

Interdisciplinary Perspectives on International Law and International Relations

THE STATE OF THE ART

Edited by

JEFFREY L. DUNOFF

Temple University

MARK A. POLLACK

Temple University

 **CAMBRIDGE**
UNIVERSITY PRESS

Contents

<i>Contributors</i>	page ix
<i>Acknowledgments</i>	xv
PART I. INTRODUCTION: SETTING THE STAGE	
1 International Law and International Relations: Introducing an Interdisciplinary Dialogue Jeffrey L. Dunoff and Mark A. Pollack	3
2 Law, Legalization, and Politics: An Agenda for the Next Generation of IL/IR Scholars Kenneth W. Abbott and Duncan Snidal	33
PART II. THEORIZING INTERNATIONAL LAW	
3 Institutionalism and International Law Barbara Koremenos	59
4 Liberal Theories of International Law Andrew Moravcsik	83
5 Constructivism and International Law Jutta Brunnée and Stephen J. Toope	119
6 Wanted – Dead or Alive: Realism in International Law Richard H. Steinberg	146
PART III. MAKING INTERNATIONAL LAW	
7 Flexibility in International Agreements Laurence R. Helfer	175

CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town,
Singapore, São Paulo, Delhi, Mexico City

Cambridge University Press

32 Avenue of the Americas, New York, NY 10013-2473, USA

www.cambridge.org

Information on this title: www.cambridge.org/9781107684027

© Jeffrey L. Dunoff and Mark A. Pollack 2013

This publication is in copyright. Subject to statutory exception
and to the provisions of relevant collective licensing agreements,
no reproduction of any part may take place without the written
permission of Cambridge University Press.

First published 2013

Printed in the United States of America

A catalog record for this publication is available from the British Library.

Library of Congress Cataloging in Publication Data

Interdisciplinary Perspectives on International Law and International Relations : The State of the Art /
[edited by] Jeffrey L. Dunoff, Temple University, Mark A. Pollack, Temple University.
pages cm

Includes bibliographical references and index.

ISBN 978-1-107-02074-0 (hardback) – ISBN 978-1-107-68402-7 (paperback)

1. International law. 2. Effectiveness and validity of law. 3. International relations. I. Dunoff, Jeffrey
L., 1960– editor of compilation. II. Pollack, Mark A., 1966– editor of compilation.

KZ3410.15759 2013

341–dc23 2012020053

ISBN 978-1-107-02074-0 Hardback

ISBN 978-1-107-68402-7 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or
third-party Internet Web sites referred to in this publication and does not guarantee that any content on
such Web sites is, or will remain, accurate or appropriate.

- Stone Sweet, Alec (1999). "Judicialization and the Construction of Governance," *Comparative Political Studies*, Vol. 32, No. 2, pp. 147–84.
- (2000). *Governing with Judges: Constitutional Politics in Europe* (Oxford: Oxford University Press).
- (2002). "Constitutional Courts and Parliamentary Democracy," *West European Politics*, Vol. 25, No. 1, pp. 77–100.
- von Stein, Jana (2013). "The Engines of Compliance," in Jeffrey L. Dunoff and Mark A. Pollack (eds.), *Interdisciplinary Perspectives on International Law and International Relations: The State of the Art* (New York: Cambridge University Press), pp. 477–501.

The Design of Dispute Settlement Procedures in International Agreements

Barbara Koremenos and Timm Betz

What explains the inclusion of formal dispute settlement procedures in international agreements? Delegating any kind of decision-making comes at a significant sovereignty cost, as Abbott and Snidal (2000: 436) note. From this perspective, instances of delegation are puzzling. Some legal scholars, however, argue that international law becomes more effective the more "lawlike" it is. Helfer and Slaughter (1997: 283), for instance, regard international tribunals as an integral part of "a global community of law." From this perspective, the absence of dispute resolution mechanisms in some agreements is what begs an explanation.

Based on game theory insights, Koremenos (2007) argues that the inclusion of dispute settlement procedures in international agreements is a deliberate choice by governments, made to address specific cooperation problems. The implication is that international law is designed efficiently: dispute settlement procedures are likely to be incorporated into agreements if, but only if, they are needed to solve specific problems. Her data confirm this viewpoint.

Yet, some empirical observations potentially undermine this conclusion. Many formal dispute resolution mechanisms are rarely invoked in practice. This pattern is reinforced by the many agreements that couple formal dispute resolution mechanisms with explicit encouragements to settle informally through, for instance, "friendly" negotiations.¹ Additionally, many formal dispute settlement mechanisms contain options to reject settlements lawfully, thereby rendering the formal mechanisms noncompulsory. Finally, states may attach reservations to their agreements,

The authors are grateful for detailed comments from Jeff Dunoff and Mark Pollack. The material in this chapter is based on research supported by the National Science Foundation under Grant No. 0801581.

¹ In the following, this is what we refer to as "informal dispute resolution" – an explicit provision in the agreement encouraging informal modes of dispute resolution, such as friendly negotiations or diplomacy. Of course, this possibility always exists. However, not all agreements encourage it explicitly. In contrast, we define formal dispute settlement procedures as those engaging a third party in mediation, arbitration, and/or adjudication.

releasing themselves perhaps from the most onerous obligations from their perspective or, more to the point of this chapter, exempting them from compulsory dispute settlement procedures; the United States, in particular, makes active use of such reservations (Henkin 1995). Given these empirical observations, one could argue that dispute settlement mechanisms are, in reality, nothing more than a fig leaf. Although incorporated into agreements, their existence is undermined by reservations and restrictions. The agreements would thus be inefficient, and formal dispute settlement mechanisms ineffective.

This chapter argues that we need to distinguish carefully between the use of dispute settlement mechanisms and their effects. Even if they are rarely invoked, dispute settlement procedures facilitate cooperation. They screen states at the stage of treaty ratification, reducing the likelihood that disputes break out. And, by providing enforcement power, they constrain states once an agreement comes into force, again reducing the likelihood of disputes. Thus, two mechanisms are at work: one regarding the selection of participating states and one regarding the selection of defections. Together, they imply that the infrequent use of dispute settlement mechanisms may be a consequence of properly functioning, carefully designed agreements, not an indication of their failure.

We also counter arguments that informal settlements and reservations are imperiling the functioning of compulsory dispute settlement procedures. First, although we document that informal settlements are explicitly encouraged in the vast majority of agreements with formal procedures, we argue that such informal settlements also take place in the shadow of these more legalized mechanisms. By providing a credible outside option, the presence of formal dispute settlement procedures likely affects the outcome of informal settlements, just as it does in the domestic context (see Muthoo 2002). Second, we show that agreements with formal dispute settlement procedures are less likely to allow for reservations. There is little reason to be concerned that reservations undermine the purpose and functioning of dispute resolution mechanisms on a large scale. Still, how reservations affect the functioning of dispute settlement provisions is an empirical question that deserves more analysis.

The next section reviews some of the recent literature on the design of dispute resolution mechanisms. We then build on rational design (Koremenos, Lipson, and Snidal 2001) to derive conjectures about the design of dispute settlement mechanisms and test these empirically. Speaking to a long-standing debate in the literature, we present new results suggesting that highly legalized dispute settlement mechanisms are used for the solution of punishment problems, and perhaps less so for information provision. By contrast, the explicit encouragement of informal settlements as the least legalized form of dispute resolution is strongly associated with informational problems. We then address the effectiveness of dispute resolution mechanisms, even if they are invoked infrequently, and the role of reservations.

I. WHAT HAS BEEN DONE SO FAR?

Over the last decade, the role of dispute resolution mechanisms has received substantial attention in the literature. In a special issue of *International Organization*, Goldstein *et al.* highlight the delegation of “broad authority to a neutral entity for implementation of the agreed rules” (2000: 387) as one of three key dimensions of legalization in international agreements; notably, the authors argue that delegation often concerns the settlement of disputes about and interpretation of agreed-upon rules.

To date, states have negotiated numerous agreements that either delegate dispute resolution authority to a preexisting body or create their own authority for dispute resolution. Nonetheless, most of these agreements have received little if any scholarly attention. Rather, a few prominent agreements are the subject of extensive literatures, for example, the International Court of Justice (ICJ), the North American Free Trade Agreement, the European Court of Justice, and the dispute settlement mechanism of the General Agreement on Tariffs and Trade, which underwent substantial revisions in the transition to the World Trade Organization (WTO).

The literature on the WTO greatly advanced our understanding of many facets of international dispute settlements but is also emblematic of two shortcomings of the field. First, single agreements, and often only one or two very specific details of an agreement, feature prominently. Although providing a holistic picture of a single institution, the extent to which findings can be generalized is limited. Grando (2006), for instance, examines the allocation of the burden of proof in the WTO’s dispute settlement system and derives policy prescriptions from her analysis. Of course, there is much to be gained from paying close attention to such details, especially when done in a theoretically informed manner. An exemplary piece in this regard is Brutger’s (2011) analysis of how the participation of private parties affects the selection of complaints in the WTO and how this, in turn, helps explain the perceived dominance of resource-rich countries in the WTO’s dispute settlement procedures. Thus, a rather minor design feature – the possibility of private contributions to litigation costs – has far-reaching implications for the pattern of observed disputes.

At the same time, the literature would benefit from more systematic comparative research. Illustrative of the advantages of such an approach is the paper by Helfer and Slaughter (1997) on supranational adjudication. They distill a number of conditions that contribute to effective supranational adjudication and apply this inductively derived theory to explain other cases of adjudication as well. Helfer and Slaughter’s work is an impressive improvement with respect to large parts of the literature. It also underscores a substantial difference between the international law (IL) and international relations (IR) literatures. Although the former typically welcomes international adjudication and strives to promote its spread and effectiveness (for a critical discussion, see the introduction in Posner and Yoo [2005]), most political

scientists assume a more distanced position, assessing the effects and effectiveness of adjudication (e.g., Huth, Croco, and Appel 2011).

Second, most authors examine the implications of the WTO for its participants (Busch and Reinhardt 2003), make normative prescriptions (Barceló 2009), or remain largely descriptive (Charnovitz 2009). By contrast, few scholars attempt to explain systematically the design choices made by states (for exceptions, see J. Smith 2000; Rosendorff 2005; Betz 2011). This is the more surprising given that a large group of scholars seems dismayed over imbalances in the workings of the WTO dispute settlement system that are thought to disfavor small poor economies (Busch and Reinhardt 2003; Kim 2008) – although there is some evidence that, over time, countries may acquire the necessary expertise and infrastructure to participate effectively in the dispute settlement mechanism (Davis and Bermeo 2009).

This inattention to broader institutional design issues is found not only in the context of the WTO but also in the study of international agreements more generally. In particular, we know little about what affects the choice of the specific form of dispute settlement procedures. In the following, we address these points, examining what accounts for the choice and design of dispute settlement mechanisms in international agreements. In particular, the analysis is concerned not just with a few select, albeit important, cases, but generates general results, based on quantitative comparisons across a random sample of international agreements that features four distinct issue areas.

II. WHY DELEGATE, AND TO WHOM?

A. Two Ideal-Type Perspectives and a Puzzle

The extant literature offers two very different takes on the delegation of dispute resolution. At one end of the spectrum, traditional realists argue that states comply with international law only when it is in their “national interest” to do so (Krasner 1978) and that institutions “have minimal influence on state behavior” (Mearsheimer 1994: 7). A variant of this view is that international law does not change behavior because states enter into only those agreements that already align with their interests (Downs, Rocke, and Barsoom 1996). Consequently, it is irrelevant whether international agreements contain dispute resolution mechanisms. If this view is correct, one would expect to see the inclusion of dispute resolution mechanisms either in random patterns across agreements or not at all if the negotiation of dispute resolution mechanisms comes at any cost. Furthermore, since states’ interests are presumably so aligned, we would expect that dispute resolution mechanisms would be rarely if ever needed.

By contrast, some legal scholars argue that international law influences state behavior “because it is perceived largely as morally authoritative and legitimate” (Ginsburg and McAdams 2003: 1234). Brunnée and Toope (2011: 308), coming from

TABLE 15.1. Summary statistics – incidence and form of dispute resolution provisions

	Any dispute resolution (1)	Forms of dispute resolution				Total (6)
		Informal (2)	Mediation (3)	Adjudication (4)	Arbitration (5)	
Security	18 (38%)	18 (38%)	5 (11%)	1 (2%)	2 (4%)	47 (20%)
Economics	54 (52%)	52 (50%)	17 (17%)	42 (41%)	24 (23%)	103 (44%)
Environment	13 (30%)	10 (23%)	6 (14%)	8 (19%)	9 (21%)	43 (18%)
Human rights	27 (66%)	16 (39%)	8 (20%)	9 (22%)	20 (49%)	41 (18%)
TOTAL	112 (48%)	96 (41%)	36 (15%)	60 (26%)	55 (24%)	234 (100%)

These and all subsequent data are from the Continent of International Law, Koremenos (forthcoming).

a constructivist perspective, emphasize how not only a perception of legitimacy and legality must exist, but “that the obligatory effect of international law must be generated and maintained through practices that sustain legality over time.” Based on the premise from the legalization literature that “courts and tribunals represent a key dimension of legalization” (Keohane, Moravcsik, and Slaughter 2000: 457), one may thus conclude that the existence and usage of dispute resolution mechanisms contribute to a more lawlike character of international agreements, thereby enhancing their legitimacy and effectiveness. Thus, we would expect to see the inclusion of dispute resolution mechanisms in most, if not all, international agreements.

How well do these two ideal-type theories perform when put to the data? Table 15.1 shows descriptive statistics from the Continent of International Law (COIL) project, which features a random sample of 234 international agreements drawn from the United Nations Treaties Series (UNTS) database.² The agreements are drawn from four issue areas following UNTS definitions: security, environment, economics, and human rights.³

Following Koremenos (2007), we identify four different types of dispute resolution mechanisms. *Informal mechanisms* refer to diplomacy, friendly negotiations, or market-based mechanisms, such as side payments. Notably, informal mechanisms do

² For a more detailed description of COIL, see Koremenos (forthcoming).

³ This is not to say that other typologies are not important. In fact, the COIL dataset codes for a wealth of other attributes as well – e.g., whether an agreement prescribes, proscribes, or authorizes behavior; whether it is thematic or regional; or whose behavior it principally governs. The randomization, however, was undertaken conditional on these four issue areas. This decision was in part motivated by the extant literature, which typically compares agreements within specific issue areas, as in Mitchell’s (2002–11) database of International Environmental Agreements or the Alliance Treaty Obligations and Provisions data set of Leeds *et al.* (2002). In part, the decision was also motivated by COIL’s theoretical premise that issue areas are comparable once one looks at the set of underlying cooperation problems that brought states to the negotiating table.

not involve any actors other than the affected parties in the dispute. Moreover, even though states always have the option to settle informally, many agreements explicitly suggest diplomacy and friendly negotiations to be used as a first means for resolving disputes. *Mediation*, the second form of dispute resolution, is more formal. Importantly, mediation involves a neutral third party, but it is nonbinding – the mediator is supposed to assist the disputing parties in finding an agreeable solution, but does not issue a formal ruling. This is different from *arbitration*, the third form of dispute resolution, in which the disputants select a third party for the resolution of the dispute. This arbitrator may issue binding statements or simply recommendations, depending on the provisions in the agreement; however, the arbitrator is supposed to solve the dispute (and not, like a mediator, only help the disputants reconcile their views). The fourth, and final, form of dispute resolution considered is *adjudication*. Here, the agreement either establishes a court or delegates to a preexisting one, and the specified court is authorized to issue a ruling, which may (but need not) be binding.⁴

Table 15.1 presents the incidence of various dispute resolution mechanisms, both for the entire sample and across issue areas. As is evident from the table, neither theory discussed above can adequately explain the data. Given that the negotiation of dispute resolution mechanisms is costly and lengthy (see Alter [2003], on difficult WTO negotiations), realists would predict the absence of dispute resolution mechanisms. Yet, almost half of the agreements in the sample, 48 percent, explicitly mention some form of dispute resolution, and 37 percent include a provision relating to one of the formal mechanisms (mediation, arbitration, or adjudication). On the other hand, not each and every agreement is made more legalized through the inclusion of dispute settlement mechanisms. Finally, it is worth noting that agreements may provide for more than one form of dispute settlement. In particular, 82 percent of the agreements with formal procedures encourage informal settlements as well.

Table 15.1 additionally reveals substantial variation across issue areas, unexplained by these theories. Agreements concerned with economic issues, for example, are almost twice as likely to explicitly encourage the informal settlement of disputes as agreements addressing environmental issues. Another notable result is that human rights agreements rely much more often on adjudication than do agreements in any other issue area. This variation, both across issue areas and across different forms of dispute resolution, begs for an explanation.

B. *The Perspective of Rational Design*

Rational design, as introduced in Koremenos *et al.* (2001) and further developed in the COIL project (Koremenos, forthcoming), provides a theory to explain such

⁴ The standard legal taxonomy of dispute resolution slices the world up slightly differently. See, e.g., United Nations Charter, Article 33 (listing negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies, or other peaceful means of settlement).

variation across agreements. The theoretical premise is that states try to solve recurrent cooperation problems through international institutions, usually manifested in international law. It is these cooperation problems that drive the design of international agreements. With respect to dispute resolution mechanisms, four cooperation problems are especially relevant.⁵

Enforcement problems are present whenever parties to an agreement have an incentive to defect from cooperation. The most prominent example of such an enforcement problem is the prisoners' dilemma. Even if mutual cooperation makes everyone better off compared to mutual noncooperation, some actors may prefer to renege because they can do better individually by cheating. States may try to address underlying enforcement problems through dispute resolution mechanisms. For instance, by explicitly identifying violators (and violations), they incur reputational costs. By authorizing punishments, sometimes collectively, punishments become more credible and thereby more effective. Collective punishments can be especially difficult to achieve, and Thompson (2009) aptly identifies a sanctioners' dilemma that can be alleviated through international institutions.

States are also more likely to include dispute resolution mechanisms into their agreements when one or more of them face a domestic *commitment problem*. Commitment problems arise if an actor's current optimal plan for the future will no longer be optimal once that future arrives and the actor has a chance to reoptimize. Thus, unless the actor has a device to tie its hands to the current plan, the plan is inconsistent over time (therefore, commitment problems are also labeled *time-inconsistency problems*). A variant of such commitment problems often arises in volatile and polarized political systems, where a government's preferences may change dramatically over time. It is important to distinguish commitment problems from enforcement problems, where an actor's *current* optimal plan entails a defection, and no reoptimization or preference change is involved. Moreover, enforcement problems can be alleviated by the existence of future periods, whereas commitment problems exist because of the future. By rendering agreements more legalized, dispute resolution provisions offer a device to solve commitment problems. As Goldstein *et al.* (2000: 393) argue, "Governments and domestic groups may also deliberately employ international legalization as a means to bind themselves or their successors in the future. In other words, international legalization may have the aim of imposing constraints on domestic political behavior." In addition, dispute resolution mechanisms provide recourse for other actors to punish a government for deviations from its announced plans, altering the incentive structure faced by governments.

Third, *uncertainty about the state of the world* refers to uncertainty regarding the consequences of cooperation. States may try to solve a particular problem but be unsure about the future consequences of their own actions, the actions of other states, and/or the actions of international institutions – including the institutions

⁵ These cooperation problems are elaborated in Koremenos *et al.* (2001).

they create. Such uncertainty may arise because states are unsure about what the world will look like in the future, because they lack the technical expertise to predict the consequences of actions, or because they are unsure about how the agreement will play out. Put differently, uncertainty about the state of the world implies that the future benefits (and costs) of cooperation are not easily predicted, and hence a dispute could easily break out, attributable to an unexpected shift in the distribution of benefits. Although flexibility measures can facilitate cooperation under such circumstances (Koremenos 2005; Kucik and Reinhardt 2008; Helfer 2013), dispute resolution provisions may prove valuable as well.⁶

The fourth relevant cooperation problem is *uncertainty about behavior*. If a party to an agreement is unsure whether another party is following through on its obligations, it may stop cooperating simply because it fears being disadvantaged by maintaining cooperation. Thus, uncertainty about behavior may trigger an unwarranted, and indeed unwanted, breakdown of cooperation – and, in turn, discourage cooperation in the first place. Dispute resolution may address such factual uncertainty in that it provides legalized ways to handle disputes, typically through a formalized procedure that collects and disseminates information. This resonates well with standard institutionalist arguments about the role of international agreements in information provision (Keohane 1984).

It might be helpful to emphasize the difference between the two kinds of uncertainties introduced above. Uncertainty about the state of the world can bring about changes in bargaining power and/or the relative gains from cooperation, making a defection more attractive to one side. Being able to prevent defections is then particularly valuable and not solved by a simple exchange of information. Uncertainty about behavior allows states to take advantage of an information asymmetry and to defect without the other side recognizing (or without the other side recognizing early enough). It is this informational advantage that encourages defections, and it is more easily resolved through a simple exchange of information.

Moreover, uncertainty about behavior as an underlying cooperation problem is different from legal uncertainty, which refers to difficulties in the interpretation and application of rules. Naturally, dispute settlement mechanisms are relevant for legal uncertainty as well. This follows closely the managerial school of compliance (A. Chayes and A. H. Chayes 1993), according to which international institutions play a vital role in the interpretation of ambiguous rules. Similarly, Ginsburg and McAdams (2003) consider how noisy signals and rule ambiguity give rise to violations of international agreements, which then are resolved in legalized dispute settlement procedures. Notably, these authors explicitly consider dispute settlement

⁶ Indeed, dispute resolution mechanisms can be considered a form of centralization that increases flexibility (Rosendorff 2005; Betz 2011), a view that contrasts with those of many legal and political science scholars that dispute resolution mechanisms reduce flexibility by constraining state actors (Abbott and Snidal 2000; Brewster 2006; Guzman and Meyer 2010).

mechanisms without any punishment power and show how they work effectively in the presence of informational problems. Hence, we expect that ambiguous rules are associated with the presence of dispute settlement mechanisms as well.

To summarize, states try to solve two categories of cooperation problems through dispute resolution mechanisms. First, problems requiring punishment or enforcement power, which arise in the presence of enforcement problems, commitment problems, and uncertainty about the state of the world. By providing enforcement power, material and reputational, dispute resolution mechanisms alleviate these cooperation problems. The second category comprises informational problems, which arise in the presence of uncertainty about behavior, as well as if agreements contain ambiguous rules. By providing information and legalized ways to handle such disputes, dispute resolution mechanisms address this category of cooperation problems.

We can refine these predictions further. If states include dispute settlement mechanisms to solve punishment problems, we would see enforcement problems, commitment problems, and uncertainty about the state of the world to be the driving forces behind the inclusion of dispute resolution provisions in international agreements; this would be so especially for the most legalized mechanisms, given the need to provide the added power of punishment. Hence, arbitration and adjudication in particular should be associated with punishment problems.

If dispute resolution mechanisms solve informational problems, that is, non-compliance due to ambiguous language and noisy signals about the behavior of other states, we would expect uncertainty about behavior and ambiguous rules to affect the inclusion of dispute resolution provisions. Moreover, resolving uncertainty about behavior mainly requires consultations and deliberations, rather than adjudication. Hence, the encouragement of informal settlements and, possibly, mediation is an appropriate design choice. By contrast, in the presence of ambiguous rules, we should see international tribunals for arbitrated or adjudicated rule interpretation.

An empirical analysis of the relationship between rule ambiguity and arbitrated or adjudicated dispute settlement mechanisms, however, is not straightforward. The reason is that both the formulation of ambiguous rules and the inclusion of dispute resolution procedures are simultaneously determined choices made by governments. Standard regression techniques therefore yield invalid inferences about the relationship between these two variables. For this reason, we omit ambiguous rules from the empirical models that follow;⁷ we instead refer to Koremenos (2011), who analyzes the simultaneous choice of rule precision and dispute resolution mechanisms in more depth, with evidence in favor of an inverse relationship between these two

⁷ Instrumental variable techniques provide an alternative way to address such endogeneity concerns. However, the two standard procedures to estimate such endogenous probit models are hugely problematic in a wide range of circumstances (Betz 2010).

TABLE 15.2. *Probit analysis – incidence and form of dispute resolution provisions*

	Any	Formal	Arb./Adj.	External
	(1)	(2)	(3)	(4)
Enforcement	0.871** (0.351)	1.011*** (0.073)	1.170*** (0.228)	1.124*** (0.200)
Commitment	1.697*** (0.526)	1.752** (0.806)	1.783** (0.882)	1.577* (0.855)
Uncertainty world	-0.206 (0.580)	0.231 (0.408)	0.248 (0.483)	0.471 (0.361)
Uncertainty behavior	0.430*** (0.115)	0.299 (0.250)	0.062 (0.352)	-0.186 (0.453)
U.S. involvement	-0.394* (0.209)	-0.232 (0.260)	-0.151 (0.254)	-0.085 (0.255)
Ln (number)	0.176** (0.085)	0.382*** (0.050)	0.386*** (0.043)	0.353*** (0.046)
N	234	234	234	234

Note: Issue area dummies omitted. Standard errors in parentheses, heteroscedasticity-robust, clustered on issue areas.

Significance: *** at 1% level; ** at 5% level; * at 10% level.

design elements. Her finding about the role of legal uncertainty is in line with Ginsburg and McAdams's (2003) theory of dispute resolution mechanisms and supports our conjectures above with respect to ambiguous rules.

III. A LOOK AT THE DATA

In this section, we examine the predictions articulated above in a random sample of international agreements. We lean on Koremenos (2007), but use a larger dataset and extend the analysis in several respects. Most important, given the smaller dataset at the time, Koremenos collapsed all four of the above cooperation problems into one variable, labeled *complex cooperation problem*; instead, we evaluate the effects of each cooperation problem *individually*. Parsing out the effects of punishment problems and informational problems allows us to draw some conclusions about the character of dispute resolution mechanisms. Of course, the two explanations need not be exclusive.

Tables 15.2 and 15.3 provide the results from four probit regressions. All data come from the COIL dataset. As in Table 15.1, the forms of dispute resolution become stronger in terms of delegation and legalization when moving from the first to the third column. The first column captures whether there is any kind of dispute resolution provision in the agreement. This category includes informal settlements, which are excluded from the second column, leaving mediation, arbitration, and adjudication. The third column in addition excludes mediation as a form of dispute settlement, counting only adjudication and arbitration, which are the two most legalized mechanisms. The fourth column offers an alternative dimension of variation in dispute settlement design: whether dispute settlements are delegated internally

TABLE 15.3. *Predicted probabilities and average marginal effects*

	Any	Formal	Arb./Adj.	External
	(1)	(2)	(3)	(4)
Pr(dispute resolution)				
-baseline	26.2%	6.3%	4.4%	3.5%
-enforcement	58.6%	28.4%	26.8%	22.2%
-commitment	84.8%	54.8%	47.0%	36.5%
-uncertainty world	20.0%	9.6%	7.1%	8.5%
-uncertainty behavior	41.5%	10.7%	5.0%	2.3%
-ln(number)	30.2%	10.1%	7.3%	5.6%
Marginal Effect				
-enforcement	32.4pp	22.1pp	22.4pp	18.7pp
-commitment	58.6pp	48.5pp	42.6pp	33.0pp
-uncertainty world	-6.2pp	3.3pp	2.7pp	5.0pp
-uncertainty behavior	15.3pp	4.4pp	0.6pp	-1.2pp
-ln(number)	4.1pp	3.8pp	2.9pp	2.1pp

Note: Baseline is a bilateral agreement without U.S. involvement and without any of the cooperation problems.

Predicted probabilities and average marginal effects (percentage points) calculated separately for each issue area and then averaged, with weights according to relative frequency of each issue area. For ln(number), marginal effect is for change from an agreement with two participants to an agreement with four participants, which is roughly the sample average.

or externally. With internal delegation, a body composed of or appointed by the member states to an agreement is involved in the dispute settlement. For instance, suppose two states try to resolve a dispute and jointly appoint a judge to serve as arbitrator. In the data, this is coded as internal delegation. By contrast, suppose the dispute is referred to the ICJ. This would be coded as external delegation, in which a third party outside the agreement is involved in the dispute settlement. Aside from international tribunals, this function could be assumed by a third state or a nongovernmental organization. External delegation, especially when it comes with compulsory jurisdiction, does not necessarily imply more legalization, but it implies a relatively larger loss of state autonomy.

A first set of explanatory variables is dictated by the conjectures derived above and includes variables that capture punishment problems (enforcement problem, commitment problem, uncertainty about the state of the world) and informational problems (uncertainty about behavior). The cooperation problems are coded as 1 whenever they are found to be present to a high degree in an international agreement.⁸

The regressions include several control variables. Based on transaction cost arguments, we expect dispute resolution provisions to be more likely as the number of

⁸ See Koremenos (2005, 2007) for an explanation of the binary coding of cooperation problems.

original participants increases.⁹ The number variable is log-transformed in order to capture the effects of percentage increases rather than absolute increases. Second, a superpower dummy is included, coded as 1 whenever the United States is a signatory to an agreement. Partly based on realist accounts, the expectation is that such agreements are less likely to include dispute resolution provisions because the United States, which has the most to lose from international constraints, does not want to be bound by international law in unpredictable ways (Koh 1997: 2615ff.; see also Brewster 2006, with an argument based in domestic politics). Finally, issue area dummies are included (not reported in the table).¹⁰ Table 15.2 presents coefficient estimates and standard errors for the probit regressions. Since probit coefficients are hard to interpret directly, Table 15.3 reports marginal effects. The marginal effects were calculated for each issue separately, then averaged across issue areas to obtain (weighted) average marginal effects.

Two results stand out. First, enforcement and commitment problems always increase the probability that an agreement includes a dispute resolution mechanism. For instance, the probability that an agreement arranges for either adjudication or arbitration increases more than fivefold in the presence of enforcement problems; it increases by a factor of ten in the presence of commitment problems. These effects are still substantial, but less pronounced, when informal mechanisms are considered, as column 1 in Table 15.3 shows. This is much in line with theoretical expectations. Commitment and enforcement problems are particularly severe issues, and hence call for legalized and formal procedures; informal mechanisms and mediation are insufficient to address these problems.

By contrast, for the third variable in the category of punishment problems, uncertainty about the state of the world, the results are much less supportive. The marginal effects are relatively small, even negative for informal mechanisms, and never statistically significantly different from 0 at any conventional level. However, even for this variable, the effects increase in size and significance as more legalized and externally delegated mechanisms are considered.¹¹ One explanation for this result might be that uncertainty about the state of the world is addressed more effectively by other design elements – escape clauses (Kucik and Reinhardt 2008) or limited duration clauses (Koremenos 2005).

The second main result concerns the variable capturing factual uncertainty, uncertainty about behavior. Problems arising from uncertainty about behavior often can be resolved through the exchange of information and hence do not require

⁹ This follows in part from the rational design conjecture; centralization increases with Number (Koremenos *et al.* 2001).

¹⁰ Standard errors are heteroscedasticity-robust and clustered on issue areas.

¹¹ One may suspect that the insignificance of the variables capturing uncertainties is due to collinearity among the variables in the regression. This, however, is not the case – none of the bivariate correlation coefficients exceeds a level of 0.32; similarly, combining variables into dummies or leaving out some of them does not increase the precision of the coefficient estimates.

formalized dispute procedures or court rulings. Thus, it was expected that the effect should be weakest for the more legalized mechanisms. This expectation is consistent with the data – the coefficient is positive and statistically significant at the 1 percent level in the first column of Table 15.5, and the marginal effect is substantively large: an agreement characterized by uncertainty about behavior is about 58 percent more likely to include a dispute resolution provision than is an agreement without such an underlying cooperation problem. The coefficient decreases in size and statistical significance once informal procedures are excluded from the dependent variable. Looking at arbitration and adjudication only, the marginal effect is negligible and statistically insignificant. For external delegation, the coefficient even turns negative and is estimated very imprecisely.

Surprising from the perspective of power politics is that U.S. involvement has a statistically significant effect only when informal procedures are considered as well; the effect weakens substantially in size and significance as dispute resolution procedures become more legalized. By our previous arguments, we would have expected the reverse; additional results below may provide an explanation, in that the United States tends to attach reservations more often than other states, and hence might be exempted from binding settlement mechanisms. The number of signatories has the expected sign and is always statistically significant; the more signatories an agreement has, the more likely is the inclusion of a dispute resolution mechanism. Moreover, the effect is strongest for more formalized (i.e., centralized) procedures, which is not surprising, given the costs of negotiating and implementing them.

On the most general level, our findings suggest that dispute resolution mechanisms assume very different tasks and that these tasks are dictated by the underlying cooperation problems. First, dispute settlement mechanisms help to resolve punishment problems by authorizing and coordinating punishments and by identifying violators explicitly. Punishment problems arise chiefly out of enforcement and commitment problems, which create incentives to cheat in the absence of effective punishments. Effective punishments are best achieved when dispute settlement mechanisms are legalized and centralized and when they are independent of direct state influence. The second purpose served by dispute settlement mechanisms is information provision. Since information provision does not require highly legalized, powerful, or centralized mechanisms, the effect is strongest for informal procedures, a perspective supported by the strong association between uncertainty about behavior and informal dispute settlement procedures, but the absence of such a relationship for arbitration and adjudication.

IV. LOOPHOLES IN AGREEMENTS . . . AND IN THEORIES?

The previous section provided strong support for conjectures based on the rational design framework. Still, two caveats need to be addressed. First, some dispute resolution provisions are nonbinding, and others appear limited, given that states often

TABLE 15.4. *Explicit encouragement to settle disputes informally*

	Mediation	Arbitration	Adjudication	External
	(1)	(2)	(3)	(4)
Yes	32 (89%)	57 (95%)	41 (75%)	61 (82%)
No	4 (11%)	3 (5%)	14 (25%)	13 (18%)
N	36	60	55	74

Note: Percentages in parentheses conditional on Form of Dispute Resolution. For example, 89% of agreements with mediation allow for informal settlements. All differences are statistically significant at $p = 0.000$.

add reservations to their agreements to the effect that they must give permission before any instance of dispute resolution delegation occurs. Does such allowance for “loopholes” restrict the functioning of dispute settlement mechanisms and, in essence, render them meaningless design elements? This section will start to explore this question and point out the need for further research along these lines. Second, dispute resolution mechanisms may not be used very frequently in practice. Yet, as we argue, this does not mean that dispute settlement mechanisms are useless or ineffective; effective dispute settlement mechanisms generate selection effects and cast a “shadow of the law,” both of which have powerful effects on state behavior and, in particular, imply that the dispute settlement mechanisms need not be invoked to be effective.

A. Restrictions and Reservations

Formal dispute settlement mechanisms impose severe restrictions on state sovereignty (Abbott and Snidal 2000: 436). States may try to relax these constraints through two means. Formal dispute settlement mechanisms may be explicitly noncompulsory, allowing for outside settlements; similarly, they may allow for the lawful rejection of settlements and appeals (i.e., the mechanisms are nonbinding).¹² Alternatively, the parties to an agreement may attach reservations at the time of signature, thus gaining an exemption from the treaty provisions pertaining to the settlement of disputes.

Descriptive statistics on design elements encouraging informal dispute resolution are displayed in Table 15.4. The overwhelming majority of agreements with formal settlements explicitly encourage the informal settlement of disputes. Although mechanisms stipulating adjudication and external delegation allow for outside

¹² One could argue that no international ruling is ever binding, so the term *nonbinding* is hardly as meaningful in the international law setting as in the domestic setting; but see Alter (2013) for an argument why the distinction between international and national law may not be that important on this dimension.

TABLE 15.5. *Possibility to reject settlements lawfully*

	Arbitration	Adjudication	External
	(2)	(3)	(4)
Yes	7 (12%)	13 (24%)	15 (20%)
No	53 (88%)	42 (76%)	59 (80%)
<i>p-value</i>	0.082	0.000	0.000
N	60	55	74

Note: Percentages in parentheses conditional on Form of Dispute Resolution. For example, 12% of agreements with arbitration allow for the lawful rejection of settlements.

settlements less often, the pattern is impressive – very few agreements rule out the informal settlement of disputes in the shadow of formalized procedures. The question, of course, is how often and under what conditions states take advantage of this opportunity, an issue certainly warranting further research.

Table 15.5 provides descriptive statistics on the possibility of rejecting settlements lawfully. Here, the pattern is reversed. The majority of agreements do not provide for this possibility; the percentage increases for adjudication and external delegation, but does not go beyond 25 percent for adjudicated mechanisms. Thus, it might be the binding, and therefore less calculable, character of formal dispute settlements that drives states into using informal procedures – but it may as well be the reduced cost, confidentiality, and expedited procedure that informal settlements provide, compared to the highly legalized and lengthy procedures in adjudicated and externally delegated mechanisms. Detailed case studies would be needed to obtain further insights into these questions.

The use of reservations is documented in Table 15.6. Almost all agreements allow for some kind of reservation – that is, reservations are not explicitly prohibited in the majority of agreements. However, the *form* of the specific dispute resolution provision makes hardly any difference with respect to whether reservations are permissible; the differences are hardly significant. Importantly, however, a difference exists among agreements that include dispute resolution provisions and those that do not: among agreements with any form of dispute resolution, 10 percent explicitly rule out reservations, whereas this figure is at only 3 percent for agreements without any form of dispute resolution; this difference is statistically significant with a *p-value* of 0.029. That agreements with dispute resolution provisions are *more likely* to rule out the use of reservations than are agreements without dispute resolution procedures suggest that states actively discourage the use of reservations that might exempt them from dispute settlements. This conjecture is supported by the very sparse use that states make of reservations, as the third line of Table 15.6

TABLE 15.6. Possibility to attach reservations and agreements with at least one reservation attached at time of entry into force

	Mediation	Arbitration	Adjudication	External
	(1)	(2)	(3)	(4)
<i>Not prohibited</i>	30 (83%)	56 (93%)	49 (89%)	69 (93%)
<i>p-value</i>	0.007	0.438	0.056	0.394
<i>Attached</i>	4 (11%)	5 (8%)	11 (20%)	10 (14%)
<i>p-value</i>	0.331	0.556	0.001	0.039
<i>N</i>	36	60	55	74

Note: Percentages in parentheses conditional on Form of Dispute Resolution. For example, 83% of agreements with mediation allow for reservations to be made; 11% of agreements with mediation have at least one reservation attached.

illustrates.¹³ Only one-fifth of agreements with adjudication have any reservations attached (whether concerning substantive provisions or the dispute resolution procedure); thus, there is little reason to be worried that states circumvent formally established dispute settlement procedures by exempting themselves a priori through the use of reservations on a large scale. Likewise, it is an empirical question whether states that attached reservations to their participation in dispute settlement procedures indeed invoke these, or whether they decide to participate despite their reservations, which would further weaken the impact of reservations on the functioning of dispute settlement procedures. Koremenos (book manuscript) will examine these questions regarding reservations in more detail. Notwithstanding, the results showcased here suggest that the design of dispute settlement procedures is not undermined by the use of reservations.

Most significant for this chapter, a closer look at the agreements in the COIL sample reveals that only ten agreements have reservations attached that are concerned with dispute resolution; nine of these agreements fall under the issue area of human rights, and one is concerned with the financing of terrorism.¹⁴

Moreover, reservations need not be a state's final word. A number of states have withdrawn their respective reservations, mirroring a move toward greater acceptance of legalized dispute settlement mechanisms. The American Convention on Human Rights provides an example, illustrating the power of soft, nonbinding law, especially when viewed in its relationship to hard law, much in line with the argument made by Shaffer and Pollack (2010).¹⁵ The Convention delegates authority to both the Inter-American Commission on Human Rights and the Inter-American Court of Human Rights. The Court is able to issue-binding rulings on contentious cases and

¹³ We consider only reservations that were attached to an agreement at the time it entered into force.

¹⁴ A table displaying data on reservations in all agreements in the COIL sample is available on the COIL website at <http://www.isr.umich.edu/cps/coil/>.

¹⁵ The discussion of the American Convention on Human Rights relies heavily on Beck (2011).

also has the authority to submit advisory opinions (i.e., nonbinding statements). In 1982, the Commission urged Guatemala to suspend an extension of the death penalty to certain crimes despite a reservation Guatemala made allowing the practice. The Commission then referred the matter to the Court. Although Guatemala did not recognize the jurisdiction of the Convention's Court in this matter, in response to the request by the Commission, the Court concluded that it was entitled to issue a parallel advisory opinion, which sided with the Commission. As a result of this increased pressure, Guatemala's government eventually ceased the death penalty. In 1986, Guatemala withdrew its reservation, and, in 1987, finally acknowledged the Court's contentious jurisdiction. In essence, the nonbinding advisory opinion exerted pressure on the Guatemalan government that was arguably just as strong as that exerted by a binding ruling. Therefore, even though Guatemala did not fall under the jurisdiction of the Court, a less binding dispute settlement mechanism exerted sufficiently strong pressure on the government to change its behavior.

B. Effectiveness without Usage

Although there is little evidence that reservations are frequently used by states to bypass dispute settlement procedures, as Table 15.6 indicates, it could be argued that formal mechanisms are not used with great regularity, outside some presumed exceptional cases like the WTO. Additionally, Table 15.4 suggests that informal procedures might be used frequently instead of the institutionalized mechanisms. This raises the question of whether "practice follows design" – are dispute settlement procedures used in practice and not simply theoretical constructs?

It would be a fallacy to infer from the nonuse of dispute settlement procedures that they are inconsequential, as some realist arguments would imply. Thus, while we and realists make similar predictions about the infrequent use of formal dispute settlement procedures, our explanations contrast starkly.¹⁶ In particular, we contend that making the leap from unused to ineffective settlement procedures overlooks the strategic interaction among and anticipative behavior of states. In fact, infrequent recourse to dispute settlement procedures may just as well indicate the effectiveness of this institutional design choice.

Two mechanisms explain such an inverse relationship between the use of dispute settlement procedures and their effectiveness. The first mechanism relies on the screening power of treaties, the second relies on their constraining power. Notably, each of these mechanisms is linked directly to distinct cooperation problems, enforcement problems, and commitment problems, respectively. Thus, the following discussion directly contributes to the debate whether international treaties constrain or screen (Simmons 2000; von Stein 2005) by identifying conditions under

¹⁶ Moreover, even though the prediction with respect to usage is the same, the prediction with respect to design differs, and we provided ample evidence in favor of our argument in the previous sections.

which treaties will exert constraining or screening functions. Finally, we discuss the influence of the shadow of the law on promoting informal settlement, thereby precluding the formal use of dispute settlement procedures.

1. Screening to Solve Underlying Enforcement Problems

First, highly legalized agreement designs may effectively restrict membership through a screening mechanism and thereby limit the potential for enforcement problems to arise. Formalized dispute settlement procedures, especially when coupled with strong enforcement mechanisms, deter dishonest signatories: those that do want to join an agreement, but do not intend to follow through on their obligations (Simmons [2009] provides an excellent discussion of this issue). For instance, in the Chemical Weapons Convention (CWC), intrusive inspections, harsh enforcement mechanisms (such as powerful sanctions and potential referral to the United Nations Security Council), and a highly legalized dispute settlement mechanism allowing for referral to the International Court of Justice, discouraged insincere ratifications. Consequently, compliance with the treaty remained on a very high level, and the few violations were concerned with rather technical details.¹⁷

The argument made so far, of course, is simply a restatement of Downs, Roche, and Barsoom's (1996) argument that states self-select into those agreements that they deem to be in their interest anyway – as they put it, “most treaties require states to make only modest departures from what they would have done in the absence of an agreement” (1996: 380). Yet, this does not imply that dispute resolution mechanisms are ineffective. Dispute resolution mechanisms may be effective precisely because they are rarely used, given their screening function. Provided that dispute resolution mechanisms impose some additional cost on violators, they can help reduce the enforcement problem to a tolerable level for a still relatively broad group of states, which then benefit from cooperation. In addition, because disputes are expected to arise less often, cooperation becomes more durable. Cooperation is in danger of breaking down as soon as any party to an agreement reneges on its commitments. By restricting the pool of signatories to signatories who have similar prisoners' dilemma-like payoffs, who expect and who are expected to comply given that mutual cooperation is superior to mutual defection, dispute resolution mechanisms contribute to more stable (and, potentially, deeper) forms of cooperation.¹⁸

¹⁷ In the case of the CWC, a case can be made that insincere ratifiers were screened out primarily by the strong inspection and sanctioning mechanisms rather than by the existence of the dispute settlement mechanism. However, the point remains that the agreement was designed such that only sincere ratifiers were willing to enter it and, as a consequence, there has been little need to invoke the dispute settlement mechanism.

¹⁸ Put differently, states (or their leaders) who have very short shadows of the future, and thus for whom the incentive to defect is higher than that of the average state, are either screened out given the potential punishment or have their payoffs changed by the threat of punishment. In either case, the incidence of cooperation would increase.

2. Constraining to Solve Underlying Commitment Problems (and Some Enforcement Problems)

A second mechanism explaining unused dispute settlement procedures is found in their constraining effects. Even if the parties to an agreement manage to solve enforcement problems through other means, commitment problems may remain. As was argued previously, dispute resolution mechanisms provide an effective means to address them. However, states may still refrain from actually invoking formal settlement procedures.

If states anticipate the rulings of a dispute settlement mechanism and the associated punishment, they may refrain from a violation in the first place. This implies that the mere presence of a dispute settlement mechanism, particularly when fortified with punishment capabilities, will reduce the incidence of rule violations; of course, if there is no rule violation, recourse to the dispute settlement body becomes superfluous as well. Thus, even if the mechanism is not engaged directly and explicitly, it exerts a constraining power on state behavior – it can be a commitment device, helping states tie their hands with respect to domestic constituencies, and it remains unused precisely because of, not despite, its proper functioning. This argument is akin to arguments found in conflict studies: if threats to use force are credible, we will rarely observe the actual use of force (A. Smith 1999).

Koremenos (forthcoming) finds that about a quarter of agreements address commitment problems, and such problems are especially prevalent in the issue areas of human rights and investment. Not coincidentally, these are also the issue areas that are characterized by a high incidence of formal dispute resolution mechanisms. Thus, delegated dispute resolution provisions are one design element helping states to solve commitment problems. For instance, if a new leader comes to power with preferences that favor defection, the ensuing costs imposed by a court could be enough to change the leader's payoffs into favoring cooperation. Thus, if delegated dispute resolution mechanisms function in this way, they are not used on the equilibrium path.

And, of course, this same constraining mechanism works to solve enforcement problems not solved through the screening function. When faced with incentives to defect, even states with stable preferences over time must incorporate into their payoffs for defection the possibility of being punished through a court or other form of formal dispute resolution. As argued above, if the threat is sufficiently high, defection may be deterred.

3. The Influence of the Shadow of the Law

Finally, the rare use of formal dispute resolution may imply that states are resolving their conflicts in the “shadow of the law.” As we have shown, the majority of agreements with formal procedures allow for informal settlements as well. Moreover,

more than half of the agreements that encourage informal settlements also impose time limits on the dispute resolution process (55 agreements out of 96). Hence, states may try to settle informally; but if they do not manage to resolve their disputes within a specified, finite time period, the formal dispute settlement process kicks in. This implies that the formal procedures cast a rather strong shadow on informal settlements.

What are the implications of power asymmetries for the outcomes of settlements? Sattler and Bernauer (2010) find that WTO disputes involving substantial power asymmetries are more likely to be settled outside the formal dispute settlement mechanism than are disputes among more equal parties; they find this to be a worrisome result, based on the argument that it is “easier to reduce legal capacity differences than to reduce power differences” (Sattler and Bernauer 2010: 162). This, however, overlooks that the shadow of the law works even in the presence of power asymmetries. The potential recourse to the dispute settlement mechanism raises the outside option of the country of lesser power, and sometimes may raise it substantially. Neither party can fall behind its expected payoff under the dispute resolution mechanism – and the fact that, in more than half of the agreements mentioning informal settlements, the formal procedures are invoked if settlement does not succeed within a specified time period further reinforces this effect. This logic works even if both parties have an incentive to strive for a settlement outside the formal mechanisms. If formal dispute settlement procedures are lengthy and costly, it may prove valuable to both sides to circumvent them by settling the issue in question informally in bilateral negotiations; yet, both sides have to acknowledge in their negotiations that the other side cannot be worse off than it would be under the formal procedure minus the costs of participating in the formal process. Again, by its mere presence, the dispute settlement mechanism affects the outcomes under the agreement without being engaged formally.

V. CONCLUSION

In this chapter, we reviewed some of the literature on dispute settlement mechanisms in international agreements and argued that attempts to explain the design and functioning of settlement mechanisms are lacking, in particular, in truly comparative projects. We set out to offer a theory that links the design of dispute settlement provisions to distinct cooperation problems, thereby transcending any particular agreement or even issue area, and showed that specific cooperation problems strongly affect both the existence and the form of dispute settlement procedures: informational problems tend to be addressed by informal mechanisms, whereas punishment problems call for formal mechanisms.

We then countered two concerns: that the use of reservations undermines dispute settlement procedures and that rarely invoked dispute settlement mechanisms are meaningless design elements. We argue that even rarely used dispute settlement

mechanisms may have strong effects. First, we addressed the screening mechanism: by providing enforcement power, these mechanisms discourage dishonest signatories from joining an agreement. Second, we addressed the constraining mechanism: the threat of a ruling combined with punishment may be enough to discourage defection by changing the payoffs in favor of cooperation. Finally, even if defection still occurs, the threat of a ruling may still inspire informal settlements outside the formal procedures.

We also point out a number of avenues for further research. Although the analysis hinted at how particular design elements might interact, the relationship among distinct design elements is an important part of any future research agenda because, as negotiators know firsthand, dispute resolution provisions are not designed in a vacuum. Finally, we need to examine more carefully the functioning of international agreements over time once they are in place, including some creative attempts to capture the elusive “shadow of the law” and its implications for both design and practice.¹⁹

REFERENCES

- Abbott, Kenneth W., and Duncan Snidal (2000). “Hard and Soft Law in International Governance,” *International Organization*, Vol. 54, No. 3, pp. 421–56.
- Alter, Karen J. (2003). “Resolving or Exacerbating Disputes? The WTO’s New Dispute Resolution System,” *International Affairs*, Vol. 79, No. 4, pp. 783–800.
- (2013). “The Multiple Roles of International Courts and Tribunals: Enforcement, Dispute Settlement, Constitutional and Administrative Review,” in Jeffrey L. Dunoff and Mark A. Pollack (eds.), *Interdisciplinary Perspectives on International Law and International Relations: The State of the Art* (New York: Cambridge University Press), pp. 345–70.
- Barceló, John J. III (2009). “Burden of Proof, Prima Facie Case and Presumption in WTO Dispute Settlement,” *Cornell International Law Journal*, Vol. 42, No. 23, pp. 23–43.
- Beck, Katherine (2011). “The Evolution of Dispute Resolution in the American Convention on Human Rights,” Working Paper (Ann Arbor: University of Michigan, Department of Political Science).
- Betz, Timm (2010). “Endogenous Variables in Probit Models: Comparing Estimators,” Working Paper (Ann Arbor: University of Michigan, Department of Political Science).
- (2011). “Crime without Punishment: Delegation, Flexibility, and Exploitation in International Agreements,” Working Paper (Ann Arbor: University of Michigan, Department of Political Science).
- Brewster, Rachel (2006). “Rule-Based Dispute Resolution in International Trade Law,” *Virginia Law Review*, Vol. 92, No. 2, pp. 251–88.
- Brunnée, Jutta, and Stephen J. Toope (2011). “Interactional International Law: An Introduction,” *International Theory*, Vol. 3, No. 2, pp. 307–18.
- Brutger, Ryan (2011). “Private Parties: Hidden Actors of WTO Dispute Settlement,” Working Paper (Princeton, NJ: Princeton University, Department of Political Science).

¹⁹ Koremenos (book manuscript) attempts to overcome some research design obstacles to determining the strength of the shadow of the law through case study research.

- Busch, Marc L., and Eric Reinhardt (2003). "Developing Countries and General Agreement on Tariffs and Trade/World Trade Organization Dispute Settlement," *Journal of World Trade*, Vol. 37, No. 4, pp. 719-35.
- Charnovitz, Steve (2009). "The Enforcement of WTO Judgements," *Yale Journal of International Law*, Vol. 34, No. 2, pp. 558-66.
- Chayes, Abram, and Antonia Handler Chayes (1993). "On Compliance," *International Organization*, Vol. 47, No. 2, pp. 175-205.
- Davis, Christina L., and Sarah Blodgett Bermeo (2009). "Who Files? Developing Country Participation in GATT/WTO Adjudication," *Journal of Politics*, Vol. 71, No. 3, pp. 1033-49.
- Downs, George W., David M. Rocke, and Peter N. Barsoom (1996). "Is the Good News about Compliance Good News about Cooperation?" *International Organization*, Vol. 50, No. 3, pp. 379-406.
- Ginsburg, Tom, and Richard H. McAdams (2003). "Adjudicating in Anarchy: An Expressive Theory of International Dispute Resolution," *William & Mary Law Review*, Vol. 45, No. 4, pp. 1229-1339.
- Goldstein, Judith O., Miles Kahler, Robert O. Keohane, and Anne-Marie Slaughter (2000). "Introduction: Legalization and World Politics," *International Organization*, Vol. 54, No. 3, pp. 385-99.
- Grando, Michelle T. (2006). "Allocating the Burden of Proof in WTO Disputes. A Critical Analysis," *Journal of International Economic Law*, Vol. 9, No. 3, pp. 615-56.
- Guzman, Andrew T., and Timothy L. Meyer (2010). "International Soft Law," *Journal of Legal Analysis*, Vol. 2, No. 1, pp. 171-225.
- Helfer, Laurence R. (2013). "Flexibility in International Agreements," in Jeffrey L. Dunoff and Mark A. Pollack (eds.), *Interdisciplinary Perspectives on International Law and International Relations: The State of the Art* (New York: Cambridge University Press), pp. 175-96.
- Helfer, Laurence R., and Anne-Marie Slaughter (1997). "Toward a Theory of Effective Supranational Adjudication," *Yale Law Journal*, Vol. 107, No. 2, pp. 273-391.
- Henkin, Louis (1995). "U.S. Ratification of Human Rights Conventions: The Ghost of Senator Bricker," *American Journal of International Law*, Vol. 89, No. 2, pp. 341-50.
- Huth, Paul K., Sarah E. Croco, and Benjamin J. Appel (2011). "Does International Law Promote the Peaceful Settlement of International Disputes? Evidence from the Study of Territorial Conflicts since 1945," *American Political Science Review*, Vol. 105, No. 2, pp. 1-22.
- Keohane, Robert O. (1984). *After Hegemony. Cooperation and Discord in the World Political Economy* (Princeton, NJ: Princeton University Press).
- Keohane, Robert O., Andrew Moravcsik, and Anne-Marie Slaughter (2000). "Legalized Dispute Resolution: Interstate and Transnational," *International Organization*, Vol. 54, No. 3, pp. 457-88.
- Kim, Moonhawk (2008). "Costly Procedures: Divergent Effects of Legalization in the GATT/WTO Dispute Settlement Procedures," *International Studies Quarterly*, Vol. 52, No. 3, pp. 657-86.
- Koh, Harold Hongju (1997). "Why Do Nations Obey International Law?" *Yale Law Journal*, Vol. 106, No. 8, pp. 2599-659.
- Koremenos, Barbara (2005). "Contracting around International Uncertainty," *American Political Science Review*, Vol. 99, No. 4, pp. 549-65.
- (2007). "If Only Half of International Agreements Have Dispute Resolution Provisions, Which Half Needs Explaining?," *Journal of Legal Studies*, Vol. 36, No. 1, pp. 189-212.
- (2011). "An Economic Analysis of International Rulemaking," Working Paper (Ann Arbor: University of Michigan, Department of Political Science).

- (forthcoming). "The Continent of International Law," *Journal of Conflict Resolution*.
- (book manuscript). "The Continent of International Law" (Ann Arbor: University of Michigan, Department of Political Science).
- Koremenos, Barbara, Charles Lipson, and Duncan Snidal (2001). "The Rational Design of International Institutions," *International Organization*, Vol. 55, No. 4, pp. 761-99.
- Krasner, Stephen D. (1978). *Defending the National Interest* (Princeton, NJ: Princeton University Press).
- Kucik, Jeffrey, and Eric Reinhardt (2008). "Does Flexibility Promote Cooperation? An Application to the Global Trade Regime," *International Organization*, Vol. 62, No. 3, pp. 477-505.
- Leeds, Brett, Jeffrey Ritter, Sara McLaughlin Mitchell, and Andrew Long (2002). "Alliance Treaty Obligations and Provisions," *International Interactions*, Vol. 28, No. 3, pp. 237-60.
- Mearsheimer, John J. (1994). "The False Promise of International Institutions," *International Security*, Vol. 19, No. 3, pp. 5-49.
- Mitchell, Ronald B. (2002-11). *International Environmental Agreements Database Project (Version 2010.3)*, available at <http://iea.uoregon.edu/>.
- Muthoo, Abhinav (2002). *Bargaining Theory with Applications* (Cambridge: Cambridge University Press).
- Posner, Eric A., and John C. Yoo (2005). "Judicial Independence in International Tribunals," *California Law Review*, Vol. 93, No. 1, pp. 1-74.
- Rosendorff, B. Peter (2005). "Stability and Rigidity: Politics and Design of the WTO's Dispute Settlement Procedure," *American Political Science Review*, Vol. 99, No. 3, pp. 389-400.
- Sattler, Thomas, and Thomas Bernauer (2010). "Gravitation or Discrimination? Determinants of Litigation in the World Trade Organisation," *European Journal of Political Research*, Vol. 50, No. 2, pp. 143-67.
- Shaffer, Gregory C., and Mark A. Pollack (2010). "Hard vs. Soft Law: Alternatives, Complements and Antagonists in International Governance," *Minnesota Law Review*, Vol. 94, No. 3, pp. 706-99.
- Simmons, Beth A. (2000). "International Law and State Behavior: Commitment and Compliance in International Monetary Affairs," *American Political Science Review*, Vol. 94, No. 4, pp. 819-35.
- (2009). *Mobilizing for Human Rights. International Law and Domestic Politics* (Cambridge: Cambridge University Press).
- Smith, Alastair (1999). "Testing Theories of Strategic Choice: The Example of Crisis Escalation," *American Journal of Political Science*, Vol. 43, No. 4, pp. 1254-83.
- Smith, James McCall (2000). "The Politics of Dispute Settlement Design: Explaining Legalism in Regional Trade Pacts," *International Organization*, Vol. 54, No. 1, pp. 137-80.
- Thompson, Alexander (2009). "The Rational Enforcement of International Law: Solving the Sanctioners' Dilemma," *International Theory*, Vol. 1, No. 2, pp. 307-21.
- von Stein, Jana (2005). "Do Treaties Constrain or Screen? Selection Bias and Treaty Compliance," *American Political Science Review*, Vol. 99, No. 4, pp. 611-22.