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Ruling the Sea: Managing Maritime Conflicts through UNCLOS and Exclusive Economic Zones

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Two primary mechanisms for managing competitive interstate claims to maritime areas are evaluated: the creation of private ownership of maritime zones in the form of Exclusive Economic Zones (EEZs) and the creation of a global institution, the United Nations Convention on the Law of the Sea (UNCLOS), to establish standards for maritime claims and dispute resolution procedures. Analyses of maritime claims in the Western Hemisphere and Europe from 1900 to 2001 show that declared EEZs help states reach agreements over maritime conflicts in bilateral negotiations, while membership in UNCLOS prevents the outbreak of new maritime claims and promotes third-party management efforts of maritime conflicts. Neither mechanism influences the probability of militarized conflicts over maritime areas.

KEYWORDS *economic zones, maritime zones, UNCLOS*

Battle on the high seas has often been the subject of dramatic chronicles, ranging from the Battle of Salamis and the Invincible Armada to pirates, treasure fleets, and massive clashes between battleships or aircraft carriers. Conflicts on the seas still occur today, but now they involve fishing

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trawlers and coastal patrol vessels, rather than galleons or dreadnoughts. Today's conflicts are no longer driven by the lure of treasure, expansion, or bloodlust, but by more mundane concerns such as fishing. Yet today's maritime disputes are not trivial, occurring quite frequently and often between democratic states (Mitchell and Prins 1999). The exploitation of the ocean's resources, combined with the difficulties in establishing clear ownership over such resources as migratory fish stocks, generates potential flash points for armed conflict.

Multiple solutions have been suggested to address problems associated with joint management of marine resources, including authority, privatization, and institutionalization (Ostrom 1990). This article compares two mechanisms for the management of maritime resources: *privatization* of the sea in the form of Exclusive Economic Zones (EEZs) and *institutionalization* through the United Nations Convention on the Law of the Sea (UNCLOS). We find that EEZs work best for states seeking to manage existing interstate maritime conflicts by promoting more frequent and more successful bilateral negotiations. UNCLOS is successful at preventing the emergence of new maritime conflicts between member states and at promoting third-party efforts to settle existing claims. Neither UNCLOS membership nor EEZ claims have any influence on the likelihood of states using militarized force to pursue their maritime claims.¹ Our analyses demonstrate the feasibility of different solutions for managing global environmental resources, contributing to the broader literature on international institutions and interstate conflict management.

THE MANAGEMENT OF THE SEA

For a resource that covers nearly three quarters of the earth's surface and has been at the center of human culture, frameworks for the governance of the sea have been slow to develop. Competition for maritime resources arose as states developed the capacity to protect waters close to their territory, navigate the seas for trade, and to use these resources to further their imperial ambitions. This debate pitted the sovereignty demands of coastal states against the wish for unhindered navigation by maritime powers. These claims and the idea of "freedom of the seas" gradually came to a compromise during the seventeenth and eighteenth centuries as the territorial sea limit concept developed, based on Bynkershoek's claim that "the power of the land properly ends where the force of arms ends" (Goldsmith and Posner 2005:59). This notion, that states had sovereignty over a limited expanse of

¹*Maritime claims* involve diplomatic contests between two or more states over access to or usage of a maritime area; militarization may or may not occur (Hensel, Mitchell, Sowers, and Thyne 2008).

water off their shores, evolved into the “cannon shot” rule, which became 3 miles in customary law due to the maximum firing range of a cannon (Pratt and Schofield 2000:3).² This rule provided the first attempt at privatization of the ocean’s resources.

The debate continued throughout the twentieth century, as the cannon shot rule was considered ambiguous. Many states unilaterally began to adopt a 3-nautical-mile territorial sea limit, while other states pushed for more expansive maritime jurisdiction. Scandinavian countries argued for a 4-mile territorial limit, Spain and Portugal laid claim to 6 miles of territorial sea, while Russia pushed claims well beyond the 3-mile limit, going so far as to claim 100 miles off the coasts of eastern Siberia and Alaska (Goldsmith and Posner 2005:60). Maritime powers such as Great Britain and the United States sought to enshrine the 3-nautical-mile limit as a universal rule but were unsuccessful in reaching an agreement during the Hague Codification Conference of 1930. This failure resulted in a period of “creeping coastal state jurisdiction,” as states began to expand their sovereignty beyond the 3-mile limit, and coastal states and maritime powers conflicted over sovereignty versus navigation rights. The Truman Proclamation of 1945 was one of the farthest ranging declarations of sovereignty, including resources of the continental shelf. In 1952, Chile, Ecuador, and Peru declared jurisdiction over a 200-nautical-mile (nm) area from their coasts, resulting in a series of disputes over fishing rights with the United States and Canada (Pratt and Schofield 2000:3).

Two unsuccessful conferences in 1958 and 1960 attempted to create a uniform standard for territorial seas.³ Work by the UN Seabed Committee resulted in a third conference that began in 1973, a successful endeavor that produced the 1982 United Nations Convention on the Law of the Sea (UNCLOS). The UNCLOS treaty established a consistent set of limits for territorial and contiguous seas, navigation rights, seabed usage, and dispute adjudication. The signature of UNCLOS in 1982, followed by its entry into force in 1994, represents a significant example of international cooperation.⁴

Article 3 of the UNCLOS agreement limits the breadth of the territorial sea to 12 nm. To compensate for this relatively short expanse, Part V

²The cannon shot rule originated in a Dutch proposal to the English in the early 1600s (Pratt and Schofield 2000:3).

³While no agreement was reached on territorial seas, the 1958 conference (UNCLOS I) led to the creation of four Conventions: Territorial Sea and Contiguous Zone, Continental Shelf, High Seas, and Fishing and Conservation of the Living Resources of the High Seas. The second conference in 1960 (UNCLOS II) came close to an agreement on territorial seas but failed by a single vote (Pratt and Schofield 2000:4).

⁴We refer to UNCLOS as an institution, even though we recognize that it is a treaty that established multiple institutions such as the International Seabed Authority. When we use the term “member,” we refer to states who became party to the UNCLOS treaty.

of the Convention establishes the exclusive economic zone (EEZ), an area beyond the territorial sea with a breadth of 200 nm, or if the continental shelf extends beyond that limit, as far out as 350 nm. States have sole rights over the exploitation of all resources in their EEZ. The convention also established a comprehensive and obligatory dispute settlement system for all signatory states (Borgese 1995). The agreement was innovative in that it identified multiple forums for the resolution of disputes, including arbitration panels, the International Tribunal for the Law of the Sea (ITLOS), and the International Court of Justice (ICJ).

While EEZs are defined by the UNCLOS treaty, they already existed in customary law. Several states declared EEZs outside the context of the UNCLOS agreement. Table 1 shows that 475 state-year observations from 1900 to 2001 (8.8%) are characterized by declared EEZs by non-UNCLOS members. Furthermore, 138 state-year (2.6%) observations involve UNCLOS members with no declared EEZs. There is enough variation to compare the efficacy of EEZs and UNCLOS as distinct conflict management tools for maritime conflicts, even though they are complementary in nature.

RESOLVING MARITIME CONFLICTS: EEZ AND UNCLOS

The resources of the sea represent a global commons of enormous wealth. Approximately 90 million tons of fish are caught each year for human consumption (UN FAO 2012:3), and fish provide more than 3 billion people with at least 20% of their average animal protein intake (UN FAO 2012:5). The global fishing industry employs 54.8 million people (UN FAO 2012:10) and accounted for \$125 billion in exports in 2006 (UN FAO 2012:15). Energy

TABLE 1 UNCLOS Membership and Declared Exclusive Economic Zones for All States, 1900–2001

	No Declared EEZ	Declared EEZ	Total
Not an UNCLOS member			
Frequency	4,475	475	4,950 (91.5%)
Row %	90.4%	9.6%	
Column %	97.0%	59.6%	
UNCLOS member			
Frequency	138	322	460 (8.5%)
Row %	30.0%	70.0%	
Column %	3.0%	40.4%	
Total	4,613 (85.3%)	797 (14.7%)	5,410

Note. The unit of analysis is the state-year. Pearson $\chi^2(1) = 1.2e+03; p < .001$.

resources of the sea contribute another \$138 billion (Borgese 1998:61), and offshore oil provides at least 30% of global oil production (Odell 1997:18). It is also estimated that nearly 1.5 trillion tons of mineable manganese nodules exist on the ocean floor (Payne 1978:937).

Because states frequently compete over maritime resources, finding ways to peaceably allocate them and adjudicate potential conflicts has become an important concern. Maritime resources have been severely depleted; nearly 90% of the world's major fisheries are exploited at or beyond their maximum sustainable limits.⁵ The few resources that do remain have often been the center of conflict; democracies such as Spain, Canada, Iceland, the United States, and Great Britain have all contested maritime resources, often resorting to the use of their armed forces (Mitchell and Prins 1999).

The competition for scarce maritime resources has necessitated the creation of conflict management mechanisms. We focus on two mechanisms states employ to resolve competing claims to maritime areas: *privatization* of the area in the form of declared exclusive economic zones and *institutionalization* of the issue through membership in UNCLOS. The *privatization* solution is argued to encourage sustainable management techniques because the consequences of exploitation are no longer directed toward all users, but to the user who is exploiting the resource (Hardin 1968). While privatization may increase the salience of maritime issues for states in a given region, especially if the distribution of resources is uneven across neighboring EEZ areas, rules regarding the delimitation of the maritime space may provide a basis for negotiation and peaceful resolution of maritime conflicts.

With *institutional* solutions, states develop agreements to "organize and govern themselves to obtain continuing joint benefits when all face temptations to free-ride, shirk, or otherwise act opportunistically" (Ostrom 1990:29). Agreements like UNCLOS enshrine definitions, guidelines, and procedures over the use of maritime resources. Over time, institutions become self-regulating and encourage sound management of shared resources. The acceptance of agreements like UNCLOS should result in a decreased likelihood of contentious claims to maritime areas and resources. Furthermore, if new claims do arise, a global institution like UNCLOS provides clear procedures for negotiating a solution. We see privatization and institutionalization as complementary strategies, especially since the UNCLOS agreement establishes provisions about acceptable limits for EEZs.

⁵It is estimated that in 2009, around 57% of the world's major fish stocks were already being fully exploited near their maximum sustainable limits, and another 30% were overexploited, depleted, or recovering from depletion. Only 13% of global fish stocks were considered under or moderately exploited (UN FAO 2012:11–12).

Privatization and the Sea

The analysis of EEZ and UNCLOS solutions for managing the global ocean commons provides insight about how countries are likely to manage disagreements over maritime zones, what we call *maritime claims*. Consider, for example, the disagreement that occurred in the “Cod Wars” between Iceland and Great Britain. Iceland increased its territorial sea claims from 4 miles in 1952 to 12 miles in 1958, 50 miles in 1972, and 200 miles in 1975. The British government protested each of Iceland’s attempts to extend sovereignty over its maritime space. The two governments engaged in militarized and peaceful interactions over the issues, including a series of bilateral and multilateral negotiations and International Court of Justice (ICJ) adjudication of the conflict.

How might the establishment of an EEZ influence the way in which states handle maritime conflicts?⁶ First, we should note that maritime claims can involve specific disagreements about where an EEZ boundary is drawn (for example, the Gulf of Maine) or may involve other issues such as states’ access to fishing areas (for example, Spanish trawlers’ access to Canadian fishing grounds). Of the 143 dyadic maritime claims in our data set, just under half (71 or 49.65%) involve contestation of the boundary of an overlapping EEZ border. It is also possible for states to make a new EEZ claim while in the midst of a conflict involving a non-EEZ issue. The creation of an EEZ is similar to the privatization of a common property resource. Advocates of privatization see the optimum management of resources occurring with the creation of property and title rights, where EEZs create a state property regime (Wijkman 1982). Within EEZs, states are free to manage, develop, and exploit all resources within the sea, the floor, and subsoil from their continental shelf with a boundary at 200 nm or to the edge of the continental margin. Because this focuses the costs and benefits of exploitation on the owner of the area, greater effort and interest is given to its preservation and maintenance.

Consistent with the economists’ prescriptions, individual rights in ocean fisheries have emerged in the wake of the enclosure of the oceans within EEZs. Individuals and communities are acquiring private property-like rights in wild fisheries through the establishment of individual transferable quotas (“ITQs”), community quotas, territorial use rights, and other instruments. Enclosure through EEZs also has coincided with the dramatic growth in aquaculture. (Wyman 2008:512)

⁶Many countries claim EEZ limits that are never contested diplomatically by other countries. These cases never enter the ICOW data set because it focuses only on cases where two or more countries contest the ownership or usage of a particular maritime area.

The benefits of EEZs led to their widespread acceptance. During the first substantive conference of UNCLOS in 1974, 100 states supported the EEZ (Pratt and Schofield 2000:4). By 1977, a total of 29 states had made a formal EEZ claim; by the signing of UNCLOS in 1982, a total of 59 states had done so (Pratt and Schofield 2000:4). Today, more than 150 states have formal EEZ claims.

How might the establishment of an EEZ influence states' conflict-management strategies to deal with preexisting maritime conflicts? In the Cod Wars, Iceland did not declare a 200-mile EEZ until 1979, six years after rejecting the ICJ ruling on the matter and after Britain had withdrawn its claims to resources in the area. However, in many other maritime claims, one or both sides declare an EEZ while a dispute over a maritime area is ongoing. The United States, for example, officially declared a 200-mile EEZ for fisheries in 1977 while in the midst of a series of maritime conflicts with Canada over the Gulf of Maine, the Beaufort Sea, the Dixon Entrance, and salmon fishing rights in the Pacific, which resulted in new bilateral negotiations.

Bilateral negotiations might occur more frequently if one or both states in a maritime dispute declare an EEZ for several reasons. First, the creation of EEZs may produce inequalities in the allocation of resources each state could expect under the proposed EEZ division and heighten the importance of the claimed area for the potential loser in the conflict. In the Gulf of Maine, for example, the United States Congress passed the Fisheries Conservation and Management Act in April 1976, which extended the exclusive fisheries zone in the Gulf to 200 miles (Rhee 1981:592). This move was met by swift resistance from Canada, as it decreased the potential maritime area that its fisherman could exploit. This produced a series of bilateral negotiations between the two governments from 1977 to 1979, ultimately prompting them to take the case to the ICJ. This pattern of interaction is consistent with research on contentious issues, whereby issues of higher salience produce more-frequent peaceful settlement attempts (Hensel 2001; Hensel et al. 2008).

A second reason the declaration of an EEZ might prompt more frequent peaceful attempts to resolve ongoing maritime conflicts is because there are ambiguities that arise when delimiting maritime borders. Some resources like fisheries may migrate across the area of two or more states' EEZs, meaning that conservation and exploitation of the resource requires coordinated action (Asgeirsdottir 2008; Bailey 1996). Maritime areas that contain migratory fishing stocks should produce more negotiations. In our data set, maritime claims involving migratory fish stocks have experienced 188 bilateral negotiation attempts, compared to 121 cases of bilateral negotiations in maritime areas without such stocks.

States may also disagree about the status of an island as the basis for a legitimate EEZ claim. In the late 1970s and early 1980s, Venezuela signed a series of agreements with the United States, France, and the Netherlands

that granted Aves Island the legal status of an island. This created an area that Venezuela could claim under its 200-mile EEZ, prompting protests from other Caribbean governments who claimed that Aves Island was an uninhabited rock. A similar issue arose between Denmark and Norway over fishing rights in the Greenland Sea. Norway argued that the median line between Jan Mayen (a Norwegian island) and Greenland should be the border. Denmark argued that the insignificance of Jan Mayen, as it has no permanent population, should be a factor in the delimitation of the border and that Greenland should be entitled to a larger EEZ area. Islands pose additional issues with the drawing of baselines, as illustrated by the Anglo-Norwegian fisheries conflict over delimitation of territorial waters off the part of the Norwegian coast lying within the Arctic Circle. The ICJ sided with Norway's claim for straight baselines in the area.

Our general expectation is that the creation of a new maritime boundary through the establishment of an EEZ will be followed by bilateral negotiations between the states involved to clarify each side's claim and to address ambiguities in how the border will be determined.

H1: *Establishment of an EEZ by one or both states in a dyad will increase the chances for bilateral negotiations over an ongoing maritime claim.*

Institutionalization and the Sea

Privatization solutions can be problematic since they are relatively insensitive to time, place, and culture and cannot be imposed without high costs (Ostrom 1990). The creation of institutions to manage resources is preferable. Institutions are designed by those who use the resource, and rules can be created that are closely aligned to the conditions of the resource. States that depend heavily on marine resources have incentives to monitor and report infractions related to a treaty and to follow the treaty's rules. The creation of enforcement and conflict resolution mechanisms allows treaty signatories to "initiate long-term arrangements that they could not otherwise undertake" (Ostrom 1990:17).

One of the most significant features of UNCLOS is its commitment to create a comprehensive and universally accepted delineation of maritime law (Boyle 1997) and a strong and wide-ranging conflict-resolution system (Borgese 1995; Sebenius 1984; UNCLOS Treaty: Part XV). Signatories to the convention are mandated to peacefully resolve their maritime conflicts (Part XV, §1, Art 279). This could occur through bilateral negotiations or through prior obligations in other global or regional agreements that specify dispute-settlement procedures (Part XV, §1, Art 282 & 284).

If these nonbinding dispute settlement methods are not acceptable, then state parties must agree to third-party dispute settlement. Under Article 287 of

the UNCLOS treaty, states can choose and rank order one of four compulsory procedures a priori: ITLOS, ICJ, arbitration under Annex VII, or arbitration under Annex VIII.⁷ If UNCLOS members do not declare one of these forums, or if they specify different preferred compulsory procedures, then the default procedure is Annex VII arbitration (Part XV, §2, Art 287). Among countries that have ratified the UNCLOS treaty, only 22% have made an Article 287 declaration, with ITLOS and the ICJ being the most-selected forums (Powell and Mitchell 2012; Treves 1999).

The flexibility of Article 287 increases the chances that UNCLOS members will resort to third-party dispute settlement for two reasons. First, states have a choice of binding forums under UNCLOS, so they can select a forum they prefer. Civil law countries are more likely to recognize the compulsory jurisdiction of the ICJ than common law or Islamic law countries, due to the legal design similarities between the World Court and the civil legal tradition (Mitchell and Powell 2011). This similarity reduces civil law countries' uncertainty before the ICJ, which makes them more amenable to declaring the ICJ as a preferred forum in UNCLOS. Among civil law states ratifying UNCLOS, 27% have declared the ICJ as their preferred forum under Article 287, compared with less than 5% of common or Islamic law ratifying states (Powell and Mitchell 2012). Common law states in the UNCLOS negotiations pushed for flexibility and the default arbitration procedure, which fits with arguments made by common law scholars about the desirability of arbitration (Posner and Yoo 2005).

Second, the dispute-settlement terms of the UNCLOS treaty are mandatory for all state parties. Unlike the optional clause declaration for the ICJ, which gives United Nations' members a choice of whether or not to accept the jurisdiction of the Court, members of UNCLOS are required to use the binding procedures under Article 287 to resolve disputes related to the treaty if other peaceful attempts fail. The treaty has dispute settlement "teeth," making it similar to the World Trade Organization. Third-party settlement techniques should be used regularly by UNCLOS members if they are unable to resolve their disagreements with other conflict management tools.

Since the treaty came into force in 1994, arbitration under Annex VII has been used in several cases (for example, *Malaysia v. Singapore*, *Guyana v. Suriname*), with most cases being heard by the Permanent Court of Arbitration.⁸ Nineteen cases have been heard by ITLOS, including the M/V Saiga Case, the Southern Bluefin Tuna Cases, and the Bay of Bengal Case.⁹ Several other cases have been heard by the ICJ, including disputes between

⁷For Annex VII arbitration, the members of the arbitral tribunal do not need any specific legal qualifications, while under Annex VIII, a list of experts is drawn up in several areas such as fisheries, navigation, and marine scientific research. The tribunal must have at least four of five members coming from this expert list (Klein 2011:56–57).

⁸http://www.pca-cpa.org/showpage.asp?pag_id=1288.

⁹<http://http://www.itlos.org/index.php?id=35&L=0>.

Nicaragua and its maritime neighbors, Honduras and Colombia.¹⁰ These latter cases show the flexibility of UNCLOS to allow for prior dispute settlement procedures (for example, optional clause declarations) to take precedence.¹¹ In short, the mandatory nature of the dispute-settlement system in UNCLOS, as well as its flexibility for allowing state parties to choose a binding forum they prefer, increases the likelihood of third-party dispute settlement for maritime disputes between UNCLOS members.

H2: Joint membership in UNCLOS increases the likelihood of third-party conflict management to help resolve maritime claims.

The dispute settlement mechanisms in UNCLOS should also reduce the likelihood of militarized conflict between members. The general provisions in Part XV, §1 of the treaty encourage states to use peaceful means for dispute resolution. The characteristics of UNCLOS should also influence its effectiveness as a conflict manager. Boehmer, Gartzke, and Nordstrom (2004) find that highly institutionalized organizations—those with mechanisms for mediation, arbitration, adjudication, and enforcement—are best able to reduce conflict by revealing private information. This should be particularly true to the extent that the parties use international organizations as conflict managers. Because the reputational costs for renegeing are enhanced when an international organization becomes involved as a conflict manager, uncertainty about states' resolve and preferences is diminished, and the institution has resources at hand for securing more credible commitments (Mitchell and Hensel 2007).

However, this effect depends on the tools employed by the organization to manage member states' conflicts. Binding tools of conflict management (arbitration, adjudication) are more likely to succeed in helping parties reach long-lasting agreements because the reputational costs for noncompliance are higher and because the institution has more resources to ensure compliance. Given that UNCLOS provides multiple forums for binding settlement, we expect this strategy to be more effective than EEZs for helping UNCLOS members resolve maritime disputes.

H3: Joint membership in UNCLOS decreases the chances for militarized conflicts over maritime claims.

H4: Joint membership in UNCLOS increases the chances that peaceful agreements will be reached to resolve maritime claims.

¹⁰ICJ Judgments 12/13/2007, 05/04/2011 (*Nicaragua v. Colombia*), and 10/08/2007 (*Nicaragua v. Honduras*), available at <http://www.icj-cij.org/docket/index.php?p1=3&p2=3>.

¹¹Because these states had accepted the compulsory jurisdiction of the ICJ, the UNCLOS treaty recognized the states' rights to settle maritime disputes through that forum.

UNCLOS should also be quite effective at preventing future conflicts over the delimitation of maritime spaces. UNCLOS provides clear mechanisms for the creation of boundaries, provisions for the creation of straight baselines for states with uneven coasts, transit rights, the definition of the continental shelf, the EEZ implications of islands, and straddling fish stocks (Pratt and Schofield 2000; §2 Art 3–16; §2 Art 37–44; §3 Art 64; §3 Art 76). States are directed to conserve their marine resources and to cooperate with other states in their conservation efforts (§2 Art 117–120; §2 Art 197–201).¹² The two dozen cases of arbitration and adjudication to resolve disagreements in the UNCLOS treaty have also helped to clarify treaty ambiguities. The clarity provided by UNCLOS rules and the consensus created in their development should act to prevent new conflicts from arising.

H5: *Joint membership in UNCLOS decreases the chances for new maritime claims.*

RESEARCH DESIGN

We test our hypotheses using data on contentious maritime claims from the Issue Correlates of War (ICOW) project:

A maritime claim involves explicit contention between two or more states over the access to or usage of a maritime area. Official representatives of the government of at least one state must lay explicit claim to a maritime area being administered or claimed by at least one other state. “Official representatives” include such individuals as a country’s head of state, foreign minister, and other legitimate political or military officials speaking on behalf of the state’s government. (ICOW Maritime Codebook: 1).¹³

Our analyses include all available maritime claims from 1900 to 2001 in the Western Hemisphere and Europe. We employ two ICOW data sets: the claim dyad-year data and the settlement-attempt data. The claim dyad-year data include a separate observation for each year of every dyadic claim. For example, the maritime conflicts over the Gulf of Fonseca involve three dyads: El Salvador-Honduras (1900–1992), Honduras-Nicaragua (1912–present), and El Salvador-Nicaragua (1913–present), generating a total of 272 claim dyad-years. The entire data set includes 3,231 claim dyad-years from 1900 to 2001.

To test hypotheses about the success of conflict-management efforts, we use the ICOW settlement-attempt data set, which records all peaceful attempts to settle the issues involved in a claim. This includes bilateral

¹²http://www.un.org/Depts/los/convention_agreements/convention_overview_convention.htm.

¹³For descriptions of the ICOW data, see Hensel (2001) and Hensel et al. (2008).

negotiations, negotiations with nonbinding third-party assistance (inquiry, conciliation, good offices, or mediation), or submission of a claim to arbitration or adjudication. The data set includes 496 peaceful attempts to settle maritime issues (63% bilateral, 33% nonbinding third-party, and 4% binding third-party). To examine the onset of new claims, we identify dyads that might plausibly experience a maritime claim in the Western Hemisphere or Europe by including all dyads composed of two coastal states as well as dyads composed of one coastal state in the region and one major power, generating a total of 75,753 cases.

Dependent Variables

In analyses employing the claim dyad-year data, we utilize three dependent variables: the number of militarized dispute onsets over the maritime issue in a given year,¹⁴ the number of bilateral negotiations per year, and the number of third-party settlement attempts per year (binding and nonbinding). Militarized disputes occurred in 90 maritime claim dyad-years (2.8%). There were a total of 237 dyad-years (7.3%) with one or more bilateral negotiations (the range is 0–5 negotiations per year) and a total of 142 dyad-years (4.4%) with one or more third-party settlement attempts (the range is 0–5 attempts per year).¹⁵

For the settlement data, we measure success with a dummy variable for reaching agreement; 275 of 496 peaceful settlement attempts (55%) resulted in an agreement.¹⁶ Analyzing new claim origins, we use a dichotomous dependent variable indicating whether a new maritime claim began in the dyad during the year of observation. New claims began in 132 of the 75,753 dyad-year observations (0.17%).

Independent Variables

Our theoretical variables focus on the effects of membership in UNCLOS and declared EEZs. Membership in UNCLOS was collected from the organization's Web site.¹⁷ We use two dummy variables to indicate UNCLOS membership status for a given dyad: *One UNCLOS Member* equals 1 if only one state in a dyad is a ratifying UNCLOS member (zero otherwise); and *Both UNCLOS Members* equals 1 if both states have ratified the UNCLOS agreement. The omitted category includes pairs of states in which neither

¹⁴Militarized attempts to settle maritime issues are identified by the ICOW project with version 3 of the Correlates of War Project's Militarized Interstate Dispute data set (Ghosn, Palmer, and Bremer 2004).

¹⁵We exclude procedural and functional settlement attempts that cannot settle the issue at stake (Hensel et al. 2008).

¹⁶While our theory predicts increased usage of binding settlement attempts (arbitration and adjudication) for UNCLOS members, we have too few cases in our data (21) to estimate multivariate models.

¹⁷<http://www.un.org/Depts/los/index.htm>.

belongs to UNCLOS. We create similar measures for EEZs, based on information reported in Pratt and Schofield (2000): *One Declared EEZ* is coded 1 if only one state in a dyad has declared an EEZ, while *Both Declared EEZs* is coded 1 if both states in a dyad have declared EEZs. The omitted category includes pairs of states in which neither has a declared EEZ.

States use both *privatization* and *institutionalization* strategies over maritime claims. Table 1 reports the frequencies for the UNCLOS and EEZ variables for all state-years in the Correlates of War (COW) interstate system (1900–2001) in our two regions. The vast majority of countries—4,475 of the 5,410 observations (82.7%)—did not belong to UNCLOS or have declared EEZ boundaries.¹⁸ Around 15% of the observations had declared EEZs, 40.4% of which (322 of 797) involved UNCLOS members. About 8.5% of the observations feature states that belonged to UNCLOS, 70% of which (322 of 460) also had declared EEZs. When considering the time period of our study, we see that EEZ declarations have been a more common approach to managing maritime areas than joining UNCLOS, although the two mechanisms are clearly linked.

The appendix provides a list of countries in our sample and the years in which they had EEZ declarations or UNCLOS membership. Thirty-eight of the 82 countries (46.3%) have declared EEZs and have been UNCLOS members at some point in the 1900–2001 time period; most of these states (31) declared EEZs prior to joining UNCLOS. Ten (12.2%) of the 82 countries have declared EEZs at some point in time, but never joined UNCLOS, while 14 (17.1%) states have been UNCLOS members but have not officially declared EEZ boundaries. Finally, 20 of the 82 countries (24.4%) have never declared EEZs nor been members of UNCLOS. Even for countries that utilize both strategies, there are often many years between EEZ and UNCLOS declarations, making it feasible to study the effects of these mechanisms separately.

We include a measure for *Recent Militarized Disputes* over maritime issues in the 10 years prior to the current year, weighted to have declining effects over time. Events in the year before an observation contribute a value of 1.0, and this weight declines by 10% each year (for example, an event from 5 years ago has a weight of 0.5). We expect that militarized history will be positively related to militarized attempts to settle maritime claims and increase the chances for peaceful negotiations (Hensel et al. 2008).

The salience of the claimed maritime area is also important, with highly salient claims being more likely to be managed through military conflict or bilateral negotiations and less likely to be submitted to binding third-party decisions (Hensel 2001). The ICOW maritime data set measures issue salience through six indicators: (1) maritime borders extending from homeland rather than colonial or dependent territory, (2) a strategic location of

¹⁸This would be expected, based on the analyzed time period because UNCLOS was not signed until the early 1980s, while EEZs were not actively utilized until the 1970s.

the claimed maritime zone, (3) fishing resources within the maritime zone, (4) migratory fishing stocks crossing into and out of the maritime zone, (5) the known or suspected presence of oil resources within the maritime zone, and (6) relation of the maritime claim to an ongoing territorial claim. We include a dummy variable for the presence of *Migratory Fish Stocks* in the claimed maritime zone because of this factor's close connection to the privatization and institutionalization approaches to management of maritime issues, as well as their potential distributional problems. Each of the remaining five indicators may contribute one point to the *Other Issue Salience* index for each claimant state, producing a range from 0 to 10.

How states bargain over contentious issues is also likely to be influenced by their relative capabilities, with more powerful states having stronger bargaining power. In more asymmetric dyads, militarized settlement attempts are less likely if the more powerful state can get what it wants through peaceful bargaining. Capability imbalances should also promote bilateral negotiations and diminish the prospects for third-party settlement. Power asymmetries should enhance the prospects for agreements, especially in bilateral negotiations, due to the stronger side's bargaining leverage. We use the COW Project's Composite Index of National Capabilities (CINC) measure (Singer, Bremer, and Stuckey 1972) to create a relative capability measure by dividing the stronger side's CINC score by the dyad's combined CINC scores. The CINC score provides information about a country's share of global military, economic, and demographic capabilities. The ratio measure for *Capability Imbalance* ranges from 0.5 (parity) to 1 (the stronger state has all of the dyad's capabilities).¹⁹

EMPIRICAL ANALYSES

Bivariate Analyses

We begin by evaluating the bivariate relationships between our key variables in the ICOW claim dyad-year data set. Our first hypothesis suggests that bilateral negotiations are more likely when states have declared EEZs over a maritime area. In Table 2, we see that bilateral negotiations occur in only 5% of observations when neither state has an EEZ, 10.5% when one member of the dyad has declared an EEZ, and 14.7% when both members have declared an EEZ ($\chi^2 = 61.08$; $p < .001$). Table 2 also provides support for our second hypothesis: Joint UNCLOS members use third-party mechanisms (10.1%) to help resolve their maritime claims more often than dyads with either one or no UNCLOS members (4%) ($\chi^2 = 8.76$; $p = .013$). EEZs and UNCLOS are

¹⁹The model for maritime claim onset also includes a dichotomous measure that equals one if both states in the dyad score six or higher on the 0–10 democracy Polity IV scale (<http://www.systemicpeace.org/polity/polity4.htm>).

TABLE 2 UNCLOS Membership, EEZs, and the Management of Maritime Claims

	Militarized Dispute(s)		Bilateral Negotiations		Third Party Activities		Onset of New Claim	
	No	Yes	No	Yes	No	Yes	No	Yes
<i>Declared EEZs</i>								
Neither	2,124	61 (2.8%)	2,076	109 (5.0%)	2,083	102 (4.7%)	52,969	105 (0.20%)
One	592	17 (2.8%)	545	64 (10.5%)	586	23 (3.8%)	13,233	15 (0.11%)
Both	425	12 (2.8%)	373	64 (14.7%)	420	17 (3.9%)	9,420	11 (0.12%)
	$\chi^2 = 0.0029$		$(p = .999)$		$\chi^2 = 1.21$		$\chi^2 = 6.374$	
<i>UNCLOS Membership</i>								
Neither	2,744	74 (2.6%)	2,618	200 (7.1%)	2,699	119 (4.2%)	62,084	123 (0.20%)
One	292	12 (4.0%)	280	24 (7.9%)	292	12 (4.0%)	8,592	6 (0.07%)
Both	105	4 (3.7%)	96	13 (11.9%)	98	11 (10.1%)	4,946	2 (0.04%)
	$\chi^2 = 2.095$		$(p = .351)$		$\chi^2 = 8.76$		$\chi^2 = 12.54$	
				$(p = .153)$		$(p = .013)$		$(p = .002)$

effective at promoting peaceful negotiations over maritime claims, although they do so through different mechanisms. Declared EEZs promote states' efforts to resolve maritime conflicts on their own, while institutional membership in UNCLOS encourages more community-oriented efforts to resolve maritime claims.

Our third hypothesis suggests that UNCLOS should reduce the risk that a maritime claim becomes militarized. In Table 2, we find that joint (3.7%) or sole (4.0%) membership in UNCLOS is associated with *more* militarized disputes compared to dyads with no members (2.6%). While this result is counterintuitive, we are reluctant to suggest that UNCLOS exacerbates conflict, since the p value is large ($p = .351$).

Reaching Agreements

Analyses in Table 3 evaluate the fourth hypothesis, that joint membership in UNCLOS increases the likelihood of achieving a peaceful agreement over a maritime claim. The privatization solution of joint EEZ declarations appears to have the edge; once two states have declared maritime boundaries, it is easier to agree upon further maritime issues ($p < .03$), although there is no effect for a one-sided EEZ declaration ($p < .55$). This indicates that maritime conflicts are managed more successfully by states that jointly view exclusive economic zones as a legitimate and fair tool for establishing maritime boundaries.

TABLE 3 Logit Analyses of the Effects of UNCLOS and Declared EEZs on the Success of Peaceful Settlement Attempts

Variables	Did Parties Reach Agreement?	Substantive Effects (min, max)
<i>Theoretical Variables</i>		
One Declared EEZ	-0.26 (0.44)	.3191, .2672
Both Declared EEZs	0.82 (0.37)**	.3191, .5060
One UNCLOS Member	0.31 (0.48)	.3191, .3869
Both UNCLOS Members	0.52 (0.50)	.3191, .4405
<i>Control Variables</i>		
Nonninding Third-Party Activity	-0.58 (0.37)	.3191, .2076
Binding Third-Party Activity	3.54 (0.96)***	.3191, .9155
Migratory Fish Stocks	0.06 (0.38)	.2980, .3191
Other Issue Saliency	-0.08 (0.08)	.4230, .2702
Recent Militarized Disputes	-0.32 (0.36)	.3414, .2097
Capability Imbalance	-0.06 (1.13)	.3296, .3166
Constant	-0.26 (1.06)	
N	289	
Log-likelihood	-164.72	
Chi-square	35.5 ($p < .001$)	

* $p < .10$, ** $p < .05$, *** $p < .01$.

UNCLOS membership, in contrast, has no significant effect on the success of negotiations, whether one ($p < .52$) or both states ($p < .31$) are members. However, binding settlement attempts significantly increase the chances for agreements. Given that the design of the UNCLOS treaty promotes binding settlement procedures through Article 287, the effect of UNCLOS on the success of peaceful settlement attempts may work indirectly by encouraging members to select third-party strategies for conflict management. We find that agreements are more likely when binding third-party techniques are employed ($p < .001$), compared to the default category of bilateral negotiations; nonbinding third-party efforts have no discernible impact on whether states are able to strike agreements ($p < .12$). The presence of migratory fish stocks does not influence the success of settlement attempts ($p < .87$), nor is there a systematic effect for the remaining control variables of issue salience, recent armed conflict, or relative capabilities.

Event Count Models

In Table 4, we present multivariate negative binomial analyses for the dyad-year data. Supporting Hypothesis 1, EEZs have a positive and significant effect on the expected count of bilateral negotiations if one or both states in a dyad have declared EEZs ($p < .001$), although the substantive effect is larger for dyads where both states have EEZs (Table 5). UNCLOS membership for one state in a dyad makes bilateral negotiations significantly *less* likely (p

TABLE 4 Negative Binomial Analyses of the Effects of UNCLOS and Declared EEZs on the Management of Maritime Claims

Variables	Model 1: Militarized Dispute(s)	Model 2: Bilateral Negotiations	Model 3: Third Party Activities
<i>Theoretical Variables</i>			
One Declared EEZ	0.02 (0.29)	1.03 (0.17)***	0.03 (0.25)
Both Declared EEZs	0.03 (0.36)	1.34 (0.19)***	-0.36 (0.33)
One UNCLOS Member	0.26 (0.36)	-0.57 (0.25)**	0.59 (0.35)*
Both UNCLOS Members	0.35 (0.55)	0.28 (0.31)	1.46 (0.41)***
<i>Control Variables</i>			
Migratory Fish Stocks	0.64 (0.25)**	0.71 (0.15)***	0.74 (0.21)***
Other Issue Salience	0.05 (0.06)	-0.01 (0.04)	-0.03 (0.05)
Recent Militarized Disputes	0.97 (0.13)***	0.50 (0.14)***	0.93 (0.17)***
Capability Imbalance	-1.54 (0.75)**	-1.95 (0.47)***	-1.15 (0.66)*
Constant	-3.33 (0.79)***	-1.60 (0.48)***	-2.54 (0.69)***
Alpha (s.e.)	0.16 (0.63)	3.38 (0.62)	5.97 (1.36)
N	3,161	3,161	3,161
Log-likelihood	-379.27	-949.01	-612.91
Chi-square	85.96***	108.05***	64.02***

* $p < .10$, ** $p < .05$, *** $p < .01$.

TABLE 5 Interactive Effects for UNCLOS/EEZ Claims

	No EEZ Claim	One State EEZ Claim	Both States EEZ Claim
<i>Predicted Counts for Bilateral Negotiations</i>			
No UNCLOS members	.077	.220	.299
One UNCLOS member	.045	.127	.172
Both UNCLOS members	.107	.304	.412
<i>Predicted Counts for Third-Party Settlement Attempts</i>			
No UNCLOS members	.059	.062	.042
One UNCLOS member	.111	.114	.076
Both UNCLOS members	.281	.290	.192

Note. Predicted counts are generated for Models 2 and 3 in Table 4 with Clarify (Tomz, Wittenberg, and King 2003), setting all other variables at their mean or mode.

< .03), while joint UNCLOS membership has no effect ($p < .35$). It appears that the threat of suing through an international court or turning to third-party arbitration has no significant influence on bilateral talks and that privatization has a more powerful influence on bilateral negotiations.

The results in Table 4, Model 3 support Hypothesis 2 and show that pairs of UNCLOS members prefer third-party solutions for managing contentious maritime issues ($p < .001$). Dyads with one UNCLOS member weakly prefer third-party solutions ($p < .09$). The remaining EEZ variables are not significant. In Table 5, we show the average predicted probabilities for Models 2 and 3 in Table 4 when varying the possible values for UNCLOS and EEZs. In all three dyadic UNCLOS conditions, we observe a higher likelihood of bilateral negotiations when both states have EEZ claims. We also find increasing probabilities for third-party settlement attempts across all EEZ conditions as we increase the number of UNCLOS members in the dyad. Thus the empirical patterns we observe for privatization are consistent, no matter the value for institutionalization and vice versa.

However, the benefits for EEZs and UNCLOS only extend so far—Table 4, Model 1 demonstrates that neither EEZ claims nor UNCLOS membership reduces the number of militarized disputes that arise over maritime claims.²⁰ Consistent with Table 2, the results suggest no support for our third hypothesis that UNCLOS membership reduces the chances for militarization.

The control variables have strong and consistent effects. The presence of migratory fish stocks in the claimed area leads to more militarized disputes ($p < .01$), as well as more bilateral and third-party activities ($p < .001$). Migratory fish stocks may exacerbate distributional problems under privatization and lead to militarization, but at the same time due to this potential,

²⁰Hensel et al. (2008) find that maritime claims are more likely to experience militarized disputes if they have higher issue salience, a history of recent militarized conflicts, and a history of failed peaceful settlement attempts.

increase the prospects for peaceful negotiations. The *Other Issue Salience* parameters are not significant.²¹ A greater history of recent militarized conflict is also a significant promoter of bilateral and third-party activities ($p < .001$), while a greater capability imbalance reduces the likelihood of bilateral negotiations ($p < .001$). Militarized conflict is more likely to occur in dyads closer to power parity ($p < .05$) with a history of recent militarized disputes ($p < .001$).

Table 6 reports the substantive effects for the negative binomial models in Table 4. Regarding the first hypothesis (Model 2), dyads with one (.220) or both members (.302) with a declared EEZ are much more likely to use bilateral negotiations to manage maritime claims than those with no

TABLE 6 Substantive Effects for Negative Binomial Models

Variables	Model 1: Expected Count, Militarized Dispute(s)	Model 2: Expected Count, Bilateral Negotiations	Model 3: Expected Count, Third Party Activities
<i>Theoretical Variables</i>			
One Declared EEZ			
No	0.0291	0.0776	0.0585
Yes	0.0307	0.2202	0.0614
Both Declared EEZs			
No	0.0291	0.0776	0.0585
Yes	0.0311	0.3022	0.0424
One UNCLOS Member			
No	0.0291	0.0776	0.0585
Yes	0.0398	0.0461	0.1119
Both UNCLOS Members			
No	0.0291	0.0776	0.0585
Yes	0.0501	0.1069	0.2759
<i>Control Variables</i>			
Migratory Fish Stocks			
No	0.0154	0.0381	0.0281
Yes	0.0291	0.0776	0.0585
Other Issue Salience			
0 (minimum)	0.0227	0.0879	0.0736
10 (maximum)	0.0365	0.0740	0.0533
Recent Militarized Disputes			
0 (minimum)	0.0256	0.0733	0.0525
3.5 (maximum)	0.8221	0.4790	1.5404
Capability Imbalance			
0.50 (minimum)	0.0513	0.1550	0.0913
0.99 (maximum)	0.0231	0.0576	0.0490

Note. Predicted counts are generated with Clarify (Tomz et al. 2003), setting all other variables at their mean or mode.

²¹This measure is significant in models for more recent time periods (1975–2001), increasing the chances for militarized disputes and bilateral negotiations.

EEZ claimants (.078). Joint UNCLOS membership has an even stronger effect (Model 3), increasing the likelihood of third-party management by a factor of nearly five (.276) from the baseline (.059). Among the controls, a history of recent militarized disputes has the strongest effect on the use of conflict management strategies.

Maritime Claim Onset

In Table 7, we test Hypothesis 5, which states that joint UNCLOS membership should reduce the number of new maritime claims. We find that membership in UNCLOS, either monadically ($p < .009$) or dyadically ($p < .008$), reduces the development of new maritime claims. This reflects the utility of UNCLOS in providing guidelines for the allocation of maritime resources. Separate analyses on the type of new claim show that the dampening effect of UNCLOS membership is generally robust across types.²² The substantive effects indicate that the probability of a new dyadic maritime claim, .0015 for all dyads, drops to .0005 when one state is an UNCLOS member and drops to .0003 when both are UNCLOS members. While the probabilities are small, joint membership in UNCLOS reduces the chances for new maritime conflicts by 400%.

However, our results for EEZs indicate that they have no effect on the development of new claims, whether both states have declared them

TABLE 7 Logit Analyses of the Effects of UNCLOS and Declared EEZs on New Claim Onset

Variables	Did New Claim Emerge?	Substantive Effects (min, max)
<i>Theoretical Variables</i>		
One Declared EEZ	-.480 (.329)	.0015, .0010
Both Declared EEZs	-.207 (.389)	.0015, .0013
One UNCLOS Member	-1.154 (.439)***	.0015, .0005
Both UNCLOS Members	-1.767 (.665)***	.0015, .0003
<i>Control Variables</i>		
Joint Democracy	.737 (.231)***	.0015, .0031
Capability Imbalance	1.172 (.875)	.0011, .0018
Constant	-7.512 (.786)***	
<i>N</i>	75,753	
Log-likelihood	-945.177	
Chi-square	27.40 ($p < .001$)	

* $p < .10$, ** $p < .05$, *** $p < .01$.

²²Joint membership in UNCLOS reduces the likelihood of new resource and fishing claims ($p < .05$). It also reduces the likelihood of new migratory and oil claims near the standard level of significance ($p < .11$). The only type of claim that UNCLOS fails to depress is new claims to maritime zones with strategic value, where it has the opposite effect, although the estimate is not significant ($p < .12$).

($p < .594$) or only one dyad member has an EEZ ($p < .145$). This suggests that EEZs may not adequately address potential distributional conflicts in the same way as institutional solutions like UNCLOS.

The control variable for joint democracy in Table 7 is positive and significant ($p < .001$), indicating that democratic dyads are most likely to experience maritime claims, further supporting the work of Mitchell and Prins (1999), who find that over 40% of militarized disputes in jointly democratic dyads involve fishing and oil issues. The other control variable, capability imbalance, has no effect on claim onset.

Robustness Checks

We check the robustness of our findings in several ways. First, we consider the possibility that countries that eventually declare EEZs or join UNCLOS are systematically different from those that do not. We created dummy variables for countries that never had EEZs or never became UNCLOS members during the entire time period. We then compared dyads that contained states with no EEZs or UNCLOS membership to those that at some point adopted these policies. Dyads in which neither state ever became an UNCLOS member have more militarized conflicts, fewer bilateral negotiations, fewer third-party attempts, but less salient maritime issues. Pairs of states who remain outside UNCLOS are more belligerent in general over their maritime boundaries, yet they tend to involve areas that have fewer resources or strategic importance. Dyads in which neither state ever declared an EEZ have fewer militarized conflicts, fewer bilateral negotiations, and less-salient maritime claims than those dyads that eventually declared EEZs. However, there is no difference in third-party settlement attempts in these two groups.

Second, we are sensitive to the fact that we include years for ICOW maritime claims that precede the privatization and institutionalization strategies. The first year in which an EEZ was officially declared was 1975, while the first year of official UNCLOS membership was 1983.²³ We estimated our models from 1975 to 2001 and compared our results to the models estimated for the full ICOW time period (1900–2001). For the results in Table 3 (reaching agreement), we find that *Both Declared EEZs* is still the only variable whose parameter is statistically different from zero, albeit at a weaker level of significance ($p < .10$). In the negative binomial models, we find the same results for militarized disputes (Table 4, Model 1); neither declared EEZs nor UNCLOS membership influences militarization of maritime claims from 1975 to 2001. Our results are also the same for bilateral negotiations (Model 2), where EEZs significantly increase the likelihood of bilateral talks. In Model 3 (third-party attempts), the estimate for *One UNCLOS Member* is no longer significant,

²³However, the UNCLOS Convention did not enter into force until 1994.

while the estimate for *Both Declared EEZs* is positive and significant ($p < .01$). Finally, in Table 7 (new claim onset), we get similar results for UNCLOS membership reducing the chances for new maritime claims ($p < .01$), while *One Declared EEZ* is negative and weakly significant ($p < .10$). While there are marginal differences across these temporal samples, our primary results hold even when considering the time periods in which these policies were actively employed.²⁴

Third, we control for cases where the specific issue at stake is the EEZ boundary line, a situation that occurs in just under half of our maritime claim cases. Our primary results hold; EEZ claims increase bilateral negotiations, UNCLOS membership increases third-party settlement, while neither strategy influences militarization. EEZ boundary issues are similar to territorial disputes in that they are less likely to produce agreements (Table 6) and more likely to generate peaceful settlement attempts (Table 4); yet they are less likely to experience militarized conflicts than non-EEZ maritime claims. We also estimated our models in the subsamples for EEZ boundary and non-EEZ boundary cases. In the EEZ boundary cases, the presence of an EEZ claim increases the chances for bilateral negotiations, while UNCLOS membership increases the chances for third-party attempts. Joint UNCLOS membership has a weaker effect in non-EEZ boundary cases, while joint EEZ claims continue to promote bilateral negotiations.²⁵

CONCLUSION

We compare two solutions for managing maritime resources: *privatization* in the form of exclusive economic zones (EEZs) and *institutionalization* through the United Nations Law of the Sea Convention (UNCLOS). We examine the effects of EEZs and UNCLOS on conflict management strategies in maritime claims in the Western Hemisphere and Europe (1900–2001). We find that the establishment of EEZs by one or both states in a dyad increases the chances for bilateral negotiations and increases the chances for successful negotiations. Membership in UNCLOS encourages the use of third-party settlement techniques for resolving maritime claims and reduces the chances for future claims to maritime zones. Neither privatization nor institutional solutions reduce militarized tensions over contested maritime spaces.

While our theory and empirical analyses help us understand various solutions to the tragedy of the oceans commons, future research will refine and expand these analyses. We examine the effects of EEZs in our analyses, but our indicator is rather simple, capturing a dichotomous effect of having

²⁴We also estimated models with an interaction term for Both UNCLOS Members and Both Declared EEZs. The results are similar when taking into account the use of both strategies simultaneously; see also Table 5.

²⁵These results are available in the online appendix for the article.

a declared zone or not. We plan to code the specific extent of states' EEZ claims (for example, the number of nautical miles), which will allow us to track changes in EEZ boundaries over time. Larger claims may have stronger effects on armed conflict because of their perceived excessive nature, such as Iceland's unilateral claims that provoked the Cod Wars. Once UNCLOS institutionalized the 200-mile EEZ boundary, however, 200-mile claims should have little effect on conflict, at least for relations between UNCLOS members, but stronger positive effects on peaceful negotiations.

Our analyses show the problems that arise when looking only at maritime cases that have been adjudicated by ITLOS, the ICJ, or other tribunals, a practice that is very common in the legal scholarship on UNCLOS. UNCLOS membership promotes third-party conflict management activities, yet the success of those attempts does not depend on membership in the convention, but rather whether a binding tool for third-party settlement is selected. Where UNCLOS seems to matter most is in its effect on the prevention of new maritime conflicts. By creating standards for a variety of aspects of maritime law, the convention brings states' maritime practices into greater alignment, achieving its ultimate goal, the creation of a strong institution where dispute settlement procedures are rarely employed. Bargaining in the shadow of an institution with strong dispute settlement procedures can be sufficient for promoting interstate cooperation.

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REFERENCES

- Asgeirsdottir, Aslaug. (2008) *Who Gets What? Domestic Influences on International Negotiations Allocating Shared Resources*. Albany, NY: SUNY Press.
- Bailey, Jennifer L. (1996) Hot Fish and (Bargaining) Chips. *Journal of Peace Research* 33(3):257–262.
- Boehmer, Charles, Erik Gartzke, and Timothy Nordstrom. (2004) Do Intergovernmental Organizations Promote Peace? *World Politics* 57(1):1–38.
- Borgese, Elisabeth Mann. (1995) *Ocean Governance and the United Nations*. Halifax, Nova Scotia: Dalhousie University Center for Foreign Policy Studies.
- Borgese, Elisabeth Mann. (1998) *The Oceanic Circle: Governing the Seas as a Global Resource*. Tokyo: United Nations University Press.
- Boyle, Alan E. (1997) Dispute Settlement and the Law of the Sea Convention: Problems of Fragmentation and Jurisdiction. *The International and Comparative Law Quarterly* 46(1):37–54.

- Ghosn, Faten, Glenn Palmer, and Stuart Bremer. (2004) The MID 3 Data Set, 1993–2001: Procedures, Coding Rules, and Description. *Conflict Management and Peace Science* 21(2):133–154.
- Goldsmith, Jack L., and Eric A. Posner. (2005) *The Limits of International Law*. Oxford: Oxford University Press.
- Hardin, Garrett. (1968) The Tragedy of the Commons. *Science* 162(3859):1243–1248.
- Hensel, Paul. (2001) Contentious Issues and World Politics: The Management of Territorial Claims in the Americas, 1816–1992. *International Studies Quarterly* 45(1):81–109.
- Hensel, Paul R., Sara McLaughlin Mitchell, Thomas E. Sowers II, and Clayton L. Thyne. (2008) Bones of Contention: Comparing Territorial, Maritime, and River Issues. *Journal of Conflict Resolution* 52(1):117–143.
- Klein, Natalie. (2011) *Maritime Security and the Law of the Sea*. Oxford: Oxford University Press.
- Mitchell, Sara McLaughlin, and Paul R. Hensel. (2007) International Institutions and Compliance with Agreements. *American Journal of Political Science* 51(4):721–737.
- Mitchell, Sara McLaughlin, and Emilia Justyna Powell. (2011). *Domestic Law Goes Global: Legal Traditions and International Courts*. Cambridge: Cambridge University Press.
- Mitchell, Sara McLaughlin, and Brandon C. Prins. (1999) Beyond Territorial Contiguity: Issues at Stake in Democratic Militarized Interstate Disputes. *International Studies Quarterly* 43(1):169–183.
- Odell, Peter R. (1997) The Exploitation of Off-Shore Mineral Resources. *Geojournal* 42(1):17–26.
- Ostrom, Elinor. (1990) *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.
- Payne, Richard J. (1978) Mining the Deep Seabed: The Political, Economic and Legal Struggle. *Journal of Politics* 40(4):933–955.
- Posner, Eric A., and John C. Yoo. (2005) Judicial Independence in International Tribunals. *California Law Review* 93(1):1–74.
- Powell, Emilia Justyna, and Sara McLaughlin Mitchell. (2012) Forum Shopping for the Best Adjudicator: Conflict Management and the United Nations Convention on the Law of the Sea (UNCLOS). Working paper, University of Iowa.
- Pratt, Martin, and Clive Schofield, eds. (2000) *Jane's Exclusive Economic Zones*, 2nd edition. Surrey: Jane's Information Group Limited.
- Rhee, Sang-Myon. (1981) Equitable Solutions to the Maritime Boundary Dispute Between the United States and Canada in the Gulf of Maine. *American Journal of International Law* 75(3):590–628.
- Sebenius, James K. (1984) *Negotiating the Law of the Sea: Lessons in the Art and Science of Reaching Agreement*. Cambridge, MA: Harvard University Press.
- Singer, J. David, Stuart Bremer, and John Stuckey. (1972). Capability Distribution, Uncertainty, and Major Power War. In *Peace, War, and Numbers*, edited by B. Russett. Beverly Hills, CA: Sage.
- Tomz, Michael, Jason Wittenberg, and Gary King. (2003) *CLARIFY: Software for Interpreting and Presenting Statistical Results. Version 2.1*. Available at: <http://gking.harvard.edu/clarify>

- Treves, Tullio. (1999) Conflicts between the International Tribunal for the Law of the Sea and the International Court of Justice. *New York University Journal of International Law and Politics* 31(4):809–820.
- United Nations Food and Agriculture Organization. (2012) *World Review of Fisheries and Aquaculture*. Rome: United Nations Food and Agriculture Organization.
- Wijkman, Magnus. (1982) Managing the Global Commons. *International Organization* 36(3):511–536.
- Wyman, Katrina M. (2008). The Property Rights Challenge in Marine Fisheries. *Arizona Law Review* 50(2):511–544

APPENDIX

TABLE A1 EEZ Declarations and UNCLOS Membership (1900–2001), Western Hemisphere and Europe

COW Code	Country	EEZ Declaration ^a	UNCLOS Member ^a
002	United States	1983	
020	Canada	1996	
031	Bahamas		1983
040	Cuba	1977	1984
041	Haiti	1977	1996
042	Dominican Republic	1977	
051	Jamaica	1991	1983
052	Trinidad & Tobago	1983	1986
053	Barbados	1978	1993
054	Dominica	1981	1991
055	Grenada	1978	1991
056	Saint Lucia	1984	1985
057	Saint Vincent & Grenadines	1983	1993
058	Antigua & Barbuda	1982	1989
060	Saint Kitts-Nevis	1984	1993
070	Mexico	1976	1983
080	Belize	1992	1983
090	Guatemala	1976	1997
091	Honduras	1980	1993
092	El Salvador		
093	Nicaragua		2000
094	Costa Rica	1975	1992
095	Panama	1995-	1996
100	Colombia	1978	
101	Venezuela	1978	
110	Guyana	1977	1993
115	Suriname	1978	1998
130	Ecuador		
135	Peru		
140	Brazil	1993	1988
145	Bolivia		
150	Paraguay		
155	Chile	1986	1997
160	Argentina	1991	1995
165	Uruguay	1988	1992

(Continued)

TABLE A1 (Continued)

COW Code	Country	EEZ Declaration ^a	UNCLOS Member ^a
200	United Kingdom		1997
205	Ireland		1996
210	Netherlands	2000	1996
211	Belgium		1998
212	Luxembourg		
220	France	1976	1996
221	Monaco	1998	1996
223	Liechtenstein		
225	Switzerland		
230	Spain	1978	1997
232	Andorra		
235	Portugal	1978	1997
255	Germany ^b	1994	1991
290	Poland	1991	1998
305	Austria		
310	Hungary		
316	Czech Republic ^c		
317	Slovakia		
325	Italy		1995
331	San Marino		
338	Malta		1993
339	Albania		
343	Macedonia		
344	Croatia		1995
345	Yugoslavia		1986–1990
346	Bosnia-Herzegovina		1994
349	Slovenia		1995
350	Greece		1995
352	Cyprus		1988
355	Bulgaria	1987	1996
359	Moldova		
360	Romania	1986	1996
365	Russia	1984	1997
366	Estonia	1993	
367	Latvia	1994	
368	Lithuania	1995	1999
370	Belarus		
371	Armenia		
372	Georgia	1991	1996
373	Azerbaijan		
375	Finland		1996
380	Sweden	1992	1996
385	Norway	1976	1996
390	Denmark	1996	
395	Iceland	1979	1985
710	China	1998	
740	Japan	1996	

^aDates listed as start dates with ongoing commitments unless noted otherwise.

^bThere were no EEZ declarations or UNCLOS membership for either West Germany or East Germany (not listed).

^cThere were no EEZ declarations or UNCLOS membership for Czechoslovakia (not listed).