplication and overlap with well-functioning institutions such as the International Board for Plant Genetic Resources," as the delegate of the Netherlands put it, if a new international gene bank would be created under FAO's auspices.[192] To bring their proposal in line with the expectations of incumbents, challengers were now willing to build on the IBPGR, as long as the FAO received a larger role.[193] Challengers also abandoned their claim for a legally binding convention. Instead, they proposed a principles-oriented "undertaking."

These concessions did not sway all opposed to reform. The U.S. in particular maintained that "[t]he current system works" and that the FAO needed not be involved in conservation in a greater capacity.[194] More importantly, incumbents objected to the proposal worked out by the advisory group, as it included a declaration of all raw and worked plant genetic resources the common heritage of mankind, as requested by challengers. UPOV members had strong reservations about this due to the implications for plant breeders' rights. Ultimately, the two sides were unable to compromise. This put FAO officials in a tight spot, as the organization does not vote to resolve conflicts but seeks to take decisions by consensus. In order to avoid further conflict, at the end of the conference, FAO members agreed to adopt the *Seed Undertaking*, as prepared by the advisory group, and establish a FAO Commission on Plant Genetic Resources.[195] At the same time, dissatisfied actors were permitted to express their reservations and not accede to the Undertaking. Seven industrialized countries, including Canada, France, the Federal Republic of Germany, Japan, Switzerland, the UK, and the U.S., chose this course of action, dealing a serious blow to the ambitions of challengers. These seven countries as well as the Netherlands also expressed their reservations with regard to the establishment of the Commission on Plant Genetic Resources (Esquinas-Alcázar, Hilmi, and López Noriega 2013, 137–38; Kloppenburg, Jr. 2004, 174).[196]

[192] FAO Conference, 22nd Session, Verbatim Records of Plenary Meetings of the Conference, C 83/PV, p. 84, http://www.fao.org/3/a-ak668e.pdf.
[193] Already at a June FAO Council meeting, inter alia the Egyptian delegation at the Council had proposed the establishment of "a network of storage" instead of a centralized international gene bank. See Food and Agriculture Organization of the United Nations, 83rd Session, Verbatim Records of Meetings of the Council, CL 83/PV, p. 115, http://www.fao.org/3/a-ak626e.pdf. This had not convinced incumbents. The U.S., for instance, had maintained "that the IBPGR network constitutes an international genebank from which germplasm is freely available," ibid., p. 139.
[194] FAO Conference, 22nd Session, Verbatim Records of Meetings of Commission II of the Conference, C 83/II/PV, p. 286, http://www.fao.org/3/a-ak670e.pdf, emphasis removed.
[195] FAO Conference, Resolution 8/83, International Undertaking on Plant Genetic Resources (November 23, 1983), http://www.fao.org/docrep/x5563E/X5563e0a.htm#Resolution8.
[196] Ibid.

In conclusion, the analysis in this section displays the opportunities for regulatory reform attempts by weaker actors in a coordinate institutional context. The availability of multiple institutions in the governance area allowed challengers to select a forum to pursue their reform agenda. However, the fact that the chosen institution had no regulatory authority over the issue in question narrowed the opportunity structure for challengers and prevented a more far-reaching reform outcome. Under the status quo ante, the governance activities of the elemental institutions were tuned to each other and rules and principles enshrined by these institutions were consistent, which made it difficult for challengers to advance alternative interpretations. Finally, throughout the negotiation process, incumbents maintained some degree of control over institutional procedures, allowing them to limit the legal force and the overall effect of the *Seed Undertaking*.

6.3.5 Adoption and Aftermath

The adoption of the *Seed Undertaking* generated further polarization. Northern countries and resident business interest groups were harsh in their assessment of the agreement (Fowler 1994, 189–90). The influential American Seed Trade Association's then-executive secretary (quoted in Kloppenburg, Jr. 2004, 174) in 1985 derided the *Undertaking* as a one-sided attempt to

> wrest control of the international germplasm system from IBPGR-CGIAR; use the Commission to manipulate a supposedly voluntary Undertaking on Plant Genetic Resources into a mandatory, legalized system which, through political domination in an patronage by FAO, they can control, and use the Commission as a visible forum to advance their prejudices against private enterprise and intellectual property-breeders' rights.

The challenger coalition, by contrast, at first celebrated the outcome (e.g. Fowler and Mooney 1990, 188). From their perspective, the *Seed Undertaking* brought the injustices in the transfer of plant genetic resources between Global North and South to the fore and provided tentative solutions. The application of the common heritage principle to raw and worked plant genetic resources challenged the commodification of crop germplasm promoted by the advanced capitalist nations and, in the eyes of challengers, allowed for a more equitable distribution of benefits.

The immediate impact of the *Seed Undertaking* was limited, however, which quickly became clear to challengers. The declaration of all plant genetic resources as common heritage did not halt the accelerating diffusion of plant breeders' rights among developed and develop-

ing countries and the *Undertaking* did not lead to a more equitable distribution of benefits (GRAIN 2001, 1). In addition, the U.S. and other incumbents took measures to shield the IBPGR against the influence of Southern states (Fowler 1994, 190–91).

The agreement itself was less impactful than the discussions it enabled in the following years and the new role it conferred to the FAO. The negotiations on the *Seed Undertaking* had put the FAO on the map as a forum to demand changes. As Pistorius (1997, 79) summarizes, "[t]hroughout the 1980s, FAO remained the principle forum in which developing countries tried to pursue their interests." The creation of a Commission on Plant Genetic Resources was consequential for institutionalizing the FAO's new role in the governance area, as it provided "a parallel body with the political power and legitimacy of the UN" (Fowler 1994, 189). Committee work allowed the conflicting parties to resolve some of their differences. However, discussions at the Commission also brought up new issues.

This process started at the second regular session of the Commission in March 1987. Members discussed measures that would allow those who had withheld their approval to the *Undertaking* to join. Yet supporters of the *Undertaking* also noted that little had been achieve so far and put forward new demands. A number of developing country delegations introduced the concept of farmers' rights as a foil to breeders' rights to acknowledge and compensate the contribution of farmers to genetic diversity. These countries also spoke out in favor of the creation of an international fund for plant genetic resources to provide means to the implementation of the commission's agenda and benefit smallholder farmers in developing countries. Other Southern countries advocated for "rights of centre of origin countries," which foreshadowed the demand for sovereign rights to plant genetic resources and raised first question marks with regard to the common heritage principle (Swaminathan 1988, 246–47).[197]

Early talks were inconclusive, leading to a rekindling of the dispute. Due to the protracted nature of the conflict, in 1988, the Colorado-based Keystone Center, a non-profit NGO stepped in and volunteered to mediate between the stakeholders (Coupe and Lewins 2007, 13–14). Various actors, including Northern and Southern government, corporations and business interest groups, civil society NGOs, and a number of international organizations, agreed to participate, initiating the International Dialogue on Plant Genetic Resources a year later. The Keystone Dialogues proceeded until 1991, facilitating multiple revisions to the Seed Undertaking in the process (for a critical assessment of the process, see Fowler

[197] FAO Commission on Plant Genetic Resources, 2nd Session, Report, CPGR/87/REP, p. 6, http://www.fao.org/tempref/docrep/fao/meeting/015/aj381e.pdf.

1994, 196–204). In 1989, the FAO Conference agreed on the first two of these amendments. The first agreed interpretation explicitly acknowledged farmers' rights and, at the same time, recognized the legitimacy of intellectual property protection for elite varieties. Importantly, it stated that "Plant Breeders' Rights as provided for under UPOV […] are not incompatible with the International Undertaking."[198] Finally, in at least a partial reversal of the common heritage principle, the resolution clarified that "'free access' does not mean free of charge,"[199] alluding to both raw and worked germplasm. The second agreed interpretation to the *Seed Undertaking* for the first time provided a comprehensive definition of farmers' rights:

> Farmers' Rights means rights arising from the past, present and future contributions of farmers in conserving, improving and making available plant genetic resources, particularly those in the International Community, as trustee for present and future generations of farmers, for the purpose of ensuring full benefits to farmers, and supporting the continuation of their contributions, as well as the attainment of the overall purposes of the International Undertaking.[200]

This definition did not endow farmers with a similar set of legal claims as breeders had under plant variety protection. Yet it implied that developing countries and farmers were to be rewarded to some degree for their tacit contributions to crop development and species conservation. At the same time, the recognition of plant breeders' rights allowed those incumbents who had expressed their reservations to join the agreement. Following the adoption of these interpretative resolutions, in 1990, even the U.S., the most forceful opponent of the *Seed Undertaking*, agreed to join the Commission on Plant Genetic Resources (see also Mooney 2011, 141–42). At the 1991 FAO Conference, the revision process came to a conclusion. A third annex introduced the notion "that nations have sovereign rights over their plant genetic resources."[201] This step preempted the formal recognition of sovereign rights in the CBD, allowing providers of raw plant genetic resources to negotiate some form of monetary compensation for access (Halewood and Nnadozie 2008, 120; ten Kate and Lasén Diaz 1997, 284–85; Rabitz 2017, 67–68; Stenson and Gray 1999, 19–20; Tilford 1998, 412–13; Winter 2010, 242–43).

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198 FAO Conference, Resolution 8/83, Agreed Interpretation of the International Undertaking (November 29, 1989), http://www.fao.org/3/x5588E/x5588e06.htm#Resolution4.
199 Ibid.
200 FAO Conference, Resolution 5/89, Farmers' Rights, (November 29, 1989), http://www.fao.org/3/x5588E/x5588e06.htm#Resolution5.
201 FAO Conference, Resolution 3/91, Annex 3 to the International Undertaking on Plant Genetic Resources (November 25, 1991), http://www.fao.org/3/x5587E/x5587e06.htm#Resolution3.

In sum, the *Seed Undertaking* and the ensuing debate at the Commission on Plant Genetic Resources allowed for the successive approximation of the conflict parties. Paradoxically, however, the revisions to the *Undertaking* also spelled the beginning of the end of one of its key achievements, the declaration of all plant genetic resources as the common heritage of mankind. In opposition to the initial goal of the *Undertaking* of promoting access, its final iteration recognized two major restrictions to access to plant genetic resources, private property rights as defined by UPOV on the one hand and sovereign rights on the other (Andersen 2008, 96; see also D. Cooper 1993).

6.4 The Second Reform Attempt, 1993-2001

As the analysis in the previous section has shown, the effect of the *Seed Undertaking* was limited. At the beginning of the 1990s, little had changed to make the treatment of plant genetic resources from the Global North and the Global South more equitable. To the contrary, incumbents achieved a series of important breakthroughs, benefitting almost exclusively agribusiness in the developed world. The 1991 revision of UPOV increased the level of protection for worked plant genetic resources and curtailed important flexibilities for breeders and farmers. Moreover, it became apparent throughout the Uruguay Round of multilateral trade negotiations that developed countries would insist on making some form of intellectual property protection for plants mandatory for all members of GATT. The conclusion of TRIPS in 1994 confirmed this impression, as it required all WTO members to adopt plant patents or a sui generis form of plant variety protection even if they had little to gain from doing so.

To counterbalance these developments in the regulation of worked plant genetic resources, developing and emerging economies insisted on the recognition of sovereign rights to raw genetic resources in CBD. While this—at least in principle—allowed biodiversity-rich Southern countries to collect revenues from the export of germplasm, it also put the nail in the coffin of the common heritage system. Crucially, the CBD did not resolve the conflict between intellectual property protection for seeds and traditional agriculture, which remains an important supplier of food in many developing countries. After the adoption of the CBD in 1992, the challenger coalition reassembled to put flexibilities to breeders' rights on the agenda of the FAO and revise the *Seed Undertaking*. Almost twenty years after the adoption of the *Undertaking*, in 2002, challengers succeeded in negotiating the *Seed Treaty*, which substantiated some of their most important demands. In accordance with the CBD, the *Seed Treaty* recognized the sovereign rights of states over their plant genetic resources to facilitate benefit sharing. Moreover, to facilitate access to seeds for smallholder farmers and

scientific breeders, it also codified farmers' rights and established a global commons for crop plants.

In contrast to the *Seed Undertaking*, the *Seed Treaty* includes concrete measures to regulate the global handling of plant genetic resources. Yet it also lacks in terms of legal force. What explains this shift? I argue that changes in the institutional context opened up the opportunity structure for challengers, allowing them to achieve more far-reaching reform. At the beginning of the 1990s, the division of labor between the CGIAR/IBPGR, the FAO, and UPOV had become brittle. The coordinated complex made way for competition between UPOV and the WTO, enshrining intellectual property rules, on the one hand and the CBD with its emphasis on sovereign rights and the commons-oriented FAO on the other. All of these institutions now claimed regulatory authority over plant genetic resources and embodied conflicting principles and rules, which allowed challengers to advance new interpretations to promote reform. However, the institutional context had also grown more fragmented, now including various highly different fora, which made the mobilization of broad and sustained collective action more difficult.

6.4.1 Regulatory Outcome

Like its precursor, the *Seed Treaty* addresses a complex of issues relating to the governance of plant genetic resources for food and agriculture at the intersection of agriculture, environmental conservation, intellectual property rights, and research. It reflects the challenger coalition's attempt to move past the unsatisfactory *Seed Undertaking* and to change regulation in a way that lives up to the changed realities in the governance area.

In the early 1990s, the expansion of plant variety protection (private ownership) on the one hand and the recognition of sovereign rights (public ownership) on the other had resulted in a situation akin to what Heller (1998) has called the "tragedy of the anticommons." According to Heller (1998, 624), "[w]hen there are too many owners holding rights of exclusion, the resource is prone to underuse." In the 1980s, many saw the governance area in a "tragedy of the commons"-situation and explicitly cited the lack of well-defined property rights as a hindrance for the preservation of biodiversity and benefit sharing (e.g. Sedjo 1988). At that time, a number of academic and practitioners argued that sovereign rights would provide an incentive for developing countries to invest more in the preservation of biodiversity while allowing for more equitable benefit sharing (Barton and Christensen

1988).[202] The CBD followed this reasoning, requiring users to document where they obtained samples of genetic material and to compensate countries of origin for any benefits arising from the use of these samples (Bragdon, Garforth, and Haapala, Jr. 2008, 82–85; Moore and Tymowski 2005, 2–4, 10–11). The recognition of sovereign rights coincided with a ratcheting up of private property rights through UPOV 1991 and TRIPS. Now, an increasing number of private and public actors held veto powers over the use of plant genetic resources. This complicated many socially desirable activities, including crop improvement, research, and subsistence farming, which depend on the continuous input of fresh germplasm from around the world (K. Aoki 2008, 93–94; Feindt 2012, 284–85; Lettington 2001). The *Seed Treaty* seeks to remedy this situation and ensure the continued international flow of germplasm (Helfer 2005). For this purpose, it introduces two significant changes:

First, it pools some of the most important food and forage crops in the so-called Multilateral System of Access and Benefit-Sharing, a global germplasm commons. This commons is distinct from the public domain. Three restrictions apply: First, the Multilateral System is limited to the 64 species contained in Annex I of the Treaty, which, however, make for a substantial amount of global consumption and include the four most important food crops, rice, wheat, maize, and potatoes. Second, it only covers varieties of these species that are not protected by intellectual property rights. Third, material accessed through the Multilateral System is freely available for specific uses only, including "conservation for research, breeding and training for food and agriculture" pursuant to paragraph 3 of Article 12.[203] While material from the Multilateral System may also be used for commercial purposes, then a portion of the revenues must be shared with the Multilateral System (Article 13).[204]

Through these provisions, the Multilateral System ensures access to genetic material stored in seedbanks and other ex situ collections of member countries and the CGIAR/IBPGR system, which had been a longstanding demand of developing countries. It also establishes a mechanism for compensation for cases in which material from the Multilateral System is used in commercial applications. In doing so, the Multilateral System provides a mecha-

[202] For an overview of the debate, see Gollin (1993). For a critical assessment of this argument, see Wood (1988).
[203] International Treaty on Plant Genetic Resources for Food and Agriculture, November 4, 2002, www.fao.org/3/a-i0510e.pdf.
[204] Benefits are not shared with individual members of the Multilateral System but instead paid into a compensation fund. Again, this applies to Annex I materials only. For any other material, users need to negotiate compensation pursuant to the rules of the CBD. The mandatory contribution was later set at 0.77 percent of the net sales of the commercialized and intellectual property-protected product for the duration of its protection (Manzella 2013, 155–57).

nism that balances between the concerns of providers of biodiversity on the one side and different groups of users on the other. It recognizes sovereign rights to plant genetic resources and acknowledges the claim to monetary compensation. At the same time, it recognizes intellectual property rights in plant varieties and facilitates the commercial exploitation of genetic material. Finally, the Multilateral System counteracts the narrowing of access under both private property and sovereign right regimes. For this purpose, it establishes an exception for uses that further the public interest, such as research, allowing for a wide dissemination of genetic material at no or low cost (Halewood and Nnadozie 2008, 117–19; see also Manzella 2013).

Second, the *Seed Treaty* takes a step in the direction of clarifying farmers' rights. While the agreed interpretations of the *Seed Undertaking* had made reference to farmers' rights, these had not detailed what specific entitlements farmers' rights confer on their beneficiaries. The *Treaty* focuses on two dimensions: First, it reaffirms the farmers' exemption. This was a core demand of the challenger coalition, as the farmers' exemption had lost its status as a binding exception to plant variety protection with the 1991 revision of UPOV. The *Treaty* stipulates that governments should retain the possibility of granting a farmers' exemption, if they so choose (Article 9.3). Second, the *Treaty* authorizes farmers "to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture" and "to equitably participate" (Article 9.2) in benefit sharing.[205] Yet again, the treaty text does not detail how precisely farmers should be involved in said processes. As in earlier documents, farmers' rights derive from the contributions of smallholder farmers to food security and their role as stewards of biodiversity.[206] The Treaty makes incremental progress with regard to the codification of farmers' rights, specifically with regard to the farmers' exemption. However, the provisions on participatory rights require further specification and do not make sufficiently clear to what extent they are enforceable (K. Aoki 2004, 442; ten Kate and Lasén Diaz 1997, 289; Winter 2010, 245–47).

In marked contrast to the *Seed Undertaking*, the *Seed Treaty* is a document of international law, imposing binding obligations on its member states. The *Treaty* includes provisions on conflict resolution (Article 22) and mechanisms to ensure its enforcement and remediation

[205] Ibid.

[206] Ibid., see also the wording of the preamble of the *Treaty*: "Affirming also that the rights recognized in this Treaty to save, use, exchange and sell farm-saved seed and other propagating material, and to participate in decision-making regarding, and in the fair and equitable sharing of the benefits arising from, the use of plant genetic resources for food and agriculture, are fundamental to the realization of Farmers' Rights, as well as the promotion of Farmers' Rights at national and international levels."

(Annex II). As the discussion of farmers' rights and the Multilateral System have shown, many provisions require further specification, however. The *Seed Treaty* also seeks to clarify its relationship with other regulations in the governance area, including the CBD, TRIPS, and UPOV (Chambers 2008, chaps. 6–7; Gerstetter et al. 2007). To this effect, the preamble of the *Treaty* states that it does not affect other treaty obligations and that there is no intention "to create a hierarchy between this Treaty and other international agreements."[207] The *Treaty* highlights that its goals align with those of the CBD and that these "will be attained by closely linking this Treaty to the Food and Agriculture Organization of the United Nations and to the Convention on Biological Diversity" (Article 1).[208]

In sum, the *Seed Treaty* fits the outcome of moderate reform. On the significance dimension, the *Treaty* scores high on both indicators. It entails significant changes to the regulatory status quo, particularly as relates to the establishment of an access and benefit sharing mechanism. The *Treaty* is also broad, as its provisions cover a wide range of additional issues and accrue benefits to a wide range of stakeholders. On the legal dimension, the Treaty scores high on the dimension of obligation but low on the dimension of precision. The provisions on the Multilateral System contain binding rules backed by a conflict resolution mechanism. However, many other provisions, particularly those on farmers' rights, are unspecific and require further negotiations. Table 6.3 summarizes the analysis.

Table 6.3: The 2001 Seed Treaty—Measuring the Regulatory Outcome

Dimension/ Indicator	Observation	Measurement	Outcome
Significance			
Indicator 1A: Depth	Extent of changes with regard to the Multilateral System is considerable	**High**	
Indicator 1B: Scope	Covers a wide variety of issues, ranging from access benefit sharing over farmers' rights to conservation and sustainable use; wide range of beneficiaries	**Broad**	**Moderate Reform**
Legal Nature			
Indicator 2A: Obligation	Binding rules backed by a conflict resolution mechanism	**High**	
Indicator 2B: Precision	Wording on farmers' rights unspecific; numerous details subject to further negotiations	**Low**	

[207] Ibid.
[208] Ibid.

6.4.2 Institutional Context

I argue that considerable shifts in the institutional context of the governance area enabled challengers to achieve a more far-reaching reform outcome than in the previous reform attempt that resulted in the adoption of the *Seed Undertaking*. In this section, I will highlight two changes to the complex for plant genetic resources that occurred in the late 1980s and early 90s and detail how they affected the opportunity structure for challengers.

After the adoption of the *Undertaking*, the division of labor between CGIAR/IBPGR, the FAO, and UPOV broke apart. The conflicting parties focused on different fora to push through their agendas and created rules that were not compatible with one another or even contradictory. In addition to changing to existing rules, such as UPOV, the conflicting parties created new institutions, including the CBD and TRIPS, to advance their respective agendas. From the perspective of the institutional opportunity approach, these changes correspond to shifts on both dimensions of institutional complexity. Due to increasing overlap and conflict between the elemental institutions of the governance area, we observe a shift from coordination to competition. The proliferation of institutions in the governance area and their increasing diversification led to a fragmentation of the regime complex for plant genetic resources.

A first change to the institutional context resulted from the adoption of the *Seed Undertaking* itself. As the analysis of the initial reform attempt has shown, the negotiations on the *Undertaking* established the FAO as a forum to discuss matters related to plant genetic resources. The *Undertaking* and the creation of the Commission on Plant Genetic Resources cemented the FAO's claim to regulatory authority over raw and worked germplasm, rivaling both CGIAR/IBPGR and UPOV. The formal recognition of the common heritage principle in particular clashed heavily with existing rules and practices. While the revision process of the *Undertaking* eased these tensions, it also created new inconsistencies. With sovereign rights and farmers' rights two novel concepts emerged from the FAO deliberations. However, there was no consensus on what they meant precisely and how they related to existing rules and norms, including the common heritage principle. The fact that plant genetic resources were now part of the FAO's remit was consequential. Challengers are dependent on the existence of a responsive forum to promote regulatory change. In the earlier reform attempt, challengers had to go great lengths to put the issue on the agenda at all, since the FAO had had no formal responsibility for the issue. Now, challengers did not need to start from scratch to refuel their reform attempt. From the perspective of challengers, the FAO continued to provide a number of distinct advantages. As a UN specialized

agency, it has a development-oriented mission and clear procedural rules. Moreover, developing countries constitute the majority of its membership (see Andersen 2008, 101–2; Petit et al. 2001, 7–8).

Until the mid-1980s, CGIAR had been the most important forum to discuss issues related to raw plant genetic resources. While the institutions of the CGIAR Consortium remained important conservation and research organizations after that, the CGIAR system saw its political role significantly diminished. This largely had to do with the institutionalization of the sovereign rights principle for plant genetic resources. While the idea of sovereign rights surfaced in the revision process of the *Seed Undertaking*, neither the *Undertaking* itself nor its agreed interpretations were legally binding. The adoption of the CBD lent legal force to the principle, replacing CGIAR's norm of free access to raw material and requiring users to negotiate with the respective country of origin over the terms of access (Bragdon, Garforth, and Haapala, Jr. 2008; Coupe and Lewins 2007, 17).[209] As a result, the CBD also supplanted CGIAR as a forum to negotiate on terms of access to plant genetic resources and benefit sharing (Stenson and Gray 1999, 22).

The creation of the CBD was a result of two developments, the increasing awareness of the international community for environmental degradation and the growing importance of bioprospecting for businesses, particularly pharmaceutical companies. As the dispute on plant genetic resources intensified, the conflicting parties realized the potential for a linkage between environmental concerns and control over plant genetic resources. The end result reflected a compromise between the Global North's aim to advance environmental preservation and the South's demand for more equitable benefit sharing (Bragdon, Garforth, and Haapala, Jr. 2008, 84). While allowing for a rapprochement of the two sides, the CBD generated a host of new problems. Most importantly, it was largely incompatible with existing regulations, including the *Seed Undertaking*. The purpose of the *Undertaking* had been to ensure the free flow of germplasm so that activities that further public interest, such as breeding, conservation, research, and subsistence farming, would not be hindered by national or private interests. The underlying idea of the CBD was to create a market for plant genetic resources by assigning sovereign rights in order to incentivize conservation efforts. However, the CBD, in effect, complicated other public interest-oriented activities, since all kinds of users, including researchers, now needed to document the origins of genetic material with painstaking accuracy (K. Aoki 2008, 79–81; Rajotte 2008, 160–61). Here, the main issue was that the CBD sought to regulate all species and did not introduce exceptions for

[209] This applies to genetic material collected after the entry of force of the CBD only.

plant genetic resources for food and agriculture or specific uses (Tilford 1998, 414).[210] That combined with the fact that many aspects remained underspecified in the final text created legal uncertainty for many stakeholders.

At the same time, the international framework for intellectual property regulation for plant varieties underwent important changes. Incumbents had concentrated on two fora to ratchet up the stringency and legal force of intellectual property protection in plants. On the one hand, they had pursued a revision of UPOV in order to limit existing limitations and exceptions. On the other, agribusiness, the U.S., and other developed countries had been pushing to make some form of intellectual property protection mandatory for all members of the international trade system. These efforts culminated in the inclusion of Article 27.3(b) in TRIPS, requiring WTO members to adopt plant patents or a sui generis form of intellectual property protection. Taken together, UPOV 1991 and particularly TRIPS imposed additional legal obligations on countries, which further narrowed the room for maneuver for challengers. Developing countries also criticized that UPOV and TRIPS are incoherent with the CDB, as the two intellectual property regulations do not require the disclosure of the country of origin of genetic material used for intellectual property protection applications (Rajotte 2008, 150–51; Roffe 2008, 65–66).

With regard to the dimension of interaction, the regime complex for plant genetic resources fits the concepts of a competitive institutional context. Institutions in the governance area overlap in terms of governance activities and enshrine conflicting rules and principles. The regime complex harbors three conceptions of control and ownership of plant genetic resources, common heritage (CGIAR and FAO), private property rights (UPOV and TRIPS), and sovereign rights (CBD and FAO), that were clearly at odds with one another if not flat out contradictory. All of these institutions claim regulatory authority over plant genetic resources.

As regards the dimension of differentiation, the regime complex fits the concept of a fragmented context. The governance area is populated by a host of institutions, including the CBD, CGIAR, the FAO, UPOV, the WTO/TRIPS, and a number of environmental fora. These elemental institutions are also highly diverse. On the one side, UPOV and TRIPS address different aspects of intellectual property regulation. On the other, two UN fora, the CBD and the FAO promote different approaches to the conservation of and access to

[210] The CBD's holistic approach also contrasted with other existing environmental agreements, including the 1971 Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat and the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora.

plant genetic resources(see also K. Aoki 2008, 95–96). The CBD in particular also extends into the neighboring governance area of environmental protection. Table 6.4 illustrates the analysis.

Table 6.4: The Regime Complex for Plant Genetic Resources in the 1990s—Assessing the Institutional Context

Dimension/ Indicator	Observation	Measurement	Overall Assessment
Interaction			
Indicator 1A: Overlap	A multiplicity of institutions claim regulatory authority for raw and worked plant genetic resources	**High**	**Competitive**
Indicator 1B: Inconsistence	Inconsistent and incoherent rules on ownership and control of plant genetic resources	**High**	
Structure			
Indicator 2A: Diversity	Elemental institutions address a host of different subject matters and have ties to neighboring governance areas	**High**	**Fragmented**
Indicator 2B: Density	Governance area is populated by a large number of institutions	**High**	

In sum, the regime complex for plant genetic resources should provide an ajar opportunity structure for challengers. It should provide ample room for strategies of institutional selection and the development of solutions. However, the differentiation of the context should make broad and sustained collective action more difficult. In what follows, I analyze the regulatory process to test these hypotheses.

6.4.3 Venue Selection and Agenda Setting

After the adoption of the CBD, practically all stakeholders agreed that a revision of the *Seed Undertaking* was necessary to restore rule consistency in the governance area. However, actors disagreed vehemently on both the form and substance of a revised *Undertaking*. Controversial topics included access and benefit sharing of plant genetic resources for food and agriculture as well as farmers' rights and other limitations to intellectual property rights in plant varieties. During this initial step, venue selection raised the most important strategic considerations for both challengers and incumbents. The CBD was designed as a framework convention. Specifics were to be negotiated in separate protocols. One option was thus to renegotiate and transform the *Undertaking* into a protocol of the CBD. Another option was to harmonize the *Undertaking* with the CBD and adopt the revised document as a legally binding treaty under the auspices of the FAO. Even challengers were sharply di-

vided on the question of which forum would be preferable to achieve substantial reform. A number of developing countries and most environmental NGOs on the one hand preferred the CBD. Particularly biodiversity-rich developing countries were more interested in advancing benefit sharing mechanisms through the CBD than discussing greater access to plant genetic resources. Biodiversity-poor developing countries and NGOs focused on food security and farmers' issues on the other hand favored the FAO instead. The agenda setting phase mainly revolved around the question of what issues should form part of the outcome.

Inconsistencies between the CBD and the *Seed Undertaking* became apparent during the negotiation process of the CBD and were formally recognized in the 1992 Nairobi Final Act (Secretariat of the CBD 2005, 193, 406–8). A year later, at the first session of the Commission on Plant Genetic Resources after the adoption of the CBD, member states jointly decided to put a revision of the *Undertaking* on the agenda of the FAO. The Commission on Plant Genetic Resources "suggested that, while using the Commission, and its Working Group, as the forum, negotiations must proceed in cooperation with the Governing Body of the International Convention on Biological Diversity."[211] While its members agreed that the outcome should constitute a legally binding document, they left open whether the revised *Undertaking* should take the form of a protocol to the CBD or of an independent treaty under the FAO. Later that year, the FAO Conference passed Resolution 7/93, backing the decision of the Commission on Plant Genetic Resources to reopen negotiations on the *Undertaking*. The Conference decided that the revision process would have the aim of harmonizing the CBD and the *Undertaking* and promoting cooperation between the secretariats of the two documents. It also agreed that negotiations were to address benefit sharing for plant genetic resources for food and agriculture and the realization of farmers' rights.[212]

Another point of contention was a remnant of both the negotiations on the *Seed Undertaking* and on the CBD. The conflicting parties still needed to resolve how genetic material collected prior to the entry into force of the CBD and stored in ex situ collections should be handled. Despite calls for closer cooperation between the FAO and CGIAR, the status of the CGIAR network and its member institutions remained unchanged after the adoption

[211] FAO Commission on Plant Genetic Resources, 5th Session, Report, CPGR/93/REP (April 23, 1993), p. 9, see also Appendix A., http://www.fao.org/tempref/docrep/fao/meeting/015/aj632e.pdf, emphasis my own.
[212] FAO Conference, Resolution 7/93, Revision of the International Undertaking on Plant Genetic Resources (November 22, 1993), http://www.fao.org/3/x5586E/x5586e06.htm#Resolution7.

of the *Undertaking*. The issue was bracketed during the negotiations on the CBD and only resurfaced in late 1993 (International Institute for Sustainable Development 1993).[213] After a change in leadership, in May 1994, the IBPGR undertook first steps to place its collections under the auspices of the FAO and its Commission on Plant Genetic Resources. Yet the process came to an abrupt halt. At the first Conference of the Parties of the CBD in November 1994, rumors were afloat in NGO circles that the U.S. and other developed countries were trying to seize control of CIGAR/IBPGR by putting its member institutions under the trusteeship of the World Bank (International Institute for Sustainable Development 1994a). Genetic Resources Action International and Rural Advancement Fund International alerted developing countries of what they viewed as a "dawn raid" by incumbents. While it is not evident that incumbents did in fact attempt a coup on CGIAR, the narrative shifted the momentum back towards the challenger coalition. As a result, developing countries were able to speed up the conclusion of contracts between the FAO and CGIAR research centers to place their collections under the authority of the FAO (Coupe and Lewins 2007, 17–18; Mooney 2011, 144–45; Pistorius 1997, 88–89).[214]

This was consequential for two reasons: First, the solution represented substantial progress on an issue, which had been deadlocked since the adoption of the *Seed Undertaking*, showing that compromise was possible. At that stage, there was very little common ground between the conflicting parties on what the revision process of the *Undertaking* should be about. The resolution of this longstanding issue eased negotiations on other hot button topics. Second, the FAO's new role boosted its status as a forum for negotiations on plant genetic resources. Due to the inefficacy of the *Undertaking*, challengers had become wary of the FAO as a venue and were setting eyes on the CBD as another UN institution to pursue regulatory reform (Coupe and Lewins 2007, 19).

The discussion on a revision of the *Seed Undertaking* continued a first extraordinary session of the Commission on Plant Genetic Resources in November 1994. A working group presented a negotiation document, which proposed to first consolidate the *Undertaking* by incorporating its annexes. It also made suggestions to resolve issues related to the common heritage principle and to define the FAO's relationship with other institutions in the gov-

[213] FAO Commission on Plant Genetic Resources, 5th Session, Report (April 23, 1993), p. 15–16, http://www.fao.org/tempref/docrep/fao/meeting/015/aj632e.pdf.

[214] The compromise was presented at the 1st extraordinary session of the Commission on Plant Genetic Resources, see FAO Commission on Plant Genetic Resources, 1st Extraordinary Session, The International network of Ex Situ Germplasm Collections: Up-Dating of the Progress Report on Agreements with the International Agricultural Research Centers, CPGR-Ex1/94/Inf.5/Ad.1 (November 1994), http://www.fao.org/tempref/docrep/fao/meeting/016/aj691e.pdf.

ernance area. The Commission reaffirmed that the aim was to produce a legally binding treaty but remained undecided on whether the revised *Undertaking* should become a standalone agreement or a protocol to the CBD.[215] The question of the scope of the revised *Undertaking* was more controversial. The conflicting parties agreed that, in contrast to the CBD, which applies to *all* plant genetic resources, a revised *Undertaking* should only apply to plant genetic resources *for food and agriculture* with the ultimate goal of promoting food security. However, there was substantial disagreement on how to draw that line. On the one hand, this raised the question of what kinds of uses it should permit. In other words, should plant genetic resources for food and agriculture be freely accessible for all uses, including commercial breeding, or only for specific uses, such as public research? On the other, there was the option of limiting the scope of the revised *Undertaking* to specific plant species that are essential for food and forage production. Later that year, at the sixth regular session of the Commission for Plant Genetic Resources, a first proposal for a list of genera to be included in a revised *Undertaking* materialized.[216] Despite this apparent progress, these questions remained important stumbling blocks to the advancement of discussions in other areas during this initial stage.

Parallel talks took part at the CBD. At a 1994 meeting, the members of the CBD argued over whether farmers' rights should be codified and exchanged views on a revised *Seed Undertaking* potentially becoming a protocol to the CBD (International Institute for Sustainable Development 1994c).[217] Discussions at the CBD were particularly concerned with rule consistency in the governance area. At the first meeting of the Conference of the CBD in 1995, the members expressed their willingness "to coordinate effects carried out in both fora in order to collaborate and avoid overlapping in the respective fields of competence of the FAO and the Convention on Biological Diversity."[218] At another 1995 meeting, the representative of the Philippines on behalf of the G77 and China asked the parties to ensure that negotiations at the FAO "do not run counter to the provisions of the Con-

[215] FAO Commission on Plant Genetic Resources, 1st Extraordinary Session , Revision of the International Undertaking: Mandate, Context, Background and Proposed Process, CPGR-Ex1/94/3 (September 1994), p. 9, http://www.fao.org/tempref/docrep/fao/meeting/015/aj668e.pdf.

[216] FAO Commission on Plant Genetic Resources, 6th Session, CPGR-6/95/REP (1995), p. 13, http://www.fao.org/tempref/docrep/fao/meeting/015/aj595e.pdf.

[217] At that point, only Japan opposed the revised *Seed Undertaking* becoming a protocol to the CBD (International Institute for Sustainable Development 1994b).

[218] UNEP Conference of the Parties to the Convention on Biological Diversity, 1st Meeting, Report, UNEP/CBD/COP/1/17 (February 28, 1995), p. 57, https://www.cbd.int/doc/meetings/cop/cop-01/official/cop-01-17-en.pdf.

vention on Biological Diversity and will be supportive of its objectives."[219] These statements are reflective of the controversy surrounding the choice of negotiation venue. At that same meeting, a number of countries, including "Malawi, Sweden and Argentina suggested that the CBD would be the proper forum to discuss the issue" (International Institute for Sustainable Development 1995, 7). The U.S., one of the few countries not having signed the CBD, expressed its preference for the FAO instead (International Institute for Sustainable Development 1995, 7).

It became clear that even pro-reform actors were divided over this question. Established NGOs in the governance area with a focus on agricultural issues, including Rural Advancement Fund International and Genetic Resources Action International, favored the FAO, as they assumed it to be more responsive to their demands. Environmental NGOs, such as International Union for Conservation of Nature and the World Wide Fund for Nature, for similar reasons, supported a shift towards the CBD. The same applied to developing countries with varying endowments of biodiversity. Biodiversity-rich countries were focused on the implications of sovereign rights and viewed the discussions on a revision of the *Seed Undertaking* as an opportunity to negotiate substantial provisions on benefit sharing at the CBD. Biodiversity-poor countries from the Global South were more focused on issues related to access to plant genetic resources for food and agriculture, such as farmers' rights and other limitations to intellectual property rights and thus viewed the FAO as the more promising venue (Pistorius 1997, 96). The FAO was only recognized as the forum to negotiate a revision of the *Undertaking* at the second Conference of the CBD in 1995 (Coupe and Lewins 2007, 19). In a decision adopted, the parties to the CBD recognized "the special nature of agricultural biodiversity, its distinctive characteristics and problems, which require specific solutions" and declared their "support for the process engaged in the FAO Commission on Plant Genetic Resources."[220]

Two years after the FAO had decided to revisit the *Seed Undertaking*, talks reached an impasse. Contrary to the self-imposed goal of completing the process of revising the *Undertaking* by 1995, discussions still revolved around the scope of the treaty and other fundamental questions, such as whether farmers' rights should be part of it. The dispute on farmers' rights escalated at the FAO International Technical Conference on Plant Genetic Resources in Leipzig in 1996. At that meeting, NGOs were present in large numbers and

[219] UNEP Conference of the Parties to the Convention on Biological Diversity, 2nd Meeting, Report, UNEP/CBD/COP/2/19 (November 30, 1995), p. 28, https://www.cbd.int/doc/meetings/cop/cop-02/official/cop-02-19-en.pdf.
[220] Ibid., p.68.

collaborated with developing countries to put pressure on the U.S., a major holdout on the issue of farmers' rights. The U.S. insisted that all references to farmers' rights should be changed to "the concept of farmers' rights" to emphasize that there were no legal entitlements. In a speech to the conference, Mooney (quoted in De Sarkar 1996a), in what became a slogan of the emergent challenger coalition, summoned the U.S. to "recognize that farmer's rights is not a concept [… but, the author] a reality." According to another delegate (quoted in De Sarkar 1996b), challengers had "a feeling that the U.S. was keen not to completely isolate itself." In fact, challengers' newfound unity on the issue left an impression on the U.S. and other incumbents. Through further informal consultations the conflicting parties came to an agreement with the final declaration reading "'to realize Farmers' Rights, as defined in FAO Resolution 5/89,' rather than realizing 'the concept of' FR [farmers' rights]" (International Institute for Sustainable Development 1996, 5).

The Leipzig Conference proved to be a breakthrough and discussions on the revision of the *Seed Undertaking* turned more substantial afterwards. At the third extraordinary meeting of the Commission on Genetic Resources for Food and Agriculture[221] in December 1996, two working groups made progress on the issues of access and benefit sharing and farmers' rights. Challengers and incumbents came to an agreement to facilitate access to specific plant genetic resources for food and agriculture for specific uses. Participants also settled on the idea of a multilateral system to distribute benefits arising from the use of these plant genetic resources (ten Kate and Lasén Diaz 1997, 287). While the details were yet subject to much debate,[222] at this meeting, the negotiating parties arrived at a shared understanding of the problems at hand and discussed tentative solutions. Importantly, actors were able to link the different thematic complexes that were of interest to different stakeholders, facilitating compromise.

This also established the FAO as the forum to discuss a revision of the *Seed Undertaking*. The reasons for the selection of the FAO were twofold. On the one hand, it was driven by path dependence. While the CBD still lacked an organizational structure, the FAO secretariat was well equipped to support such negotiations. On the other, strategic maneuvering by a number of challengers *and* incumbents played a role. On behalf of incumbents, the U.S.,

[221] The FAO Council decided to rename the Commission on Plant Genetic Resources in Commission on Genetic Resources for Food and Agriculture in late 1995.

[222] Brazil proposed to limit access "to those genera that constitute the basis for human world food consumption," suggesting a list of 25 plant species. The U.S., in turn, put forward a more open-ended definition, focusing on "those genetic resources for which there is a global interest in maintaining unrestricted access," see FAO Commission on Plant Genetic Resources for Food and Agriculture, 3rd Extraordinary Session, Report, CGRFA-EX3/96/Rep (1996), D5, D14, http://www.fao.org/tempref/docrep/fao/meeting/016/aj704e.pdf.

as a non-party to the CBD, from early on pushed other stakeholders to accept the FAO as the venue for negotiations. With regard to challengers, important civil society groups, such as Rural Advancement Fund International, had committed their political capital to the FAO and, thus, also opposed a shift to the CBD. As the analysis in this section has shown, regime complexity had a mixed effect on challengers of the regulatory status quo. The existence of multiple fora with overlapping spheres of authority, at least in principle, allowed actors to strategically select a forum to pursue reform. Due to the proliferation of institutions in the governance area, however, it became more difficult for challengers to agree on which forum to focus. As I will show in the next section, these difficulties persisted throughout the negotiation phase, exacerbating broad and sustained collective action.

6.4.4 Negotiations and Conflict Expansion

The negotiations focused on three major aspects, the scope of the revised *Seed Undertaking*, access and benefit sharing, and farmers' rights, all of which raised implications for intellectual property regulation. While the FAO as a universal membership UN organization favored challengers, the differentiation of the institutional context impeded the formation of a broad challenger coalition. Throughout the negotiations, biodiversity-rich countries continued to be more interested in advancing regulation at the CBD. Even in late 1997, the CBD Conference continued to discuss whether the revision "should take the form of a protocol to this Convention once revised in harmony with this Convention."[223] Institutional proliferation also made it more difficult for NGOs to participate at every meeting in every relevant venue, resulting in a decline of civil society participation at the FAO Commission on Genetic Resources for Food and Agriculture. As a result, the negotiation process was almost purely intergovernmental with non-state actors playing a very minor role.

As discussed above, farmers' rights had been an especially controversial topic during the initial stages of the revision process. Among incumbents, the U.S. was most reluctant to grant any sort of legally enforceable rights to indigenous groups.[224] Although a number of EU members were ready to accommodate the demands of challengers, two negotiation sessions in 1997 brought little progress because of U.S. opposition (International Institute for Sustainable Development 1997a, 4–5, 9, 1997b, 5–7, 10–11). It is all the more surpris-

[223] UNEP Conference of the Parties to the Convention on Biological Diversity, 3rd Meeting, Report, UNEP/CBD/COP/3/38 (February 11, 1997), p. 79, https://www.cbd.int/doc/meetings/cop/cop-03/official/cop-03-38-en.pdf.

[224] For the U.S. position, see Fraleigh and Harvey (2011, 112–14). For different regional perspectives on farmers' rights, see the other contributions in Frison, López, and Esquinas-Alcázar (2011). See also FAO Commission on Genetic Resources for Food and Agriculture, 5th Extraordinary Session, Report, CGRFA-Ex5/98/REPORT (1998), Appendix C, http://www.fao.org/tempref/docrep/fao/meeting/014/aj587e.pdf.

ing that the issue was resolved relatively swiftly by the end of 1998 well before the rest of the Treaty took shape. In June 1998, at the fifth extraordinary session of the Commission on Genetic Resources for Food and Agriculture, a working group compiled a proposal on farmers' rights that still contained a heavy amount of bracketed language.[225] Nevertheless, the draft was finalized within months and was included as Article 9 in the final agreement almost word by word.

What are the reasons for this sudden breakthrough? A number of developing countries were ready to make significant concessions. They had concluded that the negotiation process would break down otherwise, as the U.S. was unwilling to compromise. The final language left other challengers, particularly civil society NGOs representing indigenous groups, smallholder farmers, and rural communities, disappointed, as they had hoped for a more substantial outcome (see Mooney 2011, 146–47). This, again, highlights the difficulties of coalition building in this case. To some extent, these difficulties reflect different interests within the challenger coalition. While some actors saw farmers' rights as an important, if not the primary, goal of reform, others, particularly biodiversity-rich developing countries, treated this aspect as a bargaining chip to achieve greater concessions on benefit sharing (Coupe and Lewins 2007, 20–21; Rabitz 2017, 69–70).[226] For this reason, one interview partner went as far as saying: "There is no coalition there."[227]

More importantly, these difficulties are related to the institutional context, in which challengers operated. The greater fragmentation of the institutional context exacerbated challengers' attempts to mobilize allies and sustain collective action throughout the negotiation process. As a result, civil society participation in the reform attempt has been limited. A number of observers of the negotiation process have commented on the relative sparseness of civil society NGOs at FAO meetings. Halewood and Nnadozie (2008, 123), for instance, state that "civil society organizations' participation in the Treaty process—while very active at first—declined precipitously over the years" (see also Mooney 2011, 145).

[225] See FAO Commission on Genetic Resources for Food and Agriculture, 8th Regular Session, Composite Draft Text of the International Undertaking on Plant Genetic Resources, CGRFA-8/99/13 (1999), p. 9, http://www.fao.org/tempref/docrep/fao/meeting/014/aj560e_annex.pdf. The article on farmers' rights was formally adopted at the eighth regular session of the Commission on Genetic Resources for Food and Agriculture in April 1999 (Gerbasi 2011, 34).

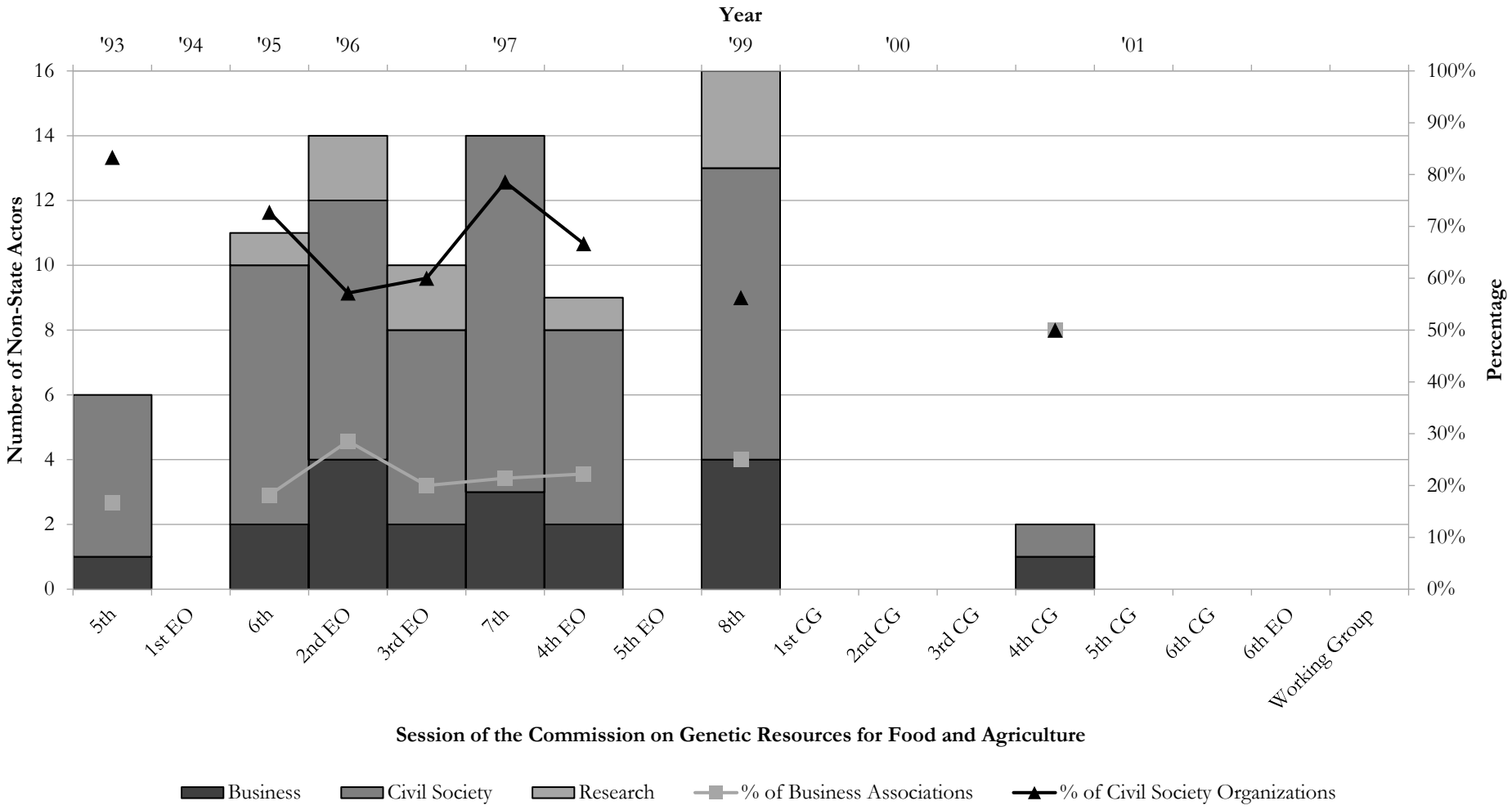
[226] The disparity in views within the G77 is illustrated by the following anecdote: According to representatives of the African Group, at the fifth regular session of the Commission on Genetic Resources for Food and Agriculture, Brazil and a number of Asian countries had left out more far-reaching proposals from the African Group in a joint proposal and were reluctant to reinsert them (Egziabher, Matos, and Mwila 2011, 50).

[227] Interview with Former Senior Programme Manager for Innovation, Technology and Intellectual Property at the International Centre for Trade and Sustainable Development (December 12, 2015).

To substantiate my conjecture and to visualize coalition-building efforts, I have gathered data on the participation of non-state actors. For this purpose, in a first step, I have collected data on the number of participating non-state organizations at all sessions of the Commission on Plant Genetic Resources/Commission on Genetic Resources for Food and Agriculture between 1993 and 2001, drawing on the attendance lists in the appendices of the official reports published on the FAO website. In a second step, I have differentiated between business, civil society, and research organizations, drawing on organizational websites, and coded entries in the dataset accordingly. Figure 6.2 illustrates the changes in the composition of non-state actors over time.

At first glance, the data seems to contradict the assessment that civil society turnout was low and decreased over time. This is deceptive for two reasons. First, incomplete data is a significant problem, as attendance lists are not available for every session. A triangulation of the descriptive statistics and statements from participants indicates that many organizations were in fact inactive during the discussions. Moreover, attendance decreased, as the negotiation process turned more informal. Second, many of the attending civil society organizations were in fact irrelevant for the outcome under investigation. The number of attending civil society organizations was larger than the number of business organizations at all but one session of the Committee. However, an in-depth analysis suggests that a significant number of attending NGOs were interested in topics other than the revision of the *Seed Undertaking*, such as animal welfare and forestry. My analysis also reveals that most civil society organizations participated only infrequently. With the exception of Genetic Resources Action International and Rural Advancement Fund International, other NGOs were only present during key meetings, e.g. the Leipzig Conference, and not at regular or extraordinary sessions of the Commission. Almost as in the earlier case, participation remained limited to a small number of key personalities, including the aforementioned Fowler and Mooney as well as Henk Hobbelink of Genetic Resources Action International. While these findings say little about my hypothesis that environmental NGOs concentrated on other venues, they underline that conflict expansion took place only to a very limited extent.

Figure 6.2: Participation of Civil Society NGOs in Commission on Genetic Resources for Food and Agriculture Sessions, 1993-2001



The limited involvement of civil society impacted negotiating dynamics, as many developing countries—at least initially—had difficulties mobilizing technical and legal expertise. As representatives of the African Group note, "[t]he major constraint was the lack of diversity in terms of expertise among the African delegates. The African region was further disadvantaged by our lack of legal experts in this field" (Egziabher, Matos, and Mwila 2011, 44). Expert involvement on behalf of African governments increased over time, however, rising from only a handful of delegates with a legal or technical background during the agenda-setting stage to twenty to thirty during the negotiation stage (see Egziabher, Matos, and Mwila 2011, 47).

Developing country governments committing more resources and personnel to negotiations and the compromise on farmers' rights caused an acceleration of the negotiations. So did the election of Fernando Gerbasi, a Venezuelan diplomat, as the new chairperson of the Commission on Genetic Resources for Food and Agriculture in 1997. Gerbasi's restructuring helped to surmount some of the difficulties that had plagued the negotiating process since the beginning. Most importantly, in 1998, the FAO Council on Gerbasi's suggestion mandated a contact group, which would discuss key aspects of the revision process in a more low-key setting in parallel to existing working groups. This led to a first important breakthrough at an informal contact group meeting in Montreux in January 1999. Here, the participants drafted the "Chairman's Elements," a position paper, which identified the lowest common denominator between the parties on each of the outstanding topics. These included the scope of the revised *Seed Undertaking*, conditions for access, the terms for sharing benefits arising from the commercialization of material covered by the revised *Undertaking*, and its legal nature. The Chairman's Elements were adopted at the 8th session of the Commission on Genetic Resources for Food and Agriculture in April 1999 and formed the basis for subsequent discussion.[228] Gerbasi also took steps to facilitate the participation of NGOs, such as Genetic Resources Action International and Rural Advancement Fund International, in these meetings (Coupe and Lewins 2007, 20; Gerbasi 2011, 31–34, 38–39).[229]

[228] FAO Commission on Genetic Resources for Food and Agriculture, 8th Regular Session, Report of the Chairman of the Commission on Genetic Resources for Food and Agriculture on the Status of Negotiations of the Revision of the International Undertaking on Plant Genetic Resources, in Harmony with the Convention on Biological Diversity, CGRFA-8/99/13 (February 1999), http://www.fao.org/tempref/docrep/fao/meeting/014/aj560e.pdf.

[229] Mooney (2011, 146) suggests that civil society NGOs were only admitted because incumbent governments wanted industry to participate at these meetings but could not allow business organizations to participate without giving civil society organizations the same privilege.

At first, the contact group contributed to solving the protracted controversy over the scope of the revised *Seed Undertaking*. So far, incumbents and challengers had only reached agreement that a revision of the *Undertaking* should apply to plant genetic resources for food and agriculture. Yet it remained subject to heated debate to which crops it should apply specifically and what uses it should permit. Challengers were willing to facilitate access for uses that further the public interest and promote food security. However, they were wary of creating a regime that would again make *their* raw germplasm freely available for everyone's benefit while receiving little to nothing in return by transnational corporations and technologically advanced developed countries. During the agenda-setting stage, challengers and incumbents had already discussed the idea of a multilateral system as a commons for *specific* food and forage genera, permitting *specific* uses. Over the subsequent sessions of the Commission on Genetic Resources for Food and Agriculture, the Multilateral System took shape with discussions focusing on a list of genera to be included.

Discussions on the list, which would become Annex I of the *Seed Treaty*, were based on scientific contributions at first. Researchers from a variety of institutions, including the International Plant Genetic Resources Institute (the successor of the IBPGR), the Vavilov Institute in St. Petersburg, and the Dutch Genebank, sought to identify crops that are essential for the world's food and forage production. They also highlighted the transaction costs that would be incurred by all stakeholders, if countries were to negotiate bilaterally over access to these crops. However, the debate on the list turned political quickly. As the terms of access and benefit sharing remained unspecified, a number of challenger countries expressed their unwillingness to include certain indigenous crops. China excluded soybean, Mexico and Peru withdrew certain sub-species of Maize, Brazil tomatoes, Africa certain tropical forages and so on, which ultimately undermined the value of the Multilateral System (Coupe and Lewins 2007, 21–22). As Falcon and Fowler (2002, 211) note, "[t]his process may help the reader understand the irony of how a list of crops crucial to world food security contains asparagus and strawberries, but is missing soybeans, groundnuts, tropical forages and most 'poor people's' crops." This reflects the profound mistrust of developing countries vis-à-vis incumbents with regard to plant genetic resources. It also highlights what Gerbasi (2011, 35) called Brazil and other biodiversity rich countries' "conscientious posture in defence of the CBD" (see also Rabitz 2017, 72–73).[230] Bargaining on the exact

[230] See for instance the statement by the Brazilian delegation at the 1999 FAO Conference: "*The Undertaking constitutes, in fact, an effective loophole in the Convention on Biological Diversity* for a wide range of exceptions. The Convention on Biological Diversity enshrines the principle of the sovereignty of the states over the genetic resources that exist in their territory. Brazil understands that facilitated access to genetic resources and the equitable sharing of the benefits accruing from their use are the two sides of the same coin. Brazil is thus

make-up of the list dragged on in parallel to discussions on other issues until the end of negotiations.[231] The basic agreement that the scope of the treaty would be based on a list of essential crops, while not fully satisfactory to all stakeholders, marked an important breakthrough, however, as it allowed negotiations to progress on other controversial issues.

With the question of scope out of the way, in a second step, negotiations turned to the conditions for access and benefit sharing. Here, challengers and incumbents needed to find common ground on two major questions: First, for what uses would plant genetic resources from the multilateral system be freely available? Second, should commercial uses be permissible at all and, if so, under what conditions should users be able to claim intellectual property rights for commercial applications? For challengers, the terms of access were tightly coupled to benefit sharing. They were skeptical that allowing for intellectual property protection would lead to an equitable outcome. At the same time, they understood that only through commercialization would sufficient revenue be generated to fund the aims of the revised *Seed Undertaking* (Helfer and Austin 2011, 398). The resolution of these questions was helped by a concession from one of the most important incumbent groups. The International Association of Plant Breeders at its June 1998 general assembly adopted a paper, stating:

> [I]n the event of protection through patents, limiting free access to the new genetic resource, ASSINSEL members are prepared to study a system in which the owners of the patents would contribute to a fund established for collecting, maintain, evaluating and enhancing genetic resources (cited in Coupe and Lewins 2007, 22).

In other words, breeders agreed to share benefits arising from the commercialization of genetic material from the Multilateral System through contributions to an international fund. The paper was distributed at the fifth extraordinary session of the Commission on Genetic Resources for Food and Agriculture that took place during the same month, facili-

endeavouring to ensure that the final text of the Undertaking reflects the necessary balance between those two aspects," FAO Conference, 13th Session, Verbatim Records of Plenary Meetings of the Conference, C99/PV (2000), p. 93, http://www.fao.org/tempref/unfao/Bodies/conf/PV_series/C99_PV/C_99_PV.pdf, emphasis my own. Brazil thus advocated for a limited scope. At the second meeting of the contact group, Brazil argued that "the 'window'" provided by the revised *Seed Undertaking* needed to be "small," "have clearly defined limits," and should only apply to "basic staple food crops," FAO Commission on Genetic Resources, 2nd Inter-Sessional Meeting of the Contact Group, Revision of the International Undertaking on Plant Genetic Resources, in Harmony with the Convention on Biological Diversity, CGRFA/CG-2/00/TXT (April 2000), B1, http://www.fao.org/tempref/docrep/fao/meeting/014/aj538e.pdf.

[231] The number of crops to be included in Annex I ranged from nine to 287. The list of 64 was only agreed during the final negotiations on the treaty text in late 2001 (International Institute for Sustainable Development 2001b, 13).

tating agreement on the compensation mechanism to be included in the multilateral system (see International Institute for Sustainable Development 1998, 9–10).[232]

However, in 2000, discussions on the intellectual property-related implications of the revision of the *Seed Undertaking* flared up again. Controversy centered on the wording of what would become article 12.3(d) of the *Seed Treaty*. The article in its final form provides that "recipients shall not claim any intellectual property or other rights that limit the facilitated access to the plant genetic resources for food and agriculture, or their genetic parts and components in the form received from the Multilateral System."[233] For the U.S. in particular but also Australia, Canada, and New Zealand, this raised concerns with regard to treaty obligations under TRIPS. The U.S. argued that the provision would run counter to TRIPS, undermining international regulations on plant breeders' rights and patents (International Institute for Sustainable Development 2000).

Until today, there exists no ruling on whether article 12.3(d) does in fact conflict with TRIPS. A number of commentators suggest that this is not actually the case (see Helfer and Austin 2011, chap. 6; Rabitz 2017, 74–75). The provision raises two important questions: First, could users, after all, claim intellectual property protection, be it plant breeders' rights or utility patents, for material received from the multilateral system? For this to be the case, standards for receiving intellectual property protection would need to be very low. Second, would intellectual property protection on material received from the multilateral system restrict uses covered by the *Seed Treaty*? This is doubtful, as the *Seed Treaty* explicitly specifies limitations to intellectual property protection, including a farmers' exemption, to permit such uses.

Despite these hypotheticals, the provision continued to be subject to intense conflict until the end of the negotiations (International Centre for Trade and Sustainable Development 2001b; International Institute for Sustainable Development 2001c). While the EU, as in the dispute on farmers' rights, took a more conciliatory position (Visser and Borring 2011, 73–74), the U.S. remained staunchly opposed. At the same time, developing countries also did not move and were willing to sacrifice U.S. participation in the Treaty to maintain the provision (see also Rabitz 2017, 74–75). While this dispute shows how far challengers and the

[232] "In this respect, the Commission noted the interesting position expressed by FIS/ASSINSEL /International Seed Trade Federation/International Association of Plant Breeders), that could facilitate the negotiations," see FAO Commission on Genetic Resources for Food and Agriculture, 5th Extraordinary Session, Report, CGRFA-Ex5/98/REPORT (1998), p. 6, http://www.fao.org/tempref/docrep/fao/meeting/014/aj587e.pdf.

[233] International Treaty on Plant Genetic Resources for Food and Agriculture, November 4, 2002, www.fao.org/3/a-i0510e.pdf.

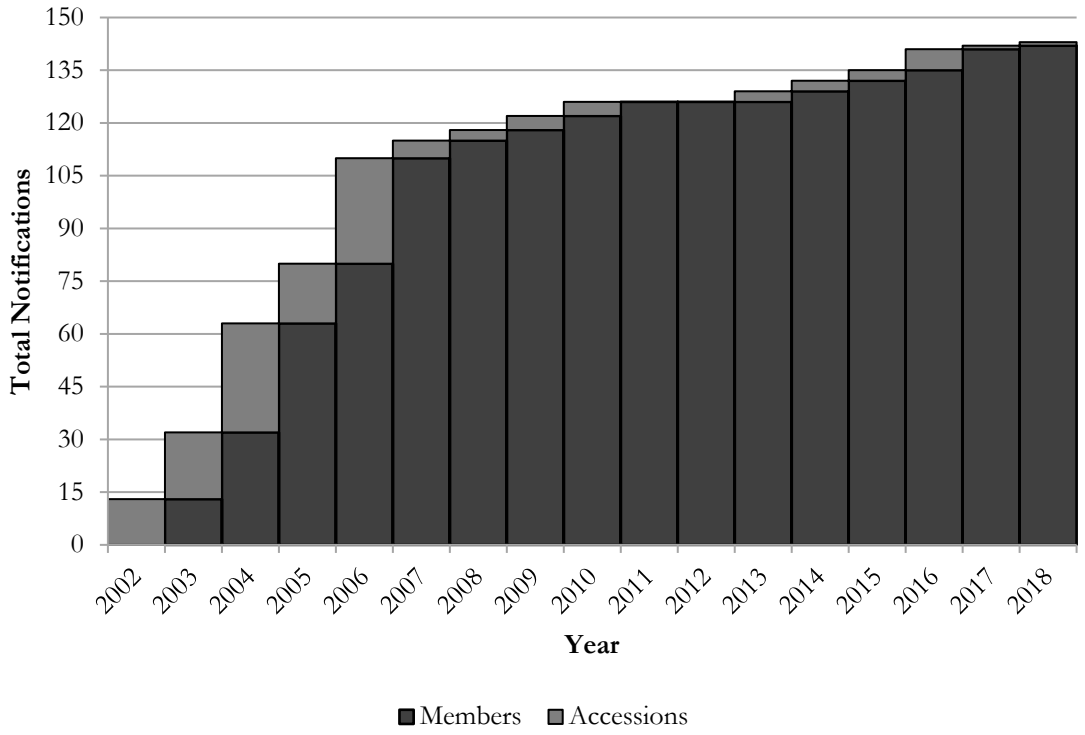
U.S. were apart concerning intellectual property protection for plant varieties and genetic material, it is also indicative of an increasing concern for regime coherence and rule consistency. Importantly, it resulted in negotiation of the savings clause to clarify the *Seed Treaty's* relationship with related instruments, including UPOV and TRIPS (International Centre for Trade and Sustainable Development 2000).

Despite these difficulties, in the final step of the negotiations, the parties handled most other pending questions with relative ease. Discussions on the legal nature and status of the revised *Seed Undertaking* were resolved in favor of a standalone treaty under the auspices of the FAO (International Institute for Sustainable Development 2001a, 10). Had NGO participation during contact group sessions been haphazard at best, the core of the challenger coalition was able to mobilize support for a last minute push at the April 2001 meeting, signing a declaration in support of access to seeds (Coupe and Lewins 2007, 23–24). With this backing, the parties finalized negotiations over the course of two meetings, concluding with the adoption of the text of the *Seed Treaty*. Due to persistent disagreement over Article 12.3(d), the U.S. and Japan abstained from the final vote (International Centre for Trade and Sustainable Development 2001a).[234]

In sum, this case displays the opportunity structure generated by institutional contexts that are both competitive and fragmented. On the one hand, the overlap and competition of a multitude of institutions gave challengers ample room for strategies of institutional selection and provided ambiguities that allowed for regulatory innovation. On the other, institutional proliferation and specialization made it difficult for challengers to expand the conflict. As I will show in the last section of this case study, this type of institutional context also creates incentives for incumbents to abandon the multilateral level and substitute it with bilateral or plurilateral fora to advance their goals there.

[234] Attempts by the U.S. to delete article 12.3(d) from the Seed Treaty were rejected by large majorities, including a last-minute bid at the FAO Conference. See FAO Conference, 31st Session, Verbatim Records of Plenary Meetings of the Conference, C 2001/PV, p. 70–71, http://www.fao.org/3/a-y6547e.pdf.

Figure 6.3: Ratification of Seed Treaty, 2002-2018



Sources: Author's illustration based on data from the FAO (n.d.).

6.4.5 Adoption and Aftermath

The FAO Conference approved the *Seed Treaty* on November 3, 2001. The *Treaty* then remained open for signature until November 4, 2002.[235] On June 29, 2004, it became effective, as the threshold of forty members had been reached earlier that year. A number of observers and stakeholders "have questioned the usefulness of the Agreement if the US—as one of the key countries involved in plant breeding and genetic engineering—is not bound to the treaty's provisions" (International Centre for Trade and Sustainable Development 2001a, 6). Importantly, however, the U.S. remained involved in the implementation process and—although it took another fifteen years—finally ratified the *Treaty* in December 2016.[236] Similarly, Japan joined in mid-2013. As of late 2018, the *Treaty* has almost universal membership with 144 contracting parties (143 states and the EU). Figure 6.3 depicts the development of the *Treaty's* membership over time.

[235] FAO Conference, Resolution 3/2001, Adoption of the International Treaty on Plant Genetic Resources for Food and Agriculture and Interim Arrangements for its Implementation (November 3, 2001), http://www.fao.org/3/Y2650e/Y2650e01.htm#Resolution3.

[236] The U.S. made its membership dependent on the following declaration: "Article 12.3d shall not be construed in a manner that diminishes the availability or exercise of intellectual property rights under national laws."

In accordance with expectations for an outcome of moderate reform, the *Seed Treaty* has received mixed reactions from pro-reform forces. Challengers have generally acknowledged the progress made on access and benefit sharing. However, a number of developing countries, particularly from Africa, as well as civil society NGOs have been less enthusiastic with regard to the provisions on farmers' rights, which they perceived as lacking (Egziabher, Matos, and Mwila 2011, 52; Mooney 2011). The UK Food Group (2004), for instance, hinting at the lack of legal precision, noted: "There is much work to do to make sure its laudable purposes are not undermined by economically powerful countries seeking rights to extract and privatise genetic resources covered by the Treaty." Some critical academics went a step further, arguing that the concept of farmers' rights is mimicking plant breeders' rights and, in so doing, legitimizing intellectual property rights for plant varieties and genetic components (see Borowiak 2004; see also Kloppenburg, Jr. 2004, 295).

As the *Seed Treaty* contained some ambiguous formulations, these needed to be clarified in the years after the adoption. Initially, the debate focused on the exact provisions for access and benefit sharing. In 2006, the parties to the *Treaty* adopted the Standard Material Transfer Agreement to determine the "level, form and manner of monetary payments on commercialization under the multilateral system of the treaty" (Esquinas-Alcázar, Hilmi, and López Noriega 2013, 144).[237] Additional agreements on the *Treaty's* funding strategy and compliance were adopted in subsequent years (see also Halewood and Nnadozie 2008, 137–39). Yet a number of provisions have remained vague, which left multiple stakeholders wondering whether the *Treaty* will be able to deliver on all of its promises.

For this reason, challengers have continued pushes in different venues to advance their reform goals. Brazil and other biodiversity-rich countries have concentrated their efforts on the CBD, which, in 2010, resulted in the adoption of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization.[238] The Nagoya Protocol introduces a legal framework for access and benefit sharing for material covered by the CBD (and not covered by the *Seed Treaty*) and, at least in principle, improves the position of countries of origin for demanding remuneration from commercial users of genetic material. Other challengers have turned to different UN venues to promote farmers' rights. In September 2018, this has resulted in adoption of a resolution

[237] FAO Governing Body of the Treaty on Plant Genetic Resources for Food and Agriculture, Resolution 2/2006, The Standard Material Transfer Agreement, (June 16, 2016), http://www.fao.org/3/a-be006e.pdf.
[238] For a detailed account of the negotiation process, see Wallbott, Wolff, and Pożarowska (2014).

by the UN Human Rights Council.[239] Echoing the provisions on farmers' rights in the *Treaty*, the Resolution states that peasants and other people working in rural areas should have the right to save, use, exchange, and sell their farm-saved seed or propagating material. The Resolution also reaffirms the rights to the protection of traditional knowledge as pertaining to plant genetic resources for food and agriculture, access and benefit sharing, and the right to participate in decision-making to the conversation and sustainable use of those resources (Saez 2018c). As challengers continue to display a lack of cohesion, focusing on different fora to achieve their goals, it is doubtful whether these outcomes will result in actual improvements to the regulatory status quo.

While challengers have concentrated their efforts on the multilateral level and particularly the UN system, incumbents have shifted their attention to the bilateral and plurilateral level to increase the stringency of intellectual property protection. The early 2000s have witnessed the conclusion of a flurry of bilateral trade and intellectual property agreements between the U.S. and developing countries, including provisions to promote a UPOV-compliant implementation of TRIPS (Morin 2009, 189–90). This shows that while fragmented governance areas with a multiplicity of highly diverse institutions but no focal point for rulemaking provide opportunities for reform, they also allow the most powerful actors to shop for venues where they can have their say.

6.5 Discussion

In this chapter, I have studied two cases of attempted reform in the area of plant genetic resources. In both cases, challengers sought to improve access to seeds and restructure the international exchange of germplasm in a way that is more equitable for providers of biodiversity in the Global South. In the earlier episode (1979-1983), these efforts resulted in the adoption of an outcome of minor reform, the *Seed Undertaking*, which lacked legal force and largely failed to change the regulatory status quo in a meaningful way. In the second episode (1993-2001), challengers were more successful and achieved an outcome of moderate reform, the *Seed Treaty*, which introduced some changes but remained unspecific. Both cases display similar actor configurations and a similar problem structure. Materially weak challengers who demand limitations to intellectual property rights were opposed by more powerful incumbents who seek to preserve the regulatory status quo or even want to increase the stringency of protection. What accounts for the greater degree of success in the second case?

[239] UN General Assembly, Declaration on the Rights of Peasants and Other People Working in Rural Areas, A/C.3/73/L.30 (October 30, 2018), https://undocs.org/en/A/C.3/73/L.30.

The analysis in this chapter supports the argument put forward in this book that, all else being equal, varying institutional context generate more or less open opportunity structures for challengers of the status quo and thus affect what they can get. In the initial reform attempt, the institutional context was coordinated and integrated. This made it difficult for challengers to put the issue on the agenda at all. In the second case, the context had shifted to a competitive and differentiated regime complex, involving a multiplicity of highly diverse institutions with conflicting rules. While this constellation facilitated agenda setting, it made it harder to build a broad and sustained reform coalition. Three findings are particularly noteworthy:

- This chapter corroborates the expectations of the regime complexity and historical institutionalist literatures on the effects of differentiation in institutional contexts on weaker actors. Institutional fragmentation disproportionally constrains actors with fewer resources.
- Even if a reform outcome is limited at the substantial level, it may have a lasting effect by putting a new forum in the spotlight. The case studies conducted in this chapter showcase a need to account for path dependence.
- While challengers benefit from competition, the second case reflects the desire of all actors to restore coherence and even order in the governance area. This has to do with the parallel differentiation of the context. Here, incumbents may abandon fora that they perceive to be dominated by challengers to pursue their agenda in functionally equivalent venues.

Table 6.5 summarizes outcomes, control and explanatory variables, as well as regulatory processes of the two cases. What are the implications of these findings?

First, the case studies carried out in this chapter provide additional supporting evidence for the institutional opportunity approach and back the conclusions drawn from the case studies in the previous chapter. The distribution of material power and preferences and public mobilization are important factors to explain regulatory outcomes. Yet institutional context is an additional factor to take into account, particularly if one is faced with outcomes that defy conventional expectations, such as cases of weaker actor influence.

Table 6.5: Reform Attempts for Access to Seeds—Analyzed with Regard to Control Variables, Explanatory Variables, and Causal Mechanisms

Case	Reform Attempt 1979-1983	Reform Attempt 1993-2001
Outcome	*International Undertaking on Plant Genetic Resources*	*International Treaty on Plant Genetic Resources for Food and Agriculture*
	Minor reform	Moderate reform
Control Variables		
Great powers	Opposed	Opposed
Business interests	Opposed	Opposed
Public awareness	No	No
Expert consensus	No	No
Explanatory Variable		
Institutional context		
Relevant institutions	CGIAR, FAO, and UPOV	CBD, FAO, UPOV, and WTO
Interaction	Coordinated	Competitive
Structure	Integrated	Fragmented
Opportunity structure	Narrow	Ajar
Causal Mechanisms		
Venue selection		
Observable implication	No responsive venue immediately available, forum shifting costly	Availability of multiple responsive venues
Conflict expansion		
Observable implication	Formation of a functional challenger coalition	Difficulties in mobilizing broad and sustained support

Second, this chapter allows for a more differentiated look at the effects of regime complexity on different sets of actors. In accordance with the core argument of this book, variation on the different axes of regime complexity has different effects on actors with divergent resource endowments. Variation on the mode of interaction affects strategies of institutional choice, such as forum shopping and regime shifting, and opens up possibilities for a reinterpretation of rules. Institutional competition is a precondition for a weaker actor influence. The structure of an institutional context, the level of institutional density and the differentiation of the elemental institutions, constrains materially weaker more than powerful actors. The latter can navigate fragmented contexts better, as they can deploy delegations at every forum and generally have access to more experts to understand the legal intricacies involved in negotiating across multiple institutions.

Third, these case studies alert us to the possibility that regulatory outcomes may have a larger or smaller effect on the institutional context. Even though the *Seed Undertaking* did little to change the regulatory status quo, it affected the governance area by establishing the FAO as a forum to discuss plant genetic resources. From the perspective of historical institutionalist approaches, path dependence should not come as a surprise. Yet it is something that the institutional opportunity approach needs to consider more strongly.

7 Conclusions

In this book, I have studied how materially weak actors can influence outcomes in global economic governance and achieve regulatory reform against the opposition of materially powerful opponents. I have set out to answer the question of what conditions and strategies allow poorly resourced challengers to prevail over entrenched incumbents and change rules according to their preferences. I have focused on cases that are characterized by conditions of institutional complexity. I have specifically looked at reform attempts in issue areas that are governed by multiple institutions overlapping to varying extents in their activities.

As noted by a growing literature in International Relations, institutional complexity has increased across the board in practically all areas of international cooperation, changing the face of global governance (Alter and Meunier 2009; Orsini, Morin, and Young 2013; Raustiala and Victor 2004). Today, instead of single-institution regimes that provide a focal point for the resolution of regulatory disputes, we often need to take into account entire configurations of international institutions that enshrine conflicting rules and competing claims to authority. This raises a number of questions of concern to both International Relations and International Political Economy scholars, which I have addressed theoretically and empirically throughout the book and to which I return in this chapter: How does institutional complexity impact international cooperation and international economic regulation in particular? Is there a trend towards the fragmentation of global governance or do regime complexes vary? Finally, who benefits from different forms of institutional complexity?

To answer these questions and develop a better understanding of regulatory reform attempts in contexts of institutional complexity, in the first part of the book, I have advanced the institutional opportunity approach. In brief, this approach is based on the following argument: Different institutional contexts produce varying opportunity structures for challengers of the regulatory status quo, enabling or constraining weaker actor influence on outcomes of international economic governance.

In contrast to the existing literature on regime complexity, the institutional opportunity approach adopts a multidimensional perspective to configurations of international institutions. On one side, it considers the mode of interaction among the elemental institutions in a governance area. It looks at the overlap and inconsistence of governance activities and

rules to differentiate between coordinated and competitive contexts. Competition facilitates the influence of entrepreneurial actors, as it enables strategies of institutional selection and allows for innovation through the reinterpretation of conflicting rules. On the other side, the approach considers the differentiation of an institutional context, focusing on the institutional density in a governance area and the diversity of the elemental institutions. It distinguishes between integrated and fragmented contexts. Governance areas with a great number of specialized fora limit the influence of weaker actors. Such institutional contexts make it more difficult for challengers to mobilize allies and sustain collective action throughout the regulatory process. Based on these considerations, the institutional opportunity approach distinguishes between four types of institutional contexts, which amount to varying levels of opportunity for challengers: (1) coordinated and fragmented contexts, providing a closed opportunity structure, (2) coordinated and integrated contexts, providing a narrow opportunity structure, (3) competitive and fragmented contexts, providing an ajar opportunity structure, and (4) competitive and integrated contexts, providing an open opportunity structure.

In the second part of the book, I have put these arguments to the test, focusing on four cases of varying weaker actor influence on outcomes in international intellectual property regulation. In two paired comparisons, I have shown how shifts in the institutional contexts of the respective governance areas have led to an opening of the opportunity structure for challengers, allowing them to negotiate greater flexibilities into intellectual property regulation. In copyright regulation, over time, a division of labor between WIPO and UNESCO has devolved into a more competitive arrangement between WIPO and the WTO, facilitating regulatory reform. In plant variety protection, the institutional context has also become more competitive but at the same time—due to institutional proliferation—more fragmented. While allowing challengers to focus their efforts on the most responsive forum, the FAO, the fragmentation of the institutional context has also made it more difficult to build a broad change coalition and sustain collective action throughout the entire reform process. These differences between context conditions, combined with similar actor constellations across cases, have allowed me to conduct a rigorous test of the explanatory power of my argument. In both empirical chapters, I have examined a number of observable implications of my argument, using novel qualitative data from document analysis and interviews as well as descriptive statistics.

The findings from chapter 5 and 6 lend support to my hypotheses. In copyright regulation, challengers were initially unable to achieve reform, which I trace to a narrow institutional

opportunity structure. The regulatory outcome, the 1982 *Model Provisions Concerning the Access by Handicapped Persons to the Works Protected by Copyright*, lacked depth and legal force, failing to change the regulatory status quo significantly. A second reform attempt, under more conducive institutional conditions, produced the 2013 *Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled*, introducing far-reaching limitations to international copyright law. Similarly, in plant variety protection, an initial reform attempt in a coordinated institutional context led only to an outcome of minor reform, the 1983 *International Undertaking on Plant Genetic Resources*. Again, a second reform attempt induced greater changes, the 2001 *International Treaty on Plant Genetic Resources for Food and Agriculture*. This outcome, however, lacked the legal bindingness of the *Print Treaty*, which I attribute to the difficulties of the challenger coalition in acting collectively in a highly differentiated institutional context.

7.1 Limitations

A number of caveats remain. I have developed the institutional opportunity approach as an analytical framework to explain the output dimension of regulatory politics. Consequently, it focuses only on part of the regulatory process, namely agenda setting, the negotiation phase, and to a limited extent implementation (see K. W. Abbott and Snidal 2009). It does not address monitoring and enforcement or the feedback loops from later stages of the regulatory process to new instances of agenda setting. This raises a number of follow-up questions. Raustiala and Victor (2004, 302) hypothesize that inconsistent international rules grant states greater leeway in the implementation of rules. Incompatible implementation patterns may in turn trigger process of regulatory change from the bottom up. This observation is highly compatible with recent historical institutionalist explanations of institutional change that focus on implementation (e.g. Hacker 2004; Mahoney and Thelen 2010).

Other limitations explicitly relate to the historical institutionalist foundation of the institutional opportunity approach. While historical institutionalism allows for an understanding of the independent causal effect of institutional complexity on processes of regulation, it is less parsimonious than realism and business power approaches. Historical institutionalist approaches to regulation, including the institutional opportunity approach, move down the ladder of generality and focus on developing and testing middle-range theories for subtypes of international economic governance (see Büthe and Mattli 2011; Farrell and Newman 2010). This risks the atomization of explanatory approaches. It also presents a twofold methodological and theoretical trade-off. First, while historical institutionalist approaches excel at making sense of the complex interaction among variables, they struggle with pre-

diction (Drezner 2010, 794–97). Second, while the examination of historical narratives allows for the identification of causal mechanisms, small numbers of cases make selection bias a concern (Steinmo 2008, 133–35).

The indeterminacy of historical institutionalism's microfoundations in general and my conceptualization of preferences in particular present another theoretical limitation. Constructivists are likely to object to some of my assumptions, as ideas in particular are undertheorized. I agree that there is much room left to explore the role of ideational factors in institutional change. However, this blind spot in the historical institutionalist literature will require more targeted theorizing efforts (see Blyth 2003; Hay 2008, 2011; Schmidt 2008, 2010). Similar issues arise with regard to the concept of power. I have contrasted powerful and weak actors, using a conventional understanding of power as a property of actors. Yet the analysis in this book indicates that power also resides in institutional structures. Actors who understand how to use a specific institutional context to their advantage may be able to exert influence, even if they are weaker in terms of material capabilities. How can we make sense of these different dimensions of power? This is something that historical institutionalist scholars need to address in a more systematic fashion (see Pierson 2015, 2016).

Finally, the empirical limitations of this study need to be considered. While the cases are carefully selected to reflect variation on the explanatory variable and cover a significant time period, the analysis presented here is limited to evidence from one governance area only. I have made a conscious choice to focus on cases in international intellectual property regulation to keep other factors constant. Yet to increase the external validity of the approach, it would be necessary to extend the analysis to cases from other fields of global regulatory governance, such as finance or trade. As I will discuss in the next section, this may require a reconsideration of some of the assumptions made.

The model developed here is bound to be incomplete and leave out certain aspects of the regulatory process. Despite these limitations, the arguments and evidence presented here represent a significant step forward in explaining weaker actor influence and understanding regime complexity. The institutional opportunity approach considers a wide range of actors, explicates context conditions, and identifies mechanisms through which challengers achieve regulatory change. This raises the question as to how far the arguments developed in this book travel.

7.2 Scope Conditions and the Potential for Generalization

The institutional opportunity approach constitutes a mid-level theory of regulatory change. As such, it applies to a more limited range of phenomena than the broader accounts of international regulation, such as realism or regulatory capture approaches. The idea is not to falsify existing theories but to point out gaps in their explanations and complement them with additional hypotheses. Under what conditions do the arguments of the institutional opportunity approach hold specifically? Three scope conditions apply.

The first scope condition pertains to the nature of the regulatory conflict. The arguments in this book apply to regulatory conflicts over matters that affect broader societal interests. While regulation is inherently political, as it always entails distributional implications for a number of groups (Mattli and Büthe 2003), some matters of regulation have noticeable consequences for society as a whole. This is an important distinction, as I expect matters of "public interest" to be subject to greater politicization.[240] Regulatory matters that concern the common good draw attention by a wider range of actors, as they potentially have an effect on every group in society, particularly if regulation is captured by special interests. This does not imply that all of these groups will mobilize, as the costs of regulatory capture by special interests may be too diffuse to provide an immediate incentive for collective action (Olson 1965). Yet challengers will have access to a wider range of potential allies than in cases of regulatory conflict where there is no social cost.

For example, a greater audience will be available to advocates of a ban on glyphosate, a potentially carcinogenic herbicide, than to opponents of the ISO 10110 standard for technical drawings for optical elements and systems, which has few if any implications beyond the optics and photonics industry.[241] Regulatory standards that could have an effect on, say, the environment, financial stability, public health, or the availability of knowledge and information, will be controversial among a greater number of groups than purely technical standards (Werle and Iversen 2006). Except in borderline cases where a new technical standard threatens the competitiveness of an entire sector or country and other social groups have an incentive to weigh in on the debate, the costs of switching to a different technical standard are highly concentrated on specific groups. Hence, in technical standard setting, the groups most affected by the proposed standard are expected to exert voice through the channels available to them but they should not be able to draw other actors into the conflict. The coalitional dynamics hypothesized by the institutional opportunity

[240] For a discussion of the term politicization, see Zürn, Binder, and Ecker-Erhardt (2012, 71).
[241] On this case, see Büthe and Mattli (2011, 163).

approach, however, depend on this kind of actor constellation and should thus only occur in regulatory matters that to some extent affect the common good.

How do we know whether a regulatory question has implications for the common good or not? The distinction is not always as clear-cut as the glyphosate example suggests. In fact, the concept of the common good itself is highly contested. Unsurprisingly, there is no minimum consensus on what constitutes an absolute normative standard of the public interest in the economic and political science literature (see Berry 1977, 6–10; Cochran 1974; Downs 1962; Goodin 1996; Sorauf 1957). In practice, groups often invoke the common good to promote their own parochial interests or try to discredit other groups by questioning their public interest-orientation. Diffuse interests in particular rely on legitimating narratives that define the parameters of the common good to advance their regulatory agendas (Trumbull 2012, 26–27). In other words, whether a specific regulatory matter is considered to affect the public interest is the result of processes of social construction that take place before and during regulatory conflicts. It depends inter alia on the interaction of institutionalized norms, strategic framing by challengers, and the political salience of an issue. Matters of financial stability, such as capital requirements for banks or hedge fund regulation, are cases in point. Only in the wake of the 2007-2008 crisis were reform advocates able to frame stringent financial regulation in terms of the public interest and achieve modest regulatory reforms (Clapp and Helleiner 2012; Kastner 2014; Woll 2013).

For these reasons, some scholars reject the utility of the concept of the public interest altogether. Others put greater analytical emphasis on strategic framing and how reform narratives resonate with the general public (Joachim 2003; Keck and Sikkink 1998). For the purpose of this book, I take a pragmatic approach and focus on regulatory matters where there is a broad consensus that they affect the public interest. I argue that framing and legitimating narratives need to relate to norms of the common good that are already encapsulated in existing rules. For cases where public opinion is hypothesized to play a significant role, it makes sense to pay greater attention to a broader range of ideational dynamics, however.[242]

The second scope condition pertains to the institutional context. The institutional opportunity approach applies to cases of regulatory conflict that take place in contexts of institutional complexity. I argue that competition among international institutions opens up opportunities for challengers to advance their reform agendas. In contexts with a focal institu-

[242] In any case, studies of regulatory reform will often benefit from approaches that incorporate institutionalist *and* ideational logics of explanation (Parsons 2007, 98–101; see also Weaver and Moschella 2017).

tion, challengers cannot select among fora and, consequently, have less room to explore alternatives to the regulatory status quo. Here, it makes more sense to adopt a more parsimonious analytical framework, such as Mattli and Woods' (2009a) approach, and focus on the properties of the respective focal regulatory institution instead to determine what factors enabled or prevented regulatory reform (see also Büthe and Mattli 2011, chap. 2). This is not to say that the institutional opportunity approach is entirely irrelevant in these cases, as it is often necessary to consider shifts in the broader institutional context of a regulatory conflict over an extended period. Conventional theories frequently disregard other institutions beyond the one they assume to be focal, which causes them to overlook dynamics that result from institutional interaction in the governance field. Similarly, there is a tendency in the literature on international economic governance to downplay the importance of process and oversimplify the role of institutional context, which the institutional opportunity approach seeks to remedy (for an example, see Drezner 2007, chap. 3). Taken together, however, these arguments will have the greatest explanatory power for regulatory conflicts that at some point involve a multitude of regulatory fora.

The third scope condition pertains to the mode of regulation. Do the arguments in this book apply to cases of public regulation only or also to cases of private self-regulation? Private regulatory initiatives are often relevant to the public interest. They are widely used in a number of issue areas, including but not limited to finance, the internet, and labor rights (see Cutler, Haufler, and Porter 1999a). However, private governance schemes, in many cases, display a lack of accessibility to important stakeholders and non-transparent rulemaking procedures, particularly if they are business-driven (K. W. Abbott and Snidal 2009, 59–60). Private governors, such as transnational corporations, are also significantly less accountable to the public than elected politicians are (Koenig-Archibugi 2004). Scholars have rightfully problematized the democratic deficit of standard setting in intergovernmental settings (Majone 1998) and the prevalence of power-based bargaining even in highly legalized international institutions, such as the WTO (Steinberg 2002). Yet I expect opportunities for challengers to be even more limited in private governance arrangements. Where states are unable or unwilling to provide governance, challengers are more dependent on the public to establish what can be considered socially acceptable behavior in the first place, as exemplified by the literature on NGO activism for environmental and labor standards (e.g. Bartley 2007). Consequently, cases of regulatory reform in private governance demand closer attention to strategic framing and other ideational dynamics than suggested by the institutional opportunity approach.

Private governance involves further complications. Particularly certification-based schemes are tightly coupled to mass markets. By extension, ordinary consumers play a more important role than in cases of regulatory governance that revolve around organized interests. The functioning of labels, such as Fair Trade, hinges primarily on the willingness of consumers to pay a premium for more stringently regulated products (Vogel 2005). At the same time, there are strong incentives for producers to free ride and create labels that undercut the prices of their high road competitors. The plethora of existing certificates, however, renders it difficult for consumers to make informed buying decisions (Büthe 2010a, 14–15). Given the low costs of institutional creation and the information asymmetries between consumers and producers, I expect a stronger pull towards institutional fragmentation in private governance. Consequently, outcomes of major reform would require different explanations than offered by the institutional opportunity approach. Private transnational governance also demands closer attention to the interaction not only among international level institutions but also between international and domestic level institutions than the institutional opportunity approach suggests (Bartley 2011; Büthe and Mattli 2011; Farrell and Newman 2015). The institutional opportunity approach associates itself with the broader institutionalist effort to explain phenomena of international economic governance, which Farrell and Newman (2014, 2016) have labelled the new interdependence approach, and points to similar explanatory factors and causal mechanisms. There may be room to explore its applicability to regulatory efforts that involve both public and private fora or hybrid governance arrangements (Knill and Lehmkuhl 2002). Having said this, the framework is not generally applicable to the subset of private transnational governance.

In sum, I have developed the institutional opportunity approach to explain cases of regulatory conflicts that involve a multiplicity of public regulatory fora and where broader societal interests are at stake. Under different scope conditions, regulatory politics operate according to different logics, and other theories of international regulation hold greater explanatory power. Within these limitations, however, the arguments developed in this book are applicable to a wide range of cases and can be tested. They contribute to a better understanding of regulatory conflicts in various issue areas of international economic governance, including but not limited to intellectual property rights, environmental and health standards, financial regulation, and labor rights. How do the findings of this book for debates beyond weaker actor influence?

7.3 Further Theoretical Implications

International economic regulation has been a hot topic in the International Political Economy literature since the early 2000s. Regime complexes have emerged as a research topic in the International Relations around the same time. The argument developed in this book draws on insights from debates in both disciplines. While it shares some of the tenets of these literatures, it also points out weaknesses.

This book has implications for how to think about actors in global economic governance. So far, materially weaker actors have not received much attention by the International Political Economy literature. This is understandable, as their influence is expected to be limited to deviant cases. Contributions, such as Kastner's (2017) study on civil society in financial regulation and this one, however, show that cases of weaker actor influence occur, if rarely, and are often all the more important. This exposes a more general issue in the existing literature. Conventional approaches to international economic regulation largely focus on one category of actors, such as powerful states (Drezner 2007), transnational corporations (Fuchs 2007), or national standard-setting bodies (Büthe and Mattli 2011). These approaches argue that, depending on the mode of rulemaking in a governance area, the interaction among actors from one of these categories determines regulatory outcomes. This book shows that a distinction between active rule-makers on the one side and passive rule-takers on the other can be misleading. Often enough, it may be expedient to consider a wider range of stakeholders and the coalitional dynamics among them. Sometimes, even seemingly uninterested bystanders can be pivotal to the resolution of a regulatory dispute, if one side of the conflict is able to mobilize this group of actors to become active on their behalf.

With regard to debates in International Relations, this book advances our understanding of the effects of varying forms of institutional complexity on international cooperation and outcomes of international bargaining. The literature on regime complexes demonstrates that we increasingly need to consider the ways in which international institutions interact in order to understand why states and other actors work together to achieve mutual benefits. However, the existing literature suffers from a unidimensional understanding of institutional complexity. Many contributions have raised concerns about the seemingly ever-increasing fragmentation of global governance, warning that this process of institutional proliferation may have self-defeating consequences and be harmful for weaker actors in particular (Benvenisti and Downs 2007; Drezner 2013). While it is certainly true that the number of international institutions has increased, this neglects that governance areas dis-

play highly different institutional contexts. Other contributions, in the functionalist tradition of neoliberal institutionalism, argue that competition and conflict among overlapping institutions induce a division of labor in the medium to long run, fortifying international cooperation instead (Faude 2015; Gehring and Faude 2014). This book suggests otherwise. It expands on the arguments of Acharya (2016) and shows that inter-institutional competition can indeed be beneficial to entrepreneurial actors, even if materially weak, and enable them to find creative solutions to regime conflict and advance their own aims.

I have developed the institutional opportunity approach to remedy the shortcomings of these unidimensional explanations. For scholars who seek to advance these arguments, the two-by-two matrix of institutional contexts developed in this book provides building blocks for a typology of regime complexes. Maybe the indicators I have identified can also be refined to allow for a large-N approach or the application of fuzzy set methods to the study of regime complexity. More importantly, in contrast to many contributions from the International Relations literature, my study reveals not only how regime complexity affects international cooperation but also provides an answer to the political economy question of who gets what. Students of International Political Economy may draw on these insights to study further cases of rulemaking in contexts of institutional complexity.

Empirically, this book has shed light on two little studied cases in international intellectual property regulation, an issue area that is largely left alone by political scientists.[243] The copyright case in particular has not been addressed from a political science perspective so far. Intellectual property rights should be higher on the agenda of political science and International Political Economy research. As I have argued throughout the book, they determine how knowledge is distributed within and across societies (Schwartz 2017). I have also shown that research into international intellectual property regulation—albeit legally complex and ripe with idiosyncrasies—yields insights that go beyond this issue area.

As a final note, I have attempted to treat these cases not just as configurations of variables to explain a larger phenomenon but also as something that is inherently relevant. This is something, I hope, this book shares with excellent studies on related topics, such as Newman and Farrell's (2019) contribution on privacy regulation and Mattli and Büthe's (2011) contribution on standard setting in global financial and product markets. With regard to a wider academic audience, this book should also engage and challenge scholars from disciplines, such as business, economics, and law, who are interested in global economic gov-

[243] Notable exceptions are of course Susan K. Sell and Jean-Frédéric Morin among others.

ernance or international intellectual property regulation and open up avenues for interdisciplinary approaches.

7.4 Real World Implications

Lastly, my study has implications for public policy and normative debates. With regard to international intellectual property regulation specifically, it highlights potential avenues for reform. Since the early 2000s, there have been a number of hard-fought battles between proponents of more stringent protection and an emergent access to knowledge movement on initiatives, including but not limited to the Stop Online Piracy Act and the Protect IP Act in the U.S., ACTA (McManis 2009; Yu 2011), intellectual property provisions in the TPP (Sell 2011), and copyright reform in the EU. Some of these initiatives have culminated in a ratcheting up of international intellectual property regulation, leading to an enclosure of knowledge at the expense of the public interest. In other cases, users have been able to forge coalitions and successfully opposed this ratcheting up. This book gives examples of where such coalitions have achieved even more, namely reform that enhances access to knowledge. The case studies show that solutions may effectively balance between private interests and the public good, increasing the availability of essential knowledge goods without prejudice to the interests of creators and innovators.

Beyond that, this book has implications for how to think about regime complexity from a practitioner's perspective. There is a recurring theme in the literature and public debates that the proliferation of international institutions and the overlap of governance activities are problematic per se, splintering the binding effect of international rules. I argue that researchers as well as policymakers should come to see institutional complexity not so much as a bug but as a feature of today's global governance. I agree with Fischer-Lescano and Teubner (2004) that the search for legal unity is in vain. However, regime complexity requires what Stokke and Oberthür (2011) have called interplay management and decision-makers should consider what these and other scholars have identified as good practices.[244] They should also understand that different forms of institutional complexity operate according to different logics. Some forms of institutional fragmentation may indeed be harmful for global governance. Institutional competition and conflicting rules, by contrast, may facilitate innovation. The concepts and indicators that I have developed for analytical purposes may serve as a starting point to better understand the risks and opportunities associated with different forms of regime complexity.

[244] See the contributions in Oberthür and Stokke (2011).

Of course, decision-makers have institutional complexity on their menu already. Francis Gurry (2005), the outgoing director general of WIPO, has alerted to the complexity of intellectual property rulemaking in the early 2000s already. In recent years, the EU Commission has addressed the proliferation of regional development banks and preferential trade agreements. In a number of talks, EU officials have cautioned against the fragmentation of global governance and advocated multilateralism as the way to go.[245] Paradoxically, the EU itself is the source of a significant number of bilateral trade agreements, potentially undercutting the authority of the WTO. Similarly, in the cases studied in this book, the established powers, including the EU, have attempted to shift rulemaking to the bilateral and plurilateral levels whereas emerging powers have focused on multilateral institutions. The outlook for global governance reform would be more positive if all actors were in fact as committed to multilateralism as they profess.

[245] Examples abound. See for instance a speech held by the former president of the European Commission Jose Manuel Durão Barroso (2014) at the European University Institute in 2010. See also a presentation by Marco Buti (2018) of the Directorate General for Economic and Financial Affairs given at Peking University in 2018.

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Selbstständigkeitserklärung [Declaration of Authorship]

Hiermit versichere ich, dass ich die vorliegende Arbeit selbständig angefertigt und keine anderen als die von mir angegebenen und bei wörtlichen Zitaten kenntlich gemachten Quellen und Hilfsmittel verwendet habe.

Berlin, 22. April 2020 Justus Dreyling