Smaller Exchanges, Larger Regimes: How Trading in Small, Interdependent Units Affects Treaty Stability

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Suppose two parties desire to divide a $300 prize equally, but only have $100 bills at their disposal. As long as the unit of exchange remains too large for equal division, the two parties seem destined for an uneven and uneasy agreement. The solution seems simple: exchange the $100 bills for $50 bills, so that the unit of exchange is small enough to support an equal division.

Theories in effective policymaking and diplomacy readily acknowledge this concept. Treaties that take an all-or-nothing approach are out of style. Breaking up a large issue into smaller entitlements would allow for more proportionate divisions that correspond to proportions the parties feel they deserve. Countries could benefit from agreeing to have joint jurisdiction over

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\[1\] See, for example, Steven J. Brams, D. Marc Kilgour, and M. Remzi Sanver, *A Minimax Procedure for Negotiating Multilateral Treaties*, in Rudolf Avenhaus and I. William Zartman, eds, *Diplomacy Games: Formal Models and International Negotiations* 280–81 (Springer 2007) (demonstrating that negotiators can promote consensus by separating negotiations into several issues and prioritizing fall-back positions where parties do not prevail on all issues); see also Stanislaw Wellisz, *On External Diseconomies and the Government-Assisted Invisible Hand*, in Bruce M. Russett, ed, *Economic Theories of International Politics* 64–65 (Markham 1968) (identifying the indivisibility problem inherent in nuisance laws that either permit a polluter to exist or bans it and suggesting that Pigovian taxes are a way to make the solution seem more divisible).

\[2\] For an infamous example, see The Treaty of Versailles (June 28, 1919), online at http://avalon.law.yale.edu/subject_menus/versailles_menu.asp (visited Nov 21, 2009). Perhaps one could argue that these lopsided agreements reflect the lopsided powers behind the agreements, as when the victors of a war force undesirable terms on the conquered, but surely even in such cases the monolithic unit of “give me everything you have” in exchange for the equally monolithic unit of “I will not utterly destroy you” deals with units of exchange far too large for the finer gradations of balance that might be conducive to a well-written treaty.

\[3\] Consider H. Peyton Young, *Equity* 16–17 (Princeton 1994) (agreeing generally that divisibility of the contested good may help parties settle on a division that corresponds to parties’ sense of proportionate entitlement, but contesting that proportionality is enough to satisfy human intuitions about equity).
disputed areas, rather than engaging in a costly fight for complete control.\(^4\) Countries that disagree on the appropriate scope of international criminal law or the jurisdictional limits of the International Criminal Court may still agree that piracy should be treated as an international crime.\(^5\) Rather than arguing for complete freedom of the seas or absolute jurisdiction over territorial waters, countries may negotiate intermediary zones with shared rights.\(^6\) Perceptions of fairness are important to gaining credibility for one’s position and building international consensus, and a state that cannot justify its position with principles of equity must dip into its limited supply of political capital to pay for its choice. Thus, theories of diplomacy and equitable division might lead one to predict that nations prefer to negotiate in smaller units, insofar as they facilitate perceptions of fair, proportionate division.

Counterintuitively, however, the current trend in treaty negotiation is not toward working with ever-smaller units of exchange. If smaller units were all that were necessary to facilitate exchange, then a state could always create the proper balance of benefits through side payments. Any divisibility problem could be solved with the introduction of money. However, in practice, states often

\(^4\) See, for example, Tuomas Kuokkanen, *International Law and the Environment* 110-11 nn 28–30 (Kluwer 2002) (listing several treaties involving joint jurisdiction, or “condominiums,” over waterways and frontier lands); Exclusive Economic Zone Co-Operation Treaty between the Republic of Guyana and the State of Barbados (Dec 2, 2003), 2277 UN Treaty Ser 202 (2003) (agreeing on joint jurisdiction, control, management, development, exploration, and exploitation rights over the area where the exclusive economic zones of the two countries overlap, as determined by the UN Convention on the Law of the Sea). See also George G. Wilson, *Handbook of International Law* 93–97 (West 1910) (describing several early twentieth century examples of joint jurisdictions and leases involving other countries’ territories); Feroz Ahmad, *Ottoman Perceptions of the Capitulations 1800–1814*, 11 J Islamic Stud 1, 1–2 (2000) (suggesting that the Ottoman sultans granted capitulations to foreign nations, giving the European powers jurisdiction over their expatriates in the Ottoman Empire, as a matter of privilege and convenience and not as a matter of rights and obligations).


\(^6\) See UNCLOS, 1833 UN Treaty Ser 3, Arts 2, 3–15, 55–59 (cited in note 5) (defining the boundaries of territorial waters and “exclusive economic zones,” as well as the overlapping rights afforded to each).
disfavor side payment schemes as overly “redistributive.” To the extent that states have formally implemented such payment schemes into agreements, they have often given a conceptual justification for why these payments are directly linked to the goals of the project at hand, rather than admitting that they are simply payments to compensate for uneven exchanges. On the contrary, some of the most successful modern treaties appear to be of a scope that would have been unimaginable a century ago, ranging across multiple regulatory regimes and binding multiple countries. On the one hand, countries are “unbundling” what were traditionally larger “packages” of sovereign rights and trading in exchanges of smaller commitments, but on the other hand, they are making many of these “small-unit” exchanges to build linkages that make larger regimes possible.

The conclusion: merely exchanging in smaller units is not enough; there must be some value added in carefully selecting those small pieces of exchange that promote interdependence. To illustrate, consider the earlier problem involving the $300 prize. If exchanging in smaller units was all that mattered, the parties could simply convert the $100 bills into $50 bills and make an even split. Instead, many of these large-scale treaties function as though the parties agreed to split the $200 evenly, then agreed to put the remaining $100 into a joint savings account in order to share the interest. Notice in this example that, strictly from a monetary perspective, the parties do not gain any advantage by choosing this second approach, given the opportunity cost. The parties could have probably earned the same amount of interest investing $50 on their own. However, there is some value added from being able to secure the stability of an interdependent relationship for the future. In the example, the added value of

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7 See David W. Leebron, The Boundaries of the WTO: Linkages, 96 Am J Intl L 5, 14 (noting that countries often frame linkages as conceptually linked, because parties tend to be resistant to “purely redistributional payments”). See also Robert O. Keohane, The Demand for International Regimes, in Beth A. Simmons and Richard H. Steinberg, eds, International Law and International Relations 33-34 (Cambridge 2006) (observing that locally entrenched bureaucracies can prevent side payments from being a possible compromise solution).

8 See, for example, Leebron, 96 Am J Intl L at 14 (cited in note 7) (observing that, in negotiations over the environment, the developed countries established a fund for developing countries in order to “pay for certain measures of environmental protection,” rather than agreeing to unrestricted side payments). For an example of an actual redistributive effort via side payments, see Eiko R. Thielemann, Symbolic Politics or Effective Burden-Sharing? Redistribution, Side-Payments, and the European Refugee Fund, 43(4) J Comm Mkt Stud 807, 822 (2005) (noting that the European Refugee Fund’s allocation rules favor countries who pose the “greatest credible threat to cause difficulties in related areas of EU policy-making”).


pooling resources might not be enough for the prizewinners to justify entering into a long-term relationship with each other. However, in the international context, countries may benefit greatly from binding each other to agreements with many interdependent clauses, simply because this makes breaches costly and builds incentives for countries to maintain cooperative relationships with one another.

This Comment explores how exchanging in smaller, interdependent units of entitlement during treaty negotiation helps build consensus for large treaty regimes and creates incentives for maintaining stable, cooperative relationships in the long run. The existing literature related to this topic takes three approaches. Prior literature on the concept of equity has focused mostly on the division problem: how to allocate indivisible goods and how to create a proportionality or prioritization system that appeals to parties' intuitive understandings of fairness.\(^\text{11}\) Prior economics and game theory literature has largely focused on explaining how cooperation and coalitions affect the feasibility of discrete transactions, such as spot contracts.\(^\text{12}\) Prior literature on international law tends to limit itself to political analysis on how issue linkages have facilitated consensus during treaty negotiations.\(^\text{13}\) This Comment tries to link these three approaches together to explain the economic incentives behind a general international phenomenon: the tendency to negotiate in more narrowly defined entitlements (smaller units) to build consensus for ambitious, comprehensive treaties that stretch over several regulatory regimes (greater interdependence). This approach differs from earlier approaches in equity literature because it proposes that parties want more than fair division from a discrete transaction. It differs from previous approaches in contract theory because the parties in focus here are states,\(^\text{14}\) who all have incentives to create

\(^\text{11}\) See, for example, Young, \textit{Equity} at 13–14 (cited in note 3) (suggesting that all-encompassing theories based on the difference principle, greatest good principle (or proportionality principle), or simplistic solutions based on simply converting an indivisible good into a divisible one, cannot account for all intuitions of fairness).

\(^\text{12}\) See, for example, Larry A. DiMatteo, \textit{et al}, \textit{Visions of Contract Theory: Rationality, Bargaining, and Interpretation} 13–18 (Carolina 2007) (summarizing the foundational works in law-and-economics-based contract theory, which tend to focus on spot contracts and efficient breach principles); consider Lester G. Telser, \textit{The Usefulness of Core Theory in Economics}, \textit{8 J Econ Perspectives} 151 (1994) (explaining under what conditions rational actors will choose to act in a coalition, and under what conditions they will choose to go-it-alone).

\(^\text{13}\) See, for example, Leebron, \textit{96 Am J Intl L} at 17–19 (cited in note 7) (cataloguing the linkage types and their political usefulness).

\(^\text{14}\) Standard contract theory might not apply well when the parties to a contract are states rather than individuals, since states are considered sophisticated parties who do not need paternalistic doctrines, since there is no court to punish breaches, and since states must anticipate long-term relationships with one another, regardless of the temporary nature of their contracts/treaties. I later make the argument that the principle of efficient breach does not translate well to contracts
agreements for the long-term\textsuperscript{15} and institutionalize norms that incentivize cooperation. It differs in focus from prior literature in international law in that it tries to generalize a larger economic principle behind why linkages help treaties succeed.

Section I explains the concept of a smaller, interdependent unit of exchange and contrasts this to the more general concept of divisibility. It then identifies some of the benefits of working with smaller, interdependent units of exchange. Section II explores how the concept of the smaller, interdependent unit of exchange has facilitated the negotiation of two successful treaties: the United Nations Convention on the Law of the Sea (UNCLOS) and the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). Section III uses a failed attempt at international negotiation, Mexico’s push for tradable remedies, to illustrate why merely working with smaller, more divisible units (such as side payments) is not enough to forge an agreement. It makes the argument that a treaty needs to employ both smaller units of exchange and cross-linkages that build interdependence in order to incentivize parties to stick to their commitments. Section IV concludes with the suggestion that countries may have overestimated the costs of interdependence and overly discounted the institutional benefits that arise from creating treaties that increase interdependence.

I. THE BENEFITS OF EXCHANGING IN SMALLER, INTERDEPENDENT UNITS

First, a definition is in order: What is a smaller, interdependent unit of exchange? By “smaller,” I mean to contrast the current scope of the legal entitlement being exchanged to how countries have traditionally conceptualized the entitlement. The idea of a smaller unit of exchange is easiest to understand in terms of tangible, divisible goods. Suppose two siblings are quarreling over who gets the whole cake, and a mediator persuades the siblings to divide the cake into two pieces. The parties are now dealing with a smaller unit of division: previously they could only think of their entitlements in terms of the whole cake; now they understand that there can be piecemeal entitlement to the cake.

\textsuperscript{15} Consider \textit{The Tinoco Claims Arbitration} (Great Britain v Costa Rica), 1 UN Rep Intl Arbitral Awards 369, 375–99 (1923) (holding that a country’s commitments are still binding, even if there has been a regime change). This case generally affirms the principle that the identity of a country can survive a radical change in government. As such, when countries negotiate treaties, they must contemplate that the treaty could survive a regime change or revolution.
Some goods, unlike cakes, lose all their value when divided. Baby-splitting is good for neither mother.\textsuperscript{16} Even with these indivisible goods, however, parties can think of their legal entitlements in narrower terms. For example, parents fighting over child custody can think of entitlements, not in terms of “pieces of children,” but in terms of “pieces of time.” Here, too, the parties are now dealing in smaller units. Previously they thought of their entitlements to their children as an indivisible whole; now they think of their entitlements in terms of time units.\textsuperscript{17} Pushing this concept further, there is no limit to how far parties could conceptually divide a legal entitlement. The law is recognizing ever-smaller sticks in the bundle of rights that constitute personal property;\textsuperscript{18} more traditional rights such as the right to exclude have been divided into smaller entitlements such as the exclusive right to make derivative works or make public performances.\textsuperscript{19} Similarly, states are willing to conceptualize their legal entitlements in more focused, narrow terms: instead of asserting general sovereignty rights over the sea, for example, they might negotiate in terms of fishing rights, right of transit, or rights to minerals on the seabed.\textsuperscript{20} Thus, by “smaller units,” I mean to express the parties’ general willingness to think of their legal entitlements as an aggregate of many narrow rights, rather than as one indivisible whole.

By “interdependent,” I mean that the system of consequences attached to the treaty terms helps ensure that it is in each party’s self-interest not to cross the other party’s interest. In private contract law, this interdependence is artificially created through the use of expectation damages, including reasonable

\textsuperscript{16} 1 Kings 3:16-28 (relating the story of Solomon’s uniquely “equitable” baby-sharing judgment).
\textsuperscript{17} See Young, \textit{Equity} at 20–23 (cited in note 3) (suggesting forced equality (giving the good to no one), lotteries, rotation, compensation, queuing, and priorities as ways of distributing indivisible goods).
\textsuperscript{18} See, for example, Lior Zemer, \textit{The Idea of Authorship in Copyright} 43–45 (Ashgate 2007) (discussing some ways in which the traditional “bundle of rights” associated with owning real property must be revised to account for the unusual balance of rights involved in intellectual property).
\textsuperscript{19} Other examples of dividing legal entitlements into smaller units include the division of property rights to separate underground easements or credits for tall buildings. See, for example, \textit{NYC Zoning—Glossary} (2009), online at http://www.nyc.gov/html/dcp/html/zone/glossary.shtml (visited Nov 21, 2009) (defining the concept of “development rights,” which gives the owner the right to construct buildings up to a given height and the concept of “TDRs,” which allows owners of development rights to sell its height rights to other developers). This is in sharp contrast to the traditional view of real property ownership, which held that ownership extended from the core of the earth to the skies. See William Blackstone, \textit{Commentaries on the Laws of England}, vol 2, ch 2, 18 (“Cuius est solum, eius est usque ad caelum. [For whoever owns the soil it is theirs up to Heaven and down to Hell].”).
\textsuperscript{20} Compare UNCLOS, Arts 55–58 (cited in note 5) (defining economic rights to the sea) with UNCLOS, Arts 37–39 (defining rights of navigation).
reliance damages. A party cannot breach without internalizing the cost of the breach, because the courts will force breaching parties to disgorge unjust enrichment and restore the breached party. However, states parties to treaties must build this interdependence into the structure of the treaty, since liability and damages for treaty breaches are far short of guaranteed. For example, the World Trade Organization (WTO) gives each party the right to be treated equally under the “most-favoured nation” principle. Each state party, when relinquishing its right to discriminate against foreign trade, depends on other states parties to similarly refrain from exercising their sovereign power to discriminate. The WTO Dispute Settlement Body makes this interdependency of legal entitlements clear in the way that it punishes breaches: if a breaching state engages in anti-competitive practices in one area of trade, it permits the injured state to engage in proportionate anti-competitive practices in another area of trade. Under my definition, countries deal with interdependent units of exchange when they consciously attach systems of benefits and consequences to the terms of the treaty to make breaches more costly.

A. Advantages of Working with Smaller, Interdependent Units

Parties can gain two types of advantages by working in smaller, interdependent units. The first type comes from properties of divisibility inherent to working with smaller units. The second type comes from the increased cooperation and stability that comes with greater interdependence.

1. Advantages in divisibility.

Thinking in conceptually smaller units of entitlement allows parties to overcome indivisibility problems. If there are two heirs competing for one


22 Id at 202–04 (calculating optimal levels of performance and illustrating the concept of the efficient breach).


24 General Agreement on Tariffs and Trade (“GATT 1947”) (1947), 55 UN Treaty Ser 194, 61 Stat pt 1, TIAS 1700, Art 1 (requiring all member countries to confer to one another “most favoured nation” status). Note that GATT 1947 has been adopted in its entirety into the modern GATT that governs the WTO. See Marrakesh Agreement, 1867 UN Treaty Set 154 at Art 2, ¶4 (cited in note 9) (incorporating GATT 1947 into the modern GATT for the formation of the WTO).

family heirloom, both parties cannot be satisfied as long as the entitlement is conceptualized in terms of the one item. Even if the entitlement is conceptualized in terms of days of the week, all parties cannot be satisfied if there are eight heirs. Imagining smaller units of entitlement allows for more equal divisions between multiple parties.\textsuperscript{26}

However, equity scholars are quick to point out that human intuitions regarding fairness are not always linked to proportionality.\textsuperscript{27} Participants may come to negotiate with a different set of priority rules in mind.\textsuperscript{28} An organ donor program, for example, may prioritize giving the organ to a hard-to-match patient over a patient who has been waiting longer in line.\textsuperscript{29} Nor would using smaller units of entitlement solve the problem of resentment from disappointed expectations\textsuperscript{30} or envy from others' windfalls.\textsuperscript{31} While these critics raise genuine obstacles to reaching a fair result, they discount the fact that divisibility plays other roles than merely facilitating proportionality.

\textsuperscript{26} At some point, however, further division of the entitlement may make it worthless (for example, if there are ninety heirs to the heirloom, it may not be worth everyone's time to share the good with so many people), and the parties may have to rethink how they divide the entitlement to preserve its worth (for example, the ninety heirs could settle for an equal chance to win complete ownership over the heirloom in a lottery). This subsection's discussion on equitable process, rather than equitable division, can be seen as another way of conceptually dividing legal entitlements, where parties no longer think of dividing the prize equally, but rather dividing the opportunity to obtain the whole prize equally.

\textsuperscript{27} See, for example, Young, \textit{Equity} at 40–41 (cited in note 3) (explaining that participants may often agree on an order of priority that gives extra weight to certain parties' entitlements).

\textsuperscript{28} Developing countries, for example, may feel that they should be given an opportunity to share in future seabed profits, even if they do not have the capital or the resources to pursue seabed mining. Consider Declaration of the Principles Governing the Sea-Bed and the Ocean Floor, and Subsoil Thereof, Beyond the Limits of National Jurisdiction, UN Doc A/Res/2749 (XXV) (1970) (declaring that the seabed and ocean floor are the "common heritage of mankind"); Declaration on the Establishment of a New International Economic Order, UN Doc A/Res/3201 (S-VI) (1974) (expressing the general sentiment among developing nations that they had been exploited and the developed nations had an obligation to assist in their current economic struggles). Minor NATO countries during the Cold War felt that the superpowers should shoulder the greater part of the cost. See Mancur Olson, Jr. and Richard Zeckhauser, \textit{An Economic Theory of Alliances}, in Russett, ed, \textit{Economic Theories of International Politics} 43–44 (cited in note 1) (explaining that non-superpower nations have less of an incentive to bear the costs of a military alliance because they gain very little utility from further militarization after a certain point, while superpowers continue to reap benefits).

\textsuperscript{29} See Young, \textit{Equity} at 28–29 (cited in note 3) (describing the US kidney donation system, which takes match and likelihood of a successful transplant into consideration).

\textsuperscript{30} Consider Oliver Hart and J. Moore, \textit{Contracts as Reference Points}, 123 Q J Econ 1, 2–3 (2008) (suggesting that parties will perform future obligations poorly if the payoff from the agreement turns out to be less than expected).

\textsuperscript{31} See Steven J. Brams and Alan D. Taylor, \textit{Fair Division} 66–67, 234 (Cambridge 1996) (critiquing negotiation analysis for not considering problems of envy, which may cause parties to be discontent, even in win-win situations, if they believe that other parties won a greater share).
First, dividing the prize into smaller conceptual units may allow for more win-win transactions to arise, because parties can take advantage of the subjective differences in valuation. If one party prefers to visit Las Vegas during winter holidays and the other party prefers to vacation there in the summer, a time-share arrangement that respects these preferences will seem like a win-win deal to both sides. Similarly, if fishing rights are important to a coastal country's industry and if rights of transit are important to a superpower with a large naval force, a territorial agreement that gives exclusive economic zones to the fishing-dependent country and rights of transit to the naval superpower will also seem like a win-win deal. Although these arrangements will not necessarily solve the problems of envy and resentment,32 they can certainly facilitate agreements in the right direction by allocating particular resources to the parties that will value them more.

Second, dividing a larger commitment into smaller steps may allow parties to form "incompletely theorized agreements,"33 where parties can find common ground on a larger ideal or principle while disagreeing on the particulars of how that principle should be applied. For example, states that cannot currently commit to a single definition for "aggression" may simply agree to agree at some future date and agree to create a committee to propose an appropriate definition.35 These early commitments may serve as reference points for establishing customary norms of international law and rallying consensus for future treaties that pin down particulars.36

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32 For example, a party who feels he has won 51 percent of the prize may still envy an opponent who subjectively values her share at 75 percent, because he may feel that he could have extracted more concessions from the opposing party.

33 See Cass R. Sunstein, Legal Reasoning and Political Conflict 35 (Oxford 1996) (proposing the theory that large groups of people may form a consensus on a general principle without being able to agree on all of the details).

34 See, for example, Lori F. Damrosch, et al, International Law: Cases and Materials 1370 (West 4th ed 2001) (reporting that the International Criminal Court's Preparatory Commission has been unable to finalize a proposed definition of "aggression").

35 See Formulation of the Principles Recognized in the London Charter of the Nuremberg Tribunal and in the Judgment of the Tribunal, UN Doc A/Res/177 (II) (1947) (authorizing the International Law Commission to establish principles for judging future acts of aggression). This gradual process of coming to an agreement also happens in contract law, where parties may gradually settle on particular terms of agreement and gradually bind themselves to increasing levels of obligation, through a series of "letters of intent" or preliminary contracts that come with "culpa in contrabendo" liability. See Soili Nysten-Haarala, The Long-Term Contract: Contract Law and Contracting 92-98 (Kauppakaari Oyj 1998) (showing that private contract law recognizes intermediary steps to liability and contractual agreement, using the German legal system as an example).

36 See, for example, The Justice Case (Case 3), Opinion and Judgment, in Trials of Individuals before the Nuremberg Military Tribunals under Control Council Law No 10, 1946-1949, vol III, 954, 983-84 (1951) (addressing the argument raised by German judges facing prosecution for
2. Advantages in interdependence.

If divisibility advantages were all that mattered, then parties would have no reason to build grandiose treaty regimes that regulate large areas of law. Countries, like firms engaging in spot contracts, would tailor individualized treaties for separate transactions. Territorial disputes could be solved by simply measuring out the exact proportions of land reflecting the strength of the countries' respective claims. When the legal entitlement is indivisible (that is, where the contested good loses value if the countries attempt to split it or own it jointly), one party could compensate the other through side payments.

However, that is not the way that international law seems to work. Although there are some inherent benefits to working with smaller units of transaction, as discussed in the previous section, careful selection of the type of smaller unit used can help promote interdependence. For example, suppose a state simply chooses to remove opposition to a proposed treaty issue through one-time side payments. Here, the state uses the advantage of divisibility inherent in money in order to build consensus for the treaty. It involves using a unit of exchange that is "smaller" (in contrast to the larger units of "treaty concessions"), but not more interdependent. Once the state makes the one-time side payment, it has no further obligations to the other state. It could even rescind the treaty concession at a later time through reservations or amended treaties, making the one-time side payment only worth the amount of time that the treaty concession lasted. By contrast, suppose that the same state, rather than giving a one-time side payment, makes a credible structural investment in the

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37 Vienna Convention on the Law of Treaties ("Vienna Convention") (May 23, 1969), 1155 UN Treaty Ser 331, Arts 2(1)(d), 19 (1969) (granting states the right to make any reservations not incompatible with the purpose of the treaty or explicitly prohibited by the treaty). See, for example, "The Fisheries Jurisdiction Case" (United Kingdom v Iceland), 1973 ICJ 3, ¶ 34 (describing a case where Iceland's earlier deal with the UK to recognize a twelve-mile exclusive fisheries jurisdiction was made moot by a change in international law where many countries decided to automatically recognize a twelve-mile exclusive fisheries jurisdiction). The problem with upfront payments is that states could be left with the hard decision of complying to its side of a treaty bargain, even if a change in circumstances has made the bargain one-sided. More likely, the party who ended up with the bad side of the bargain will breach.
treaty concession.\textsuperscript{38} This would help assure other parties to the agreement that all parties are committed to making the treaty last, encouraging them to build reliance on the treaty as well. For example, when the developed countries wanted to establish universally recognized deep-sea mining rights, they chose not to negotiate a lump-sum payment of anticipated profits to the resistant developing countries. Instead, the developed nations agreed to submit to an International Seabed Authority that would distribute profits from deep-sea mining to developing countries on an ongoing basis.\textsuperscript{39} Committing to interdependent relationships or larger structures of international organization can limit the range of options available to players in the negotiations in order to incentivize cooperation.\textsuperscript{40} Additionally, countries may simply gain some structural advantages from achieving greater economies of scale by pooling resources, sharing information, or coordinating their actions.\textsuperscript{41} Furthermore, by building conceptual linkages between smaller obligations in a larger treaty regime, the breaches that do occur can be “contained” without infecting the health of the entire treaty. For example, if a party to the WTO violates another party’s right to nondiscrimination in a particular trade area, the breaching party loses its right to nondiscrimination in a proportionate trade interest.\textsuperscript{42} Neither party needs to lose its membership rights or lose the entirety of its nondiscrimination rights. This pattern of action suggests that parties often have an incentive to deal in smaller units, not only to gain the benefits of divisibility, but also to gain the advantages of interdependence. Not all small-unit agreements create interdependence (as the side payment example illustrates), but some small-unit exchanges, by virtue of being linked to a larger scheme of exchanges, facilitate long-term cooperation. Careful selection of those particular smaller entitlements that build interdependence can incentivize parties to adhere to the treaty for the long run.

\textsuperscript{38} Consider Oliver E. Williamson, \textit{Credible Commitments: Using Hostages to Support Exchange}, 73 Am Econ Rev 519, 521 (1983) (suggesting that parties who make a sizeable investment into a long-term project can signal to other parties that it will not breach the long-term agreement).

\textsuperscript{39} See UNCLOS, Arts 156–58 (cited in note 5) (establishing the International Seabed Authority, its nature and fundamental principles, and its organs).

\textsuperscript{40} See Telser, 8 J Econ Perspectives at 159–60 (cited in note 12) (suggesting that forcing the negotiating parties to pre-commit to certain relationships, such as vertical integration, can constrain the range of profitable actions for these parties enough to resolve the problem of an empty core).


\textsuperscript{42} DSU, 1869 UN Treaty Ser 401 at Art 22, ¶¶ 3–4 (cited in note 25) (establishing the procedures for determining liabilities for breach and appropriate retaliatory measures).
B. Why is Interdependence an Advantage?: Some Differences between Private Actors and States

It might seem counterintuitive to think of interdependence as an advantage. Contract theory, for example, highly prizes the parties' ability to make an efficient breach.\(^4\) As such, courts rarely uphold contract clauses that provide for excessive liquidated damages, for fear of seeming too punitive.\(^4\) The law and economics analysis in contract law focuses on the end goal of maximizing wealth by allocating resources to the highest-valuing actor.\(^4\) To that end, contract damages focus on forcing the breacher to internalize the costs to the aggrieved party, so that the breacher only breaches when it is equal or better for both parties to the contract.\(^4\)

However, the end goals and interests of countries may differ from the interests of firms acting within a predictable legal system. First, countries cannot rely on international courts to hold other countries to their treaty obligations. Some countries, for example, do not submit to the compulsory jurisdiction of permanent international courts such as the International Court of Justice (ICJ).\(^4\)

Though countries may voluntarily submit to tribunals or other dispute settlement mechanisms, they often still hold enough political power to influence outcomes post hoc, whether by selecting the judges,\(^4\) threatening to damage the credibility of the court by non-participation or by non-compliance with the

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\(^4\) See Cooter and Ulen, *Law and Economics* at 196–98 (cited in note 21) (suggesting that courts should only enforce contracts as necessary to make cooperation in deferred, but otherwise efficient, exchanges possible).

\(^4\) Id at 251–52 (summarizing why punitive damages are not favored in contract law).


\(^4\) See *Declarations Recognizing the Jurisdiction of the Court as Compulsory* (2009), online at http://www.icj-cij.org/jurisdiction/index.php?p1=5&p2=1&p3=3 (visited Nov 21, 2009) (listing all of the countries that recognize the ICJ’s compulsory jurisdiction). Notably, the US has withdrawn its recognition after a series of unfavorable decisions, and does not currently appear on the list.

\(^4\) See, for example, Statute of the International Court of Justice ("ICJ Statute"), 59 Stat 1031, TS 993, Art 10 (1945) (requiring an absolute majority of votes in the Security Council, as well as the General Assembly, for a candidate to be appointed judge).
judgment, or simply refusing to submit to an unfavorable court’s jurisdiction in future disputes. Second, the lack of clear resolution to breach increases the cost of breach by multiplying the uncertainties. There is no guarantee, for example, that a party would not overreact to a breach and retaliate in a disproportionate, inefficient way. There is no guarantee that a breaching party will agree to compensate for the breach at all.

Third, states parties to a treaty are necessarily linked by a long-term relationship that will last as long as the countries exist. The treaty itself may become obsolete or superseded by custom, but the distrust arising from one breach can easily spill over to impede negotiations in a seemingly unrelated agreement or to sour diplomatic relations generally.

Fourth, the “self-interest” of nations differs from the “self-interest” of individual firms or actors. Whereas an individual firm seeks to maximize profit or, at most, has a fiduciary duty to enrich its shareholders, nations have a general duty to safeguard public well-being and maintain order. Of course, this

49 See, for example, *Case Concerning United States Diplomatic and Consular Staff in Tehran (US v Iran), Judgment, 1980 ICJ 3 (May 24, 1980)* (deploring the fact that Iran refused to show up to court to defend itself and that the US acted unilaterally in trying to rescue hostages without waiting for court permission).


51 See, for example, *In Larger Freedom: Towards Development, Security and Human Rights for All, Report of the Secretary-General (Mar 21, 2005), UN Doc A/59/2005, ¶ 122-26 (2005)* (supporting the conclusion that NATO’s peacekeeping attack on Kosovo was “illegal, yet legitimate”).

52 However, the possibility that the state will ignore its international legal obligations should not be overstated. See, for example, *M/V Saiga (No 2) (St Vincent v Guineau), 120 ILR 143, ¶ 170 (Intl Trib L of the Sea 1999)* (observing that it is a “well-established rule of international law that a State which suffers damage as a result of an internationally wrongful act by another State is entitled to obtain repARATION for the damage suffered from the State which committed the wrongful act and that ‘reparation must, as far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed’ (Factory at Chorzow, Merits, Judgment No. 13, 1928, P.C.I.J., Series A, No. 17, p. 47).”).

Even if the courts are powerless to enforce their judgments, there will still be consequences in the form of damages for most violations where a treaty defines adjudicatory procedures in advance, since it is not in the interest of the state to resort to self-help or ignore international pressure to submit to the court.

53 For example, recipients of foreign aid may be concerned that their aid packages will be affected unless they acquiesce to the aid-giving country’s policy objectives. But see *Economic Measures as a Means of Political and Economic Coercion against Developing Countries, UN Doc A/RES/50/96 ¶ 2 (1995)* (reaffirming that unilateral coercive economic measures that are “not authorized by relevant organs of the United Nations or are inconsistent with the principles contained in the Charter of the United Nations” are not allowed).
responsibility does not prevent states from also thinking about how its interest
groups may profit from a favorable trade treaty or territorial agreement. Even
so, states are responsible for regulating themselves in the international order in a
way that individual firms or actors are not.54 When a private actor breaches a
contract, this does nothing to de-legitimate the legal order underlying the
contract. The law will affirm its authority by enforcing the proper penalties for
the breach. However, when a state breaches a treaty, it threatens the legitimacy
of the international order, because a tenet of international law only has as much
force as custom and the nations' self-discipline are willing to provide.55 When
enough nations violate a treaty, custom may change the treaty’s status as law.56

There must be some means of internalizing the large externalities incurred
by the international community when a breaching state harms a long-term
relationship or detracts from the law’s credibility. Since increasing damages ex
post to reflect these externalities seems unworkable (given the uncertainty
involved in enforcing such judgments), these “interdependent” structural
commitments may be a way for parties to build deterrence incentives into the
text of the agreement itself.57 Once states can be properly incentivized to adhere
to the treaty, the treaty is able to use this inertia to gain legitimacy and build
reliance on the treaty. While contract theory may seek to discourage
unreasonable reliance, treaty-makers would want to encourage states to adjust
their local bureaucracies to the treaty regime, build long-term policy goals based
on the treaty’s implications, and empower those domestic interest groups that
are best poised to take advantage of the treaty’s benefits.58 Treaty negotiators

54 See, for example, United Nations Charter, Arts 33–37 (defining the duty of UN member
countries to settle disputes peacefully); see also id, Art 2 (preventing members from using force or
threat of force against the territorial integrity or political independence of any state); Case
Concerning Military and Paramilitary Activities in and against Nicaragua (Nicaragua v US), Merits, 1986
ICJ 14, ¶ 187 (1986) (observing that Article 2(4) of the UN Charter now also applies to non-
members because it has acquired the status of customary international law).

(describing the legal positivist’s view of international law, that law is merely the ability to give
effect to the nations’ “political wills”).

(observing that treaties that are changed by subsequent practice are now common, especially in
bilateral treaties, where it only takes the actions of two parties to change the norm).

57 Consider Nysten-Haarala, The Long-Term Contract at 224–25 (cited in note 35) (discussing Oliver
Williamson’s view that “[l]egal rules can never sanction all dishonesty and cheating, and sanctions
cannot always repair the damage,” and suggesting that requiring parties to invest “credible
commitments” to their long-term joint projects will help build loyalty and trust where the law
cannot).

58 For a useful analogy, consider Tom Ginsburg, Locking in Democracy: Constitutions, Commitment, and
international law commitments into a nation's new constitution can help “lock in” democracy by
would want countries to invest in a dispute resolution system by getting advance commitments to submit to the adjudicating body’s jurisdiction. If parties could commit to using adjudicatory channels to clarify legal obligations rather than diplomatic or self-help channels, then the states parties to the treaties could benefit from the creation of new law as well as the increasing legitimacy of the court. Given the difficulty of exacting precise penalties for breaches and the ease with which a breach can damage the relations between nations, it makes sense to negotiate treaties that structure entitlements in an interdependent way that makes the costs of breach prohibitive. Such treaties would help states internalize the potential instability costs of a breach.

II. TREATY NEGOTIATION: THE EXCHANGE OF SMALLER, INTERDEPENDENT UNITS IN PRACTICE

Although the idea of the “smaller, interdependent unit of exchange” can apply to private contracts as well as treaties between states, it is especially useful to trace the effect of using smaller, interdependent units through the lens of public international law for two reasons. First, treaties help test the internal strength of the negotiated terms when they are left to their own devices. Since there is no official inter-state governance to enforce the contract, the treaty must provide its own systems of private ordering and disincentives for breach.

Note that this presents a positive externality problem. Although the community at large may benefit from the clarification of law and the increased legitimacy of the court or arbitral panel as it resolves more disputes, the parties in the dispute would pay all the actual costs. Given this added cost, parties may have no desire to submit to the jurisdiction of the court when they can settle out of court. Perhaps one solution to this would be to grant a kind of “qualified immunity” to first-time offenders who help clarify an issue of first impression. The winning party would still have the international equivalent of a declaratory judgment or an advisory opinion to help sway diplomatic negotiations its way, while the losing party would be able to save face and not be found formally liable for a treaty breach.

Consider John Austin, *The Province of Jurisprudence Determined* 201 (Noonday 1954) (arguing that international law is not “positive law” because it does not answer to a sovereign, and that any duties imposed by international law must ultimately be enforced through moral sanctions).

Consider Marc Galanter, *Justice in Many Rooms: Courts, Private Ordering, and Indigenous Law*, 19 J Leg Pluralism 1, 23 (1981) (theorizing that parties who form contracts are operating under “law in the shadow of indigenous ordering”). In the contract context, the agreement is supported by private...
Second, the lack of a credible world court and states’ interest in long-term cooperative relationships detracts from the rationale behind an “efficient breach.” Given the current interconnectedness of the world economy, the ease of transportation, and the easy access to information, countries no longer have the luxury simply not to deal with one another. Treaties can help illustrate how rational actors behave when they are forced into long-term relationships and how a system may adjust to internalize the harms to trust and the rule of law created by breach. In order to study these effects across different areas of international law, I present two case studies: one based on territorial disputes and the other based on trade regulation.

A. Territorial Disputes Case Study: The UN Convention on the Law of the Sea

UNCLOS was negotiated out of a sudden shift in the customary international law regarding states’ territorial rights to the seas. Traditionally, customary international law had held that the high seas (three nautical miles, or a cannon’s shot, away from the shore) were *mare liberum*, open to all and belonging to none. The US set the world in disequilibrium in 1945 when President Truman issued a proclamation that the US now owned the mineral resources on its continental shelf seabed. Rather than protesting, many other countries acquiesced to the standard and made similar claims extending their territorial rights further into the sea. Concerns over the rapid land grab came to a head when Arvid Pardo, the Maltese Ambassador to the UN, raised before the General Assembly the issue of whether countries could reserve parts of the

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order and the threat of law; in the treaty context, the threat of enforcement under the law may not be as strong, but the same concept of “private ordering” can explain how treaties are able to maintain compliance.


63 *Natural Resources of the Subsoil and Sea Bed of the Continental Shelf*, Presidential Proclamation 2667, 10 Fed Reg 12303 (Sept 28, 1945) (presidential proclamation that the US now owns the mineral resources in its continental shelf seabed).

64 Louis Henkin, *How Nations Behave* 213 (Columbia 2d ed 1979) (noting that sovereign rights to the continental shelf quickly became recognized as customary law, even before the nations had an opportunity to codify the norm through the 1958 Convention on the Continental Shelf, 499 UN Treaty Ser 311, TIAS No 5578 (1958)).
ocean floor beyond their jurisdictions for commercial purposes. Although previous conventions had already agreed on various limits for territorial claims over the sea, Pardo’s speech, which speculated on the technical feasibility of deep-sea mining in the near future, ignited the imaginations of developing countries eager to share in the “common heritage” of the ocean floor. As a result, there was a sharp division between the developing nations, who felt entitled to share in the potential wealth from deep-sea mining but constrained by their lack of technology and capital, and the developed nations, who also wanted to lay claims to deep-sea mining rights, but found that any bid for international recognition of these rights to exclude would be blocked by the more numerous developing-nation voting bloc.

In 1973, representatives met in New York for the Third UN Conference on the Law of the Sea in order to iron out these differences. Three of the main

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65 UN GAOR, 22d Sess, 1515th mtg at 1, UN Doc A/C.1/PV.1515 (1967) (raising the issue of whether countries could reserve parts of the ocean flood beyond their jurisdictions for commercial purposes).


67 UN GAOR, 22nd Sess, 1515th mtg at 5 (cited at note 65) (statement of Ambassador Pardo) (asserting that “[n]ational appropriation and commercial exploitation of the mineral resources of the ocean floor . . . are imminent”).

68 Id (“If the mineral resources lying on the ocean floor are incredibly vast, equally vast are the resources lying below the floor’s surface. We know little about the presence of vein deposits, yet they must in all likelihood exist . . .”). See also Henkin, How Nations Behave at 226 (cited in note 64) (surmising that Pardo’s ill-timed move of opening the law of the sea to change at a time of increasing small-country nationalism probably resulted in an international grab at immediate gains at the expense of the “common heritage” of the seas); Caitlyn L. Antrim, Converting Competition to Collaboration: Creative Applications of Models in the Law of the Sea Negotiations, in Avenhaus and Zartman, Diplomacy Games at 227 (cited in note 1) (relating how an MIT study on the feasibility and profitability of deep sea mining revealed that the developing countries’ estimates of profitability were overly optimistic).

69 UN GAOR, 22d Sess, 1515th mtg at 8–9 (cited at note 65) (statement of Ambassador Pardo) (“The wording of the [Continental Shelf] Convention, whatever may have been the intentions of its authors, provides powerful legal encouragement to the political, economic, and military considerations that are inexorably impelling technologically advanced States to appropriate the sea-bed and ocean floor beyond the 200-metre isobath for their own use.”).

70 In fact, there was more opposing the developed countries’ attempt to claim territory than the coalition of developing nations. Politically, it was inexpedient to claim proprietary rights to portions of the sea, and the General Assembly eventually passed a resolution proclaiming the seabed to be beyond national jurisdiction and the “common heritage of mankind.” UN Doc A/RES/2749 (XXV) (cited in note 28).

71 See Reservation exclusively for the peaceful purposes of the sea-bed and the ocean floor, and the subsoil thereof, underlying the high seas beyond the limits of present national jurisdiction and use
issues of contention included the scope of territorial waters, ownership of the seabed beyond territorial waters, and the right of transit. The developed nations wanted recognition of rights to exploit the ocean floor, while developing and landlocked nations wanted a share of the ocean mining profits. Coastal developing nations sought to extend their exclusive economic rights beyond traditional territorial waters, but developed nations with large maritime forces feared that such expansion of territorial claims to the sea would result in impeded navigation for their navies.

Countries were able to reach consensus on the 1982 UNCLOS largely as a result of the “package deal” mechanism, a consensus-building strategy that the conferences on the Law of the Sea helped popularize. This mechanism is a prime example of how parties sought to trade in smaller units while making these exchanges contingent on an interdependent relationship (in this case, the “package deal”). For example, maritime superpowers and poorer coastal nations could not agree on an appropriate boundary for the territorial sea, where the coastal state would enjoy absolute sovereignty and exclusive economic rights. Rather than thinking of territorial rights over coastal seas in indivisible terms of “absolute sovereignty,” the 1982 Convention solved this impasse by splitting up the rights to navigate, exploit natural resources, and enforce rules.

of their resources in the interests of mankind, and convening of a conference on the law of the sea, UN Doc A/RES/3029 (XXVII) (Dec 18, 1972) (setting the dates and purpose of the first session).

See Katherine Hill and Zachary Wales, An Interview with Gudmundur Einiksson, 59 J Intl Affairs 43, 44 (2005) (“A major aspect was the debate over narrow zones, which are somewhat linked to territorial shipping rights, navigation rights and resource rights.”). See also Henkin, How Nations Behave at 217, 219 (cited in note 64).

Henkin, How Nations Behave at 50 (cited in note 64) (observing that initial efforts tried to give special rights to landlocked and other “geographically disadvantaged” countries, who could not have as ready access to deep sea mining ventures).

Id at 216 (observing that the developing nations had built a strong coalition by employing the rhetoric of “economic self-determination” and characterizing the act of other states mining and fishing in their “patrimonial seas” as “economic imperialism”).

Id at 219 (noting that extending the territorial sea to twelve miles would convert important international waterways into territorial sea).

See G. Plant, The Third United Nations Conference on the Law of the Sea and the Preparatory Commission: Models for United-Nations Law-Making?, 36 Intl & Comp L Q 525, 525, 528 (1987) (noting that the concept of passive consensus procedure is “as old as primitive law” and that the concept of negotiating trade-offs is a familiar one in diplomacy, but suggesting that the UNCLOS conferences employed a new type of “active consensus” strategy which involved extensive “package deal” trade-offs between functionally unrelated issues).

See Hill and Wales, 59 J Intl Affairs at 45 (cited in note 72) (“Since all of these issues were negotiated simultaneously, it was decided early on that it wouldn’t be possible for a country to elect to participate in to some areas and not others.”).

Article 3 of UNCLOS provided that the “territorial sea” of coastal states could extend twelve nautical miles from the shore, granted an additional twelve-nautical-mile zone called the “contiguous zone” where the coastal state could take measures to enforce its customs, fiscal, immigration, and sanitary laws. Article 3 also granted a generous two-hundred-nautical-mile zone called the “exclusive economic zone” (EEZ) where the coastal state would have exclusive rights to exploring, exploiting, conserving, and managing natural resources. In exchange for the wide scope of economic rights granted to the coastal nations, the powerful maritime states were able to negotiate a comparably wide range of navigational rights, including the right of innocent passage through all territorial seas and a right of transit passage through straits used for international navigation.

The controversy regarding deep-sea mining was resolved similarly, by forcing a proportionate division of seabed claims between the developing nations and the developed nations. An equitable division of property rights over the ocean floor seemed impossible, since the developed nations had the technology (theoretically) and the capital to benefit from the ocean floor, and the developing nations did not. Instead, the treaty envisioned that developing countries would get a right to a share of the profits, even if those countries could not directly take advantage of the deep-sea mining rights themselves. Every time a national enterprise sought to claim an area of seabed, it would have to present two sites to the International Seabed Authority. The International Seabed Authority would then choose the one it deemed better, and an organ

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79 UNCLOS, Art 3 (cited in note 5) (defining the breadth of the territorial sea).
80 Id at Art 33 (defining the sea’s contiguous zone).
81 Id at Art 55 (defining the specific legal regime of the exclusive economic zone of the sea).
82 Id at Arts 18–19 (defining sea passage and innocent passage).
83 UNCLOS, Arts 38–39 (cited in note 5) (defining the right of transit passage and the duties of ships and aircraft during transit passage).
84 Henkin, How Nations Behave at 221 (cited in note 64). As it turns out, no one currently has the technology to exploit the ocean floor. See Hill and Wales, 59 J Intl Affairs at 48 (cited in note 72) (reflecting in hindsight that the deep sea mining venture was economically non-viable, given contemporary technology).
85 Hill and Wales, 59 J Intl Affairs at 48 (cited in note 72) (“The compromise between developed and developing nations was that there would be a shared responsibility, a dual system, and individual countries that wanted to exploit deep sea minerals would do so on a parallel basis, sharing the revenues of any mining operation with the international community.”).
86 Young, Equity at 4–5 (cited in note 3) (describing the formulation and purposes of organs to implement deep sea mining). But see Brams and Taylor, Fair Division at 17–18 (cited in note 31) (noting that the “one divides, the other chooses” method tends to systematically favor the divider, because she can choose what she knows about the chooser’s preferences to get far more than fifty percent of the subjective valued prize).
called the Enterprise would develop the seabed site and distribute profits, with the technological support of the developed nations. 87

Not only did UNCLOS employ the concept of the “smaller unit,” it also deliberately structured these exchanges to foster interdependent relationships between the developing and developed nations. 88 First, it prohibited states from attaching reservations, derogating unilaterally, or entering into incompatible inter se agreements. 89 These prohibitions would help preserve the “package deal” that the states agreed on during the Third Conference. 90 Such provisions would preserve the exact pairing of compromises made on each side, so that parties could owe obligations to one another even on conceptually unrelated issues. 91 Second, UNCLOS divided up entitlements in a way that still forces parties to cooperate with one another in order to enjoy their rights. When breaches occur, the states parties will find that self-help is not worth their while: since UNCLOS was negotiated at such high costs 92 and ties so many interests together, states would generally find it cost-efficient to submit to an international tribunal and risk paying monetary damages. 93 However, even if a gross breach of the treaty

87 Henkin, How Nations Behave at 221 (cited in note 64) (“The right to exploit was divided between national enterprise and a new international enterprise run essentially by the developing states, with the developed states giving the international enterprise the capital and technology it would need in order to get started on one set of mining operations.”).

88 Consider UNCLOS, preamble at 1 (cited in note 5) (acknowledging that the problems of ocean space are “closely interrelated” and “need to be considered as a whole”).


90 Hill and Wales, 59 J Intl Affairs at 45 (cited in note 72). Without these UNCLOS clauses protecting the “package deal,” current international law would permit states to place reservations or selectively accede to only the provisions favorable to it, defeating the whole compromise. See Vienna Convention, 1155 UN Treaty Ser 331, Arts 2(1)(d), 19 (cited in note 37).

91 For example, the right of transit and innocent passage is conceptually linked to the right to expanded exclusive economic zones (EEZ), since the expansion of the EEZ could impede the other party’s exercise of its navigational rights. However, there is no readily apparent conceptual reason why the right to engage in deep sea mining should be linked to the right to an expanded EEZ. Yet, since these provisions reflect a larger balance of compromises between the developed nations and the developing nations, countries may feel politically obligated to respect these rights.


93 See, for example, M/V Saiga (No 2), 120 ILR 143, at ¶¶ 167–82 (cited in note 52) (awarding a standard calculation of compensatory damages for a violation of the UNCLOS provisions on releasing foreign vessels upon bail).
should occur and even if the states parties should fail to submit to the prescribed dispute settlement mechanism, the internal linkages in the UNCLOS treaty could disincentivize parties from retaliating disproportionately and help contain the breach to a limited scope. For example, the right to an expansive exclusive economic zone and the right of innocent passage and transit passage necessarily anticipate that these two uses of the sea will coexist in the same space. If Nation A fails to restrain its fishing boats from wandering into Nation B’s EEZ, and attempts to settle the matter at court fail, the Nation B could reciprocate by refusing the right of innocent passage to Nation A’s ships. Because these rights have been negotiated as smaller units of a larger whole, it is easier to be proportionate in retaliation. Because these rights are closely coordinated with one another, it is easier to establish the causal link between the right that is breached and the self-help remedy applied.

A second example: rather than giving ocean floor mining rights to developed nations with no strings attached, UNCLOS requires developed nations to enter into a long-term cooperative relationship with the International Seabed Authority. This example illustrates why a long-term relationship may be preferable to an upfront side payment, or even an ongoing fee. First, part of the problem with an upfront side payment to the developing nations was that estimates of future profits from deep-sea mining were preliminary and speculative. An early side payment could result in a windfall for the developing nations if the viable technology for deep-sea mining turned out to be over a half-century away, or it could turn into a steal if it turned out that a technology breakthrough was imminent. To make matters worse, developing nations overestimated the profitability of these ventures, while the developed nations kept to conservative estimates. Structuring the side payment to be an ongoing arrangement, expressed as a percentage of the actual profits, would help alleviate these uncertainties in valuation. Even then though, a developing nation might worry that if the mining operations become too profitable, the far more powerful developed nations would renegotiate the side payments or simply

94 See UNCLOS, Arts 286–88 (cited in note 5) (prescribing the proper procedures for resolving disputes arising under UNCLOS and authorizing certain international tribunals and courts to hear UNCLOS cases).


96 Antrim, Converting Competition to Collaboration: Creative Applications of Models in the Law of the Sea Negotiations, in Avenhaus and Zartman, Diplomacy Games at 219–20 (cited in note 68) (indicating that the MIT model presented to negotiators used the best estimates of industry experts at the time, but that there were many unknown variables).

97 Id at 227.
choose to invest more in their navies and less in sustaining an old compromise. The best solution seems to be to require the developed nations to make a long-term capital investment in an international mining enterprise that would distribute its profits to the developing nations. By establishing this obligation while the prospects of future mining profits are uncertain, the developing nations can ensure that the developed nations will be more likely to cooperate in the international enterprise. Committing to early development and ongoing funding of the international enterprise helps ensure that the developing nations’ enterprise keeps pace with the developed nations’ mining infrastructure.

The problem with side payments is that money is often too liquid of an asset. The smallness of the unit of exchange is not enough to guarantee a smooth trade. Because money is so easy to convert into other forms of value, it is not a credible commitment mechanism. For parties who cannot always rely on a centralized dispute settlement mechanism, incentives that come from within are crucial to keeping the agreement alive. Joint investments into infrastructure, a network of conceptually related rights, and means of containing the breach with proportionate retaliation all help build incentives to preserve the ongoing relationship between the contracting parties. The fact that a large network of interdependent obligations and rights is composed of smaller units of entitlements functions as a stopgap that prevents comparatively minor breaches from becoming larger issues, by offering incremental means of retaliating proportionately. Meanwhile, interdependent commitments, such as joint investments and mutually dependent rights, help inflate the cost of major breaches to help parties internalize the high transaction costs of renegotiating ignored treaties, the costs to international order caused by breach, and the damage done to the parties’ long-term relationship. The inflexibility of a treaty (created by clauses that prevent reservations, unilateral derogations, and the like) also has the effect of giving priority to the provisions of those treaties over the provisions of more flexible treaties. This seems to be good evidence that states behave rationally even when they decide to breach, taking into account the high costs of unsettling interdependent commitments and negotiating institutional change when carefully selecting which treaties to modify or breach.

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98 Consider Williamson, 73 Am Econ Rev at 519–20 (cited in note 38) (arguing that contract theory takes an unnecessarily centralized, court-dependent focus, and that the use of “credible commitments,” like giving a hostage to the other side or making a big investment in infrastructure, helps create a private ordering that enforces prior agreements). Similarly, here, the developed nations were asked to commit a “hostage” to the developing nations: they must invest in the international mining enterprise in order to gain legal recognition of their private enterprises.

99 See Plant, 36 Intl & Comp L Q at 566 (cited in note 76) (likening UNCLOS’ inflexibility to the inflexibility of a “Constitution,” and noting that “on its own terms it enjoys a strong degree of pre-eminence over other treaties by virtue of its integral status.”).
Negotiating issues in a piecemeal, “tit-for-tat” way may have special negative consequences in international law, however. Because widely accepted “customs” can be as legally authoritative as treaties in international law,\textsuperscript{100} it can become difficult to arrange “package deals” when one of the coalitions uses what is already a widely recognized right as a bargaining chip to negotiate the recognition of a more controversial right. For example, many coastal countries, even those that were not part of the developing nations’ coalition, favored the idea of an expansive EEZ, and enough countries had accepted the idea of the expansive EEZ for the concept to become recognized as customary international law, even for those countries that chose not to ratify UNCLOS.\textsuperscript{101} As such, evolving international custom provided a way for non-party states to avoid the package deal that conditioned recognition of EEZ rights to submitting to UNCLOS’s deep-sea mining provisions. The US, for example, currently claims a two-hundred-nautical-mile EEZ, even though it is not a party to UNCLOS.\textsuperscript{102} This surprising turn of events does not detract from the idea that states should negotiate in smaller, interdependent units, however. It simply serves as a reminder to negotiators that the rights they bring to the table must be carefully selected to add to whatever rights that are already (or soon will be) recognized under international custom. As economists have long recognized through core theory, interdependent commitments can only exist where the right cannot exist apart from that cooperative relationship.\textsuperscript{103}

\textsuperscript{100} See ICJ Statute, Art 38, ¶ 1 (cited in note 48) (stating that “international custom, as evidence of a general practice accepted as law” is an acceptable source of international law); see also Restatement (Third) of the Foreign Relations Law of the United States, § 102(1) (1987) (stating that “[a] rule of international law is one that has been accepted as such by the international community of states in the form of customary law,” “by international agreement,” or “by derivation from general principles common to the major legal systems”).

\textsuperscript{101} Case Concerning Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada v US), 1984 ICJ 246, 294 (Oct 12, 1984) (noting that though several states do not seem inclined to ratify UNCLOS, this “in no way detracts from the consensus reached on large portions of the instrument.”); see also Case Concerning Passage Through the Great Belt (Finland v Denmark) (provisional measures), 1991 ICJ 12, 13 (July 29, 1991) (noting that certain provisions of UNCLOS now reflect customary law).

\textsuperscript{102} Reagan Proclamation, 83 Dept State Bull No 2075 at 70–71 (1983) (declaring that the US will adhere to the EEZ limits recognized by existing maritime practice, which also happen to be the limits set by UNCLOS).

\textsuperscript{103} See Telser, 8 J Econ Perspectives at 152 (cited in note 12) (explaining the core principle that “any coalition of traders will only participate in the market as a whole if and only if they can do at least as well as they could off by themselves in their own coalition.”).
B. A Trade Agreement Case Study: The World Trade Organization

In 1994, states participating in the Uruguay Round of trade negotiations concluded the Marrakesh Agreement Establishing the WTO, which required states parties to the treaty to adhere to the new General Agreement on Tariffs and Trade (GATT), the General Agreement on Trade in Services (GATS), and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). As in the UNCLOS agreement, there had been a fundamental rift during negotiations between the developed nations and the developing nations. Initially, developing countries were reluctant to agree to TRIPS, since they were more likely to be second-comers, and the developed countries would have the technology and the capital to gain the larger part of TRIPS’ benefits. Developed countries also had pressure from domestic interest groups to maintain protectionist policies for their manufacturing and agricultural industries. Developed and developing countries also had to reconcile conflicts between import-dependent and export-dependent interests, and coordinate their domestic trade and intellectual property policies to the WTO’s minimum standards. However, two strategies in particular, which involved the use of “smaller, interdependent units,” helped form the basis of consensus for the WTO agreements.

104 Marrakesh Agreement, 1867 UN Treaty Ser 154 at Art 2, ¶ 2 (cited in note 9).
105 Meir Perez Pugatch, The International Political Economy of Intellectual Property Rights 49 (Edward Elgar 2004) (observing that developing countries had little to gain from a liberalized international intellectual property regime, which would open domestic products to foreign competition).
106 But consider J. Michael Finger and Philip Schuler, Poor People’s Knowledge (Oxford 2004) (describing various ways that the current regime could uniquely improve the wealth of developing nations, by granting intellectual property rights to traditional craft, ethnobotanical knowledge, and intangible cultural heritage such as folklore, native art, and agricultural techniques).
108 See Richard H. Steinberg, In the Shadow of Law or Power? Consensus-Based Bargaining and Outcomes in the GATT/WTO, 56 Intl Org 339, 345 (2002) (noting that the benefit of accessing a foreign market would come with the cost of opening its domestic market to others, but that the opportunity cost of losing access to a market was smaller for large economies, giving them the upper hand in the negotiations).
109 See Jerome H. Reichman, Universal Minimum Standards of Intellectual Property Protection under the TRIPS Component of the WTO Agreement, in Carlos M. Correa and Abdulqawi A. Yusuf, eds, Intellectual Property and International Trade: The TRIPS Agreement 24–25 (Aspen 2008) (reasoning that the universal minimum standards imposed by TRIPS was a means of protecting the developed countries’ comparative advantage in the production of intellectual goods, in order to balance out the comparative advantage that developing nations had recently gained in manufacturing traditional industrial products).

The WTO created cross-issue package deals between several different areas of trade in order to cement a general consensus. These linkages take advantage of the "smaller, interdependent unit" concept in several ways. For example, the negotiators of the Uruguay Round showed willingness to uncouple specific trade issues from a larger agricultural policy agenda, third-world redistribution agenda, or tariff policy. Previously, when countries had engaged in single-sector negotiations, countries were not able to achieve greater trade liberalization. By contrast, the Uruguay Round negotiations isolated specific concessions, such as the phase-out of the Multi-Fiber Arrangement (a quota system limiting textiles exports from developing countries) and the continuation of the Generalized System of Preferences (preferential tariff-cutting to developing country exports), outside of their normal context as one part of a larger textile policy or protectionist agricultural policy. Breaking up this issue from the larger policy (in other words, using a smaller unit of negotiation) allowed the negotiators to mix and match these concessions with other concessions from unrelated policy areas, such as intellectual property rights (in other words, building interdependence between the issues being negotiated). In this particular linkage deal, for example, WTO negotiators envisioned that developing countries would get apparel and agriculture liberalization, while developed countries would use this concession to leverage a global minimum standard of international intellectual property protection. By implicating more trade areas in the deal, the negotiators could mobilize a greater number of domestic interest groups to

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110 As in UNCLOS, the use of package deals meant that countries could not sign on to one party of the treaty without signing on to the whole package. See Marrakesh Agreement, 1867 UN Treaty Ser 154 (cited in note 9) (compelling all states parties to sign on to TRIPS, GATT, and GATS, and only leaving certain plurilateral agreements optional).

111 See Davis, 98 Am Pol Sci Rev at 159 (cited in note 107) (suggesting that the agendas of the US–Japan talks on beef and citrus and the US–EU talks on wine were much more protectionist because they were single-sector negotiations that focused exclusively on agricultural products).

112 Alice J.H. Wohin, Comment, Towards GATT Integration: Circumventing Quantitative Restrictions on Textiles and Apparel Trade under the Multi-Fiber Arrangement, 22 U Pa J Int'l Econ L 375, 378 n 14 (2001) (noting the developing nations' disappointment on hindsight that the phase-out of the Multi-Fiber Arrangement they negotiated with the developed nations was not worth the intellectual property concessions they gave in return).


114 Michael P. Ryan, The Function-Specific and Linkage-Bargain Diplomacy of International Intellectual Property Lawmaking, 19 U Pa J Int'l Econ L 535, 541–42 (1998) (noting that previous negotiations were not able to achieve such bargains because intellectual property negotiations were handled separately from trade negotiations, through WIPO and GATT, respectively).
counter the fallout from the negative concession. Furthermore, as the final “package deal” grew to encompass the domain of several different government departments and agencies, it became far less likely that any interest-group-controlled policymaker could successfully veto the final outcome as contrary to domestic policy.

Part of the problem with single policy negotiations is that, too often, both sides want similar, mutually incompatible concessions. For example, the agricultural interest groups in both countries would want protective tariffs against foreign goods and unimpeded access to foreign markets. Establishing conceptual ties between previously unrelated policy areas would help countries settle on concessions that affect different issue areas and, therefore, are not mutually exclusive. Making concessions across policy areas also helps create win-win situations that take into account the comparative advantage of each country and the differences in relative value of concession between the party making the concession and the party receiving it. There would be ongoing incentives for parties to keep their commitments, because the negotiating history would give a credible rationale for why the textile policy of one country could plausibly and justifiably affect the intellectual property rights of the other country. This sort of interdependence cannot happen without isolating smaller issues from broader national policies, because it is much harder to displace entire national policies rather than to mix and match smaller concessions.

2. Institutional coordination

Once the states parties had succeeded in all of the cross-issue micro-balancing, there needed to be a mechanism to maintain these linkages and concessions in their proper proportion. The Marrakesh Agreement addressed this need by establishing a formal Dispute Settlement Body (DSB), which had the power to determine liability and coordinate states parties’ retaliatory measures when a breach occurs.

See Davis, 98 Am Pol Sci Rev at 157 (cited in note 107) (proposing that cross-sector linkages in trade liberalization deals could offset the disapproval of agricultural lobbies by appealing to the industrial and service sector interest groups).

For example, giving legal recognition for a country’s biological patents will be a more valuable concession for a technologically advanced party to receive than for the technologically behind party to give. Similarly, a country that is already transitioning into service-oriented industries may find that eliminating tariffs for manufactured goods and agricultural products is a small concession to make, while a developing nation may find this a very valuable concession to get.

Marrakesh Agreement, 1867 UN Treaty Ser 154 at Art 3, ¶ 3 (cited in note 9); consider DSU, 1869 UN Treaty Ser 401 at Art 22 (cited in note 25) (establishing the procedures for determining liabilities for breach and appropriate retaliatory measures).
A previous form of GATT predating the WTO had existed from 1947, but it had never implemented a permanent, formal administrative structure. Because of this lack of a coordinating body, developed nations prior to 1994 were able to bully developing nations that did not comply with the desired intellectual property standards, using their large markets as leverage. For example, the US often used the General System of Preferences policy (granting preferential treatment to certain countries) to impose trade consequences on countries that had intellectual property standards it deemed inadequate. The US could impose tariffs on selected imports as retaliation for other countries' perceived breaches of intellectual property rights, under Section 301 of the Trade Act of 1974, and in some cases the US was even able to change foreign legislation on intellectual property rights, despite strong domestic opposition in the foreign country to the new regime. Given the unpredictability and unilateral nature of retaliatory measures based on power politics, the developing nations had an incentive to submit to a coordinating international infrastructure, such as the DSB, even if they might not have liked the stricter TRIPS, GATT, and GATS regimes that came with the DSB. As a part of the deal, the US agreed to submit all WTO-based Section 301 complaints to the WTO’s DSB.

The DSB owes its success in part to the highly interdependent system of concessions established during the Uruguay Round negotiations. The Dispute Settlement Understanding (DSU) of the WTO provides that a state party who has suffered from a treaty breach may, after an appropriate finding of liability by

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118 Protocol of Provisional Application of the General Agreement on Tariffs and Trade (Oct 30, 1947), 55 UN Treaty Ser 308 (implementing the original 1947 GATT treaty, which itself was never officially entered into force).

119 John H. Jackson, William J. Davey, and Alan O. Sykes, Legal Problems of International Economic Relations 289 (West 3d ed 1995) (noting that an ad hoc coordinating system developed despite the lack of a formal mechanism).


122 See, for example, Pugatch, The International Political Economy of Intellectual Property Rights at 67 (cited in note 105) (explaining how the US was able to pressure South Korea to grant patent rights to pharmaceutical products, rather than processes, despite strong opposition from the Korean Pharmaceutical Association and the Korean Publishers’ Association).

123 See Robert E. Hudec, Broadening the Scope of Remedies in WTO Dispute Settlement, in Friedl Weiss and Jochem Wiers, eds, Improving WTO Dispute Settlement Procedures 369 (2000) (describing how the majority of Uruguay Round participants, who originally wanted compliance with WTO remedy awards to be on a voluntary basis, quickly changed their minds once the US began to enforce Section 301 unilaterally whenever it perceived a “violation” of its international trade provisions).

124 Id.
the DSB, seek permission to suspend its concessions. To put it another way, the DSB gives permission to the offended party to engage in self-help. For example, Antigua submitted a complaint to the DSB in 2003, arguing that the US had violated GATS when it banned Internet gambling sites based in Antigua from servicing American gamblers, without also banning certain state-approved horseracing gambling sites based in the US. The DSB determined that this was discriminatory, and permitted Antigua to suspend its obligations to the US under the TRIPS agreement. Here, as in UNCLOS, the use of smaller, interdependent issue linkages helped contain breaches to their appropriate scope. The DSU requires any suspension of concessions or obligations to be proportional to the breach, and instructs the retaliating party to get advance permission from the DSB confirming that the countermeasures are appropriate. This sort of partial suspension of treaty obligations would not be possible if the WTO agreements had not been structured, from the beginning, as a system of small, artificially linked compromises. Because the issues are severable from the overall WTO deal, a breach does not unravel the entire agreement. Because the issues are interdependent (because of the way the negotiations paired unrelated issues together as linked concessions), parties have a conceptual rationale and a limiting principle to explain which retaliations, even if seemingly unrelated, are actually appropriate and proportionate.

One curiosity about the DSB’s self-help-based remedies is that the parties to the dispute already have the right to exercise self-help, as sovereign nations, regardless of whether the DSB authorizes the offended party to take countermeasures. Though the world may disapprove of such unilateral actions, a party who feels genuinely wronged could retaliate by suspending

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125 DSU, 1869 UN Treaty Ser 401 at Art 22, ¶ 1 (cited in note 25) (providing that a party should only apply such retaliatory measures after the party at fault fails to comply with the DSB’s ruling).


127 DSU, 1869 UN Treaty Ser 401 at Art 22, ¶¶ 3–4 (cited in note 25) (requiring that the level of suspension of concessions be equivalent to the level of the offense, and advising the party to try to suspend within the same “sector” as the violation—for example, suspending service-related concessions if the violation is under GATS).

128 See, for example, International Law Commission, Draft Articles on Responsibility of States for Internationally Wrongful Acts, UN GAOR, 56th Sess, Supp No 10, UN Doc A/56/10, ch IV.E.1, Arts 49–52 (2001) (requiring that countermeasures be proportionate and warning that countermeasures are illegal once the dispute is submitted to a court, but omitting any conclusion on the illegality of countermeasures prior to court involvement); see also Restatement (Third) of the Foreign Relations Law of the United States at § 905 (cited in note 100) (recognizing that a state victim may resort to countermeasures that might be otherwise unlawful if it will remedy the violation and be proportionate).
certain obligations, all on its own. Thus, when states parties voluntarily enlist the DSB's help in resolving a dispute and selecting an appropriate countermeasure, they are making a deliberate choice to invest in the credibility of the DSB. By seeking to legitimate their actions under an international standard rather than a unilateral standard, parties who submit to the DSB give the WTO an opportunity to clarify treaty obligations and generate new law that fills in the gaps left by the treaty texts. Though states parties could theoretically act independently, the DSB serves as a coordinating mechanism, even if it cannot serve as an enforcing mechanism. Short of a massive, controversial breach, parties seem to be willing to let the DSB create an internationally agreed-upon reference point for where liability and proportionality lies. In that sense, the WTO has built-in incentives for parties to commit to interdependence, because the DSB serves a coordinating function in deciding which issues ought to be linked and to what proportions. As the international controversy over the US' use of Section 301 demonstrates, parties might prefer to bind one another to an interdependent relationship by investing in an international dispute resolution mechanism, rather than to risk a world where each party is its own judge. Binding one another to a long-term, routine procedure makes sense when any one given dispute is not worth the cost of creating new infrastructure from scratch.

III. WHERE LINKAGE NEGOTIATIONS FAIL: USE OF SMALLER UNITS WITHOUT INTERDEPENDENCE

In the space remaining, I address the importance of having both properties—smallness and interdependence—in order to realize the benefits of consensus in negotiations, treaty stability, and long-term cooperation. In much of the linkage literature, issues are considered linked "when they are simultaneously discussed for joint settlement." David Leebron, in his article, *The Boundaries of the WTO: Linkages,* observes that negotiators and interest groups have tried to tie all kinds of subject areas, however unrelated, to the WTO trade regime. However, there is a limit to how far one can tie unrelated issues together. Side payments, for instance, are a quintessential example of units

129 However, strictly speaking, the DSB is not authorized to create new law via interpretation, since the WTO agreements stand "as is" as the product of many negotiations. In practice, however, parties will inevitably adjust their behavior and expectations based on the precedents and clarifications that come along with each case decision.


131 Leebron, 96 Am J Intl L at 5-6 (cited in note 7) (noting that there have been attempts to tie trade to environmental commitments, labor standards, and even human rights).
of exchange that are small but not interdependent.\textsuperscript{132} Many scholars have noted that side payments, despite their easy divisibility and liquidity, are disfavored as bargaining chips.\textsuperscript{133} For example, in the Uruguay Round, developed countries preferred to adjust their grants of food assistance in exchange for restricting their agricultural export subsidies, rather than giving direct side payments.\textsuperscript{134} The advantages of interdependence, as discussed in this Comment, give one explanation why merely dealing in small, easily convertible units might not be enough to facilitate a long-term agreement, however convenient it may be in the short term.

While breaking a large conflict into small sub-issues may have some inherent advantages, it is not enough to maintain a long-term treaty relationship. If the parties do not rearrange these sub-issues into an interdependent structure, their side payments and linkages will not be sufficiently anchored to a conceptual justification or limiting principle to give a clear reference point of where the mutual obligations lie. Although there may be some advantages to having some severable sub-issues in the agreement, as the WTO’s method of prescribing proportionate countermeasures illustrates, obligations that are too independent from one another will disincentivize parties from building reliance on a long-term “entanglement” with one another. As Oliver Williamson suggested in his article, \textit{Credible Commitments},\textsuperscript{135} staking a binding investment in a cooperative venture may build credibility for a long-term relationship, even if such an entangling investment may seem undesirable from an efficient breach standpoint.

As a last mini-case study, consider Mexico’s proposal to the WTO regarding the implementation of “tradable remedies.”\textsuperscript{136} Mexico noted that small or developing countries often encountered difficulty in enforcing effective countermeasures when larger, developed countries breached a WTO

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\item See Section I.A.2.
\item See, for example, Leebron, 96 Am J Int’l L at 14 (cited in note 7) (observing that the developed countries preferred to establish a long-term fund to help developing nations pay for environment protection measures, rather than making an “unrestricted side payment”)
\item Id (citing \textit{Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on Least-Developed and Net Food-Importing Developing Countries}, in Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, in World Trade Organization, \textit{The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations} 392 (Cambridge 1999)).
\item See Williamson, 73 Am Econ Rev at 19 (cited in note 38) (investments that appear undesirable may help build credibility for long-term relationships).
\end{enumerate}
obligation. Because smaller, developing nations cannot effectively take advantage of DSB's self-help remedies, Mexico proposed that such countries should have the right to auction off their remedies to other states.

At first glance, the auction system seems to run into the same problem as side payments: it uses a "smaller," more separable unit of exchange without creating the interdependence necessary to make it credible currency. The current WTO policy requires that the remedies are similar in kind to the breach: the DSB sets a maximum value that the offending country can recover through its countermeasures, and it requires that the countermeasure should affect the same treaty "sector" (GATT, GATS, or TRIPS) as the breach, whenever possible. However, the tradable remedy has the effect of unhitching the consequences of the breach from the relational and conceptual context built by the WTO's network of treaty concessions. Countries may find the auction system unsettling because of the political friction and public misperceptions that may occur when a third-party country who has not been offended earns the right to "retaliate" against a defendant.

Also, the remedy may change in value as the ownership changes. Even if theoretically, the buyer country must adhere to the same exact numerical value limits as the auctioning country when it imposes the remedy, in practice, this numerical value is probably discounted based on who the party is. For example, if a poor island country wins a $100 million remedy, it may cost the offending party nothing if it already conducts less than a $100 million worth of trade with the country. If the EU won that award in an auction, however, a $100 million remedy may create serious trade consequences for the offending country. Furthermore, Kyle Bagwell, Petros C. Mavroidis, and Robert W. Staiger, in a study analyzing the economic implications of Mexico's proposal, suggest that the auction system necessarily creates an externality, because when the auction winner implements the anticompetitive countermeasure, a portion of the goods or services that are blocked will be diverted to the losing party's markets. Such an externality could create perverse incentives for parties to try to lose the auction or bid higher for it than they would based on the absolute value of the

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139 DSU, 1869 UN Treaty Ser 401 at Art 22, ¶¶ 3–4 (cited in note 25).

140 Bagwell, Mavroidis, and Staiger, *The Case for Tradable Remedies in WTO Dispute Settlement* at 17 (cited in note 137).

141 Id at 17–18.
countermeasure, because they are conscious of the adverse consequences that the countermeasure could have on the auction loser’s markets.\textsuperscript{142} There is also the possibility that the infringing government would capitalize on its perception that the DSB has undervalued the breach or that the victim state will sell the remedy at a discounted price because there will be no takers. Although the proposal does not anticipate that the infringing government could participate in the auction, if an infringing government were allowed to buy off the remedy at what it perceives to be a discounted price, then this would endanger the deterrence system established under the DSB.\textsuperscript{143}

Theoretically speaking, however, an auction system is not inherently incapable of creating a structure that encourages interdependence. For example, negotiators of the Uruguay Round were able to link issue areas that were traditionally completely alien to one another and build a conceptual understanding that one country’s agricultural export entitlements can be linked to another country’s intellectual property rights. The negotiation history of the Uruguay Round, and the package deals that resulted, help justify these new conceptual links of interdependence. Similarly, if an auction system had been a part of the original negotiations and parties had created enough linkages to condition the exercise of their entitlements to the success of the auction system, perhaps the auction system could have worked. The developed nations and the developing nations would probably have had to create some sort of discounting system to take account of the changes in value and externalities that occur when a remedy changes ownership. Or, alternatively, countries could have collectively decided to accept that this variation in value is a part of the auction system and left the externalities uncorrected, assuming that the possibility of spillover effects would generate international pressure for countries not to breach in the first place. However, the problem currently facing the Mexico proposal is that these compromises and policy decisions were not negotiated ex ante. Without a prior conceptual link based on negotiation history, it is hard for countries to justify an ex post adjustment that changes the potential value of their remedies. Countries carefully take into consideration who they are offending and decide whether they can afford to offend such parties in a larger context of foreign policy, reciprocity, and long-term trade relations. Because parties have already invested heavily in building expertise and norms around this identity-based political web, it is unlikely that a new system of interdependence will emerge around the auction system, unless it had been explicitly negotiated beforehand. Given the costs and uncertainties involved in instituting a new system, the transaction costs of negotiating tradable remedies may simply be too high.

\textsuperscript{142} Id at 19.
\textsuperscript{143} Id at 29.
This Comment has explored how countries could negotiate and maintain more stable treaties by conceptualizing their legal entitlements in smaller units and conditioning the exercise of these entitlements on continued cooperation and investment in an ongoing system of interdependence. Countries can benefit from the flexibility and cross-issue linkages that come with unbundling particular issues from a larger policy (as in the WTO negotiations) or, to borrow a metaphor from property theory, trading individual sticks from the bundle of territorial rights (as in the UNCLOS negotiations). However, as the Mexico proposal for tradable remedies illustrates, merely working in narrowly framed or highly exchangeable entitlements is often not enough to forge a viable agreement. This Comment tries to add to the current academic discussion on linkages and treaty negotiation by emphasizing the importance of interdependence, even long after the negotiations have concluded. When structuring treaty obligations, negotiators should give opportunities for countries to invest in a long-term relationship. For example, they can create dispute settlement mechanisms that coordinate how parties react to breaches and save the parties the transaction costs of renegotiating an equilibrium after each breach. As parties begin to build reliance on the dispute settlement mechanism, the mechanism can serve as a way to generate international norms that clarify parties’ obligations to one another. A treaty might also encourage long-term relationships between parties by requiring them to make an ongoing investment in a joint venture. By binding parties to make credible monetary and political commitments to an international infrastructure, a treaty can make breaches costly and thus incentivize parties to compete within the system rather than without. A treaty could link entitlements together as a system of package deals at the negotiations stage, so that parties can justify how the breach of an obligation in one area can affect their entitlements in another. Pairing specific entitlements to specific obligations can also help contain the negative effects of breaches when they do occur, by creating a sensible measuring stick for determining proportional retaliations.

Creating these interdependent relationships help treaties gain institutional inertia, and states should take into account the added benefits that come from having a stable system that coordinates collective action and strengthens international norms over time before they decide to engage in short-term opportunistic behavior. Unlike private parties who may contract at arm’s length and participate in a market of infinite sellers and buyers, states are stuck with one another for the long run, and the number of potential allies and trading partners is finite. Where private parties can have the luxury of contemplating the “efficient breach,” self-interested states must consider the cost of forgoing stable, long-term relationships. The creation of a predictable, reliable world
order may be the greatest positive externality of all, and the prospect of capturing these benefits may be worth the encumbrance of binding one’s government to a highly interdependent, long-term commitment.