Charles Boehmer* and Renato Corbetta

Hard International Law-Contributing Organizations as Networks

DOI 10.1515/peps-2016-0031
Previously published online November 18, 2016

Abstract: This paper explores the networks that intergovernmental organizations (IGOs) create in the international system and explore how states relate to each other in such networks. It focuses in particular on the network of IGOs that act as creators of and agents for hard international law. We introduce new data that allows us to investigate which institutional traits and functions are most closely related to IGOs' contribution to the implementation and enforcement of informal international law. We map out and explore the network of "highly legalized" IGOs for the years 1980–2005 as well as the affiliation networks emerging from states' membership in such IGOs. Combining international relations theory with network theory, we raise novel hypotheses on the potential impact of highly legalized IGO networks on states' conflict behavior and peace.

Keywords: IGOs, Network Analysis, International Institutions

1 Introduction

Which intergovernmental organizations (IGOs) generate new international norms and laws and regulate and enforce state compliance with treaties and other obligations? This question is important because it relates to IGO efficacy in promoting cooperation.[1] To regulate state behaviors and enforce compliance,

1 Following Jacobson (1984), we define intergovernmental organizations (IGOs) as organizations formally established by treaty the members of which are mostly sovereign states. Examples of IGOs range from organizations created to address international coordination issues, such as the International Civil Aviation Organization (ICAO), to organizations that perform multiple cooperation tasks, such as the United Nations (UN). As we explain below, IGOs distinguish themselves from other less formal international institutions for having permanent bureaucratic structures, organizational autonomy from member states, and some degree of delegated decision-making and oversight autonomy. See also Volgy et al. (2008).

***Corresponding author: Charles Boehmer,** University of Texas at El Paso, 500 W. University Ave., El Paso, TX 79968, USA, E-mail: crboehmer@utep.edu
Renato Corbetta: University of Alabama at Birmingham, 1401 University Blvd., Birmingham, AL 35294, USA

IGOs must be equipped with the necessary institutional mandates and mechanisms. Moreover, international law-oriented IGOs and their member states relate to one another to create an international legal structure that may ultimately affect conflict and cooperation in the international system. Both legal scholars and political scientists study international law and international organizations, but a limited amount of research joins these two topics (Alvarez 2005; Slaughter-Burley 1993). There has been little systematic study about how the institutional design of IGOs relates to their ability to be agents and creators of international law using a large sample of IGOs. The goal of this project is to map systematically IGOs' involvement with "hard" international law, which requires both a higher level of state commitment to multilateralism and the independence of IGOs. This project presents new data on IGOs' institutional characteristics to help us understand which organizations are designed to generate and implement international law. In this paper we explore both how these "highly legalized" IGOs relate to each other and how states, through their membership in such IGOs, are connected to each other in the creation of a complex international law network.[2] These data should be important for explaining many patterns of cooperation and conflict between states, as well as compliance towards international agreements.

Because the structure of IGOs, including those features related to international law, and their ability to influence state behavior are endogenous to their member states' willingness to be affected by such institutions, we employ a network-analytic approach in this investigation.[3] Scholars interested in compliance with international law are increasingly adopting network arguments, suggesting that states' networks of shared IGO membership promote compliance with various international legal provisions (Goodliffe et al. 2012; Greenhill 2010; Prorok and Appel 2014; Von Stein 2008, 2010). Thus, we approach IGOs' role in the creation and effectiveness of international law in terms of two interrelated networks: (1) a broader network that connects IGOs to one another as a function of their involvement with international law; and (2) an affiliation

2 We define hard international law as the set of binding international legal provisions contained in formal treaties, agreements, and conventions and international custom. We refer to "highly legalized IGOs" as those IGOs that have sufficient authority, autonomy, and organizational structures to contribute to the creation of hard international law, and we adopt the Abbott et al. (2000) that "hard" international law has a high degree of obligation on states, precision in wording and state commitments, and delegates a high degree of authority to IGOs.

3 A network approach forces us to think about and explicitly model the endogeneity that characterizes most agent-structure relations (see Kadushin 2012; Newman 2010; Ward, Stovel, and Sacks 2011; Wasserman and Faust 1994).

network between states resulting from their shared membership in international law-involved IGOs.

While the data collection project is ongoing, this paper offers a first look at the data for the 1980–2005 period. The data are "biased" towards currently existing IGOs, but they allow us to provide a first inferential investigation of the institutional features and functions that drive IGO contribution of hard international law, as well as a descriptive exploration of the resulting networks of what we label as highly legalized IGOs and state membership in such networks. This effort helps us raise new hypotheses about the influence of IGOs on peace and conflict although, ultimately, the data collected in this project could be used to study the effects of IGO networks on many forms of state behavior.

2 Linking international law and IGOs in the literature

The systematic study of international institutions has grown considerably over time. Two main approaches have emerged, one focusing on individual IGOs and the other employing samples or the whole population of IGOs. Here we take the latter approach but borrow theoretically from the rational institutional design literature that is often employed to study single IGOs. The literature that examines IGO attributes and their effects on state behavior is too extensive to be adequately reviewed here, so we focus more narrowly on studies pertaining to institutional design and/or international law especially those that involve samples or the population of IGOs.[4]

Several studies and large N data projects have provided systematic classifications of IGO institutional attributes and mandates (Boehmer, Gartzke, and Nordstrom 2004; Cox and Jacobson 1973; Haftel 2007; Haftel and Thompson 2006; Hooghe and Marks forthcoming; Jacobson 1984). The IGO institutional score and mandate data produced by Boehmer, Gartzke, and Nordstrom (2004) –a partial source of data for this project– has been used in others studies (Bearce and Bondanella 2007; Boehmer and Nordstrom 2008; Donno, Metzger, and Russett 2015; Dorussen and Ward 2008; Hansen, Mitchell and Nemeth 2008; Ingram,

4 For example, several studies examine the effects of institutions with certain missions on state behavior, such as integrationist IGOs or preferential trade agreements (PTAs) on trade flows, international conflict, or democratization (Bearce and Sawa 2005; Haftel 2007; Mansfield and Bronson 1997; Mansfield and Pevehouse 2000; Hafner-Burton and Montgomery 2008).

Robinson and Busch 2005). Few of these works, however, explicitly connect IGOs' institutional features to international law. Similarly, a number of studies directly looks at IGOs in their attempt to evaluate the effectiveness of international law by investigating states' compliance with specific legal provisions, often concerning conflict behavior or human rights (Goodliffe and Hawkins 2006; Goodliffe et al. 2012; Greenhill 2010; Huth, Croco, and Appel 2011; Morrow 2007; Prorok and Appel 2014; Simmons 2002; Valentino, Huth, and Croco 2006). Some of these studies argue that the effectiveness of international law should be assessed based on states' shared membership in IGOs, as IGOs may either directly enforce compliance with international law or provide third party states with additional tools to promote compliance (Goodliffe et al. 2012; Prorok and Appel 2014; Von Stein 2010). Our goal in this project is to connect IGO attributes and their embeddedness to the legalization conception of international law, based on the foundation provided by Abbott and Snidal (1998), Abbott et al. (2000), Koremenos et al. (2001), and Hawkins et al. (2006). The next section provides a brief discussion of our theoretical foundation for this data project.

3 Theoretical propositions linking IGO attributes to international law

We begin from the premise that IGOs are the products of states' preferences (Koremenos, Lipson, and Snidal 2001) and are rationally formed to produce collective goods and reduce transaction costs, but they also help to create and enforce new rules and norms (Abbott and Snidal 1998, 8). For states to accomplish the goals for which they become active in IGOs, these institutions require some degree of centralization and independence (Abbott and Snidal 1998).

States' decisions about which institutions should be given greater functional capacity is not random. We solve this issue by linking IGOs to the degree of legalization provided by states. States use IGOs and international law, through international treaties, to legalize norms and patterns of behavior that they see in their interest (Abbott et al. 2000). The extent of legalization of IGOs relates to their ability to contribute to hard or soft law. The degree to which individual IGOs are connected to hard international law (O, P, D) depends on: differences in how states are obligated (O) to comply with international law; the precision of the law (P); and the delegation (D) of authority to third-parties, in this case IGOs. States ratify hard law treaties –which are often formed through IGOs– and create IGOs to help enforce international law. The creation of precise, binding international laws, and the delegation of authority to IGOs are meant to limit state

sovereignty and facilitate the identification of non-compliant behavior. Members of hard-law based IGOs signal a public commitment to certain norms and rules in the interstate system.

The quantity and quality of state IGO memberships matter and, although states may not have set out to design a broader international law network, one can be said to emerge as states join the same IGOs to advance hard international law. The relationship between states' embeddedness and cooperation is endogenous. Shared ties in a network of IGOs reflect states' preferences for seeking cooperation by creating and enforcing rules in the international system, some akin to covenants that should not be broken for short-term interests. "Most international agreements are simultaneously contract and covenant" (Abbott and Snidal 2000, 425).

The embeddedness of states within the network of hard-law connected IGOs reflects a commitment to solve interstate conflicts through third party institutions. These states should be more likely to adopt behaviors that are not just contract-based, but internalize deeper norms and values. We expect states that are embedded in the network of hard-law IGOs to enjoy a higher level of cooperation.

To refine further the prediction that hard law related IGOs contribute to cooperation, we classify IGOs based on Young's (1999) typology. Young categorizes international regimes by mission types: procedural, programmatic, regulatory, and generative. The latter two mission types relate to international law and IGOs. IGOs with regulatory missions help regulate and monitor behavior–e.g. the IAEA and the WTO. We hypothesize that state dyads most embedded in the networks of IGO with regulatory mission are more committed to the enforcement of international law and enjoy interstate peace compared to less embedded state dyads. Similarly, we expect the same type of shared preference for international law for state dyads most deeply tied to highly legalized IGOs with a generative mission as these IGOs seek to expand and deepen international law.

4 Methods

The data for this project come from the IGO attribute dataset (Boehmer 2011), which provides many measures of IGO institutional characteristics, including a new measure of IGOs contribution to hard international law, labeled "IGO Hardness" and new variables reflecting Young's (1999) regime typology. We examine relationships between IGO attributes and their contribution to international law as a function of their mission and map out the network of highly legalized IGOs for the 1980–2005 period. The population of IGOs used for this study is based on the revised Correlates of War Intergovernmental Organizations (2.3) dataset

(Pevehouse, Nordstrom, and Warnke 2004), which includes 12,856 IGO years. Each IGO is measured for each year of its existence.

The IGO Hardness variable is a composite index that ranges from zero to five, based on an IGO's possession of five key institutional attributes: Formal Voting, Operations Codified, Bureaucracy, Binding Decisions, and Juridical mechanism. The higher the value of this variable, the more it should capture the extent to which an IGO is related to hard international law, whereas low values relate the IGO to soft international law based roughly on Abbott and Snidal (2000) continuum. We label IGOs that score high –four or more– on this variable as "highly legalized." We also create four binary variables that classify IGOs' mission based on Young's typology: regulatory, programmatic, procedural, and generative.[5] IGOs are also coded as possessing specific issue area focus: economics, security, or matters of culture/norms.

We first present descriptive statistics about the IGO traits defined in the above-mentioned Young typology. We then focus on the IGO Hardness index and use network analysis to look at IGOs from a relational perspective. We look at the IGO data first as one-mode networks in which IGOs constitute the nodes and are related to one another by sharing a Hardness scale of four and above. This approach provides a picture of the "thickness" –the density– of the network of those IGOs that are expected to mostly influence international law and state behavior. We then shift our focus to member states and look at the data as two-mode (affiliation) networks in which states are connected by shared membership in IGOs with a high degree of Hardness.

5 Exploratory empirical findings

Figure 1 presents the frequency distribution of international organizations with regulatory, programmatic, procedural, and generative function over time. Most IGOs in any given year have programmatic and/or procedural function. A minority of IGOs have regulatory or generative functions, which we expect to contribute more strongly to the development and enforcement of international law. Note also the overall limited longitudinal variation in the data. Few IGOs add or shed functions during this limited period of time, and whatever variability is observed is due to the "death" of organizations.[6]

5 These four variables are not mutually exclusive; an IGO may provide all four of these attributes, especially those IGOs that have multiple functions and broad missions.

6 Frequencies within the same year are not the same across IGO functions due to missing cases.

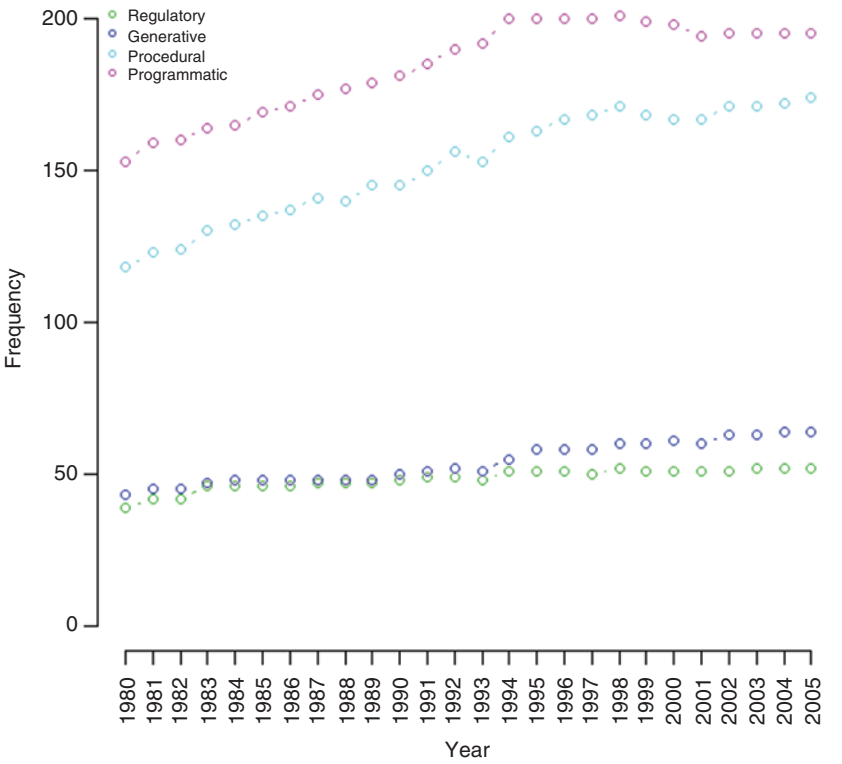

Figure 1: Distribution of IGO function according to Young's (1999) typology.

We investigate which institutional features better predict specific IGO missions according to Young's typology. We ran a series of logit regressions in which the dependent variable is whether or not an IGO takes on a regulatory, procedural, programmatic or generative mission. The results are presented in Table 1 below. All of the five institutional attributes that we have identified in the previous section as key determinants of high legalization – formal voting, operations codified, bureaucracy, binding decisions, and juridical mechanism– are positive and significant for regulatory and generative IGOs, whereas the procedural and programmatic IGOs show some attribute coefficients that are negative and/or insignificant.

The other IGO trait we are mostly interested is IGO Hardness. The dot-plot in Figure 2 below shows the frequency distribution of IGOs based on their hardness index during the 1980–2005 period. The diameter of each dot is proportional to the number of IGOs with a certain Hardness score. Figure 2 shows that most IGOs are relatively bare bone operations with few hard operational features. Only a

Table 1: Hardness components as predictors of mission type.

	Regulatory IGOs		Generative IGOs		Procedural IGOs		Programmatic IGOs	
	Coef.	P>|z|	Coef.	P>|z|	Coef.	P>|z|	Coef.	P>|z|
Voting	0.454	0.000	1.414	0.000	0.046	0.460	0.112	0.116
Codified Op	0.663	0.000	0.269	0.007	0.129	0.040	0.720	0.000
Bureaucracy	0.446	0.000	0.495	0.000	−0.492	0.000	0.922	0.000
Binding	2.106	0.000	0.612	0.000	0.534	0.000	−0.344	0.000
Judiciary	1.603	0.000	1.750	0.000	0.347	0.001	−0.007	0.953
Constant	−3.217	0.000	−2.363	0.000	0.186	0.000	−0.150	0.000
N	6833		6804		6859		6821	
AIC	4560.70		5599.50		9347.70		8111.30	

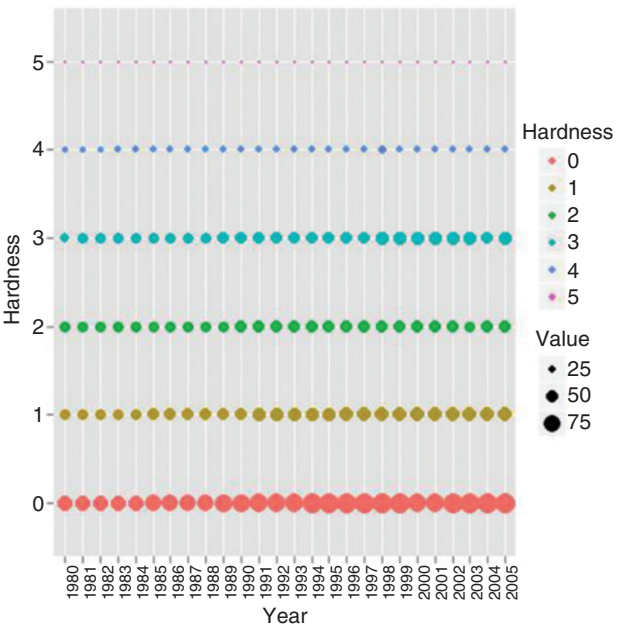

Figure 2: Frequency distribution of the hardness index across IGOs.

minority of IGOs achieve a score of 4 or higher and can be considered highly legalized and the traits least frequently present are the ability to make binding decisions and juridical mechanisms. This may indicate that IGO contributions to hard international law comes from a rather limited number of organizations. States make stronger commitments to international law by joining these IGOs.

Table 2: Relationships between mission type, mandate, and hardness.

	Regulatory IGOs		Generative IGOs		Procedural IGOs		Programmatic IGOs	
	Coef.	P>|z|	Coef.	P>|z|	Coef.	P>|z|	Coef.	P>|z|
Economic IGO	0.159	0.035	−0.190	0.005	−0.029	0.567	0.403	0.000
Security IGO	1.041	0.000	0.620	0.000	0.609	0.000	−0.122	0.191
Hardness	0.935	0.000	0.595	0.000	0.007	0.667	0.398	0.000
Constant	−3.857	0.000	−2.608	0.000	0.100	0.720	−0.147	0.001
N	6798		6771		6824		6876	
AIC	4758.30		5895.20		9374.50		8205.90	

We use the Hardness variable, in addition to whether IGOs have an economic or security focus, in a series of logit models to explore whether they assume regulatory, programmatic, generative, or procedural mission. The results are presented in Table 2. IGOs with a security mandate are positively and statistically related to the presence of a generative or regulatory mission. Serious security commitments between states appear to positively relate to state ties to hard international laws through regulatory and generative IGOs. Having an economic focus has a more ambiguous effect, actually reducing the likelihood of assuming a law-generating function. Hardness emerges as a consistent predictor of regulatory and generative missions.

We employ descriptive network analytical techniques to map the network of law and behavior-influencing IGOs. Because the structure of the emerging networks varies little over time, we provide only the snapshot the year 2005. In this preliminary analysis individual IGOs represent the nodes in the network, and we take the edges –the links between them– to be the possession of a Hardness index of 4 or above. Figure 3 shows the graphical representation of influential IGOs in 2005. In the graph each IGO is labeled according to its Correlates of War name. Not surprisingly, this network is constituted by some of the most established and popular global IGOs –such as the UN, the IMF, the WTO, ILO, and the ITU– and by some of the most widely known regional IGOs –such as the EU, the OAS, CARICOM, ASEAN, and ECOWAS.[7]

The goal of mapping the network of influential IGOs is to derive broader structural attributes of the networks themselves that may play a role in shaping state behavior and the creation of international law. For each data-year we derive some

7 The position of individual IGOs in the graph is determined by the randomization built into the graph layout algorithm.

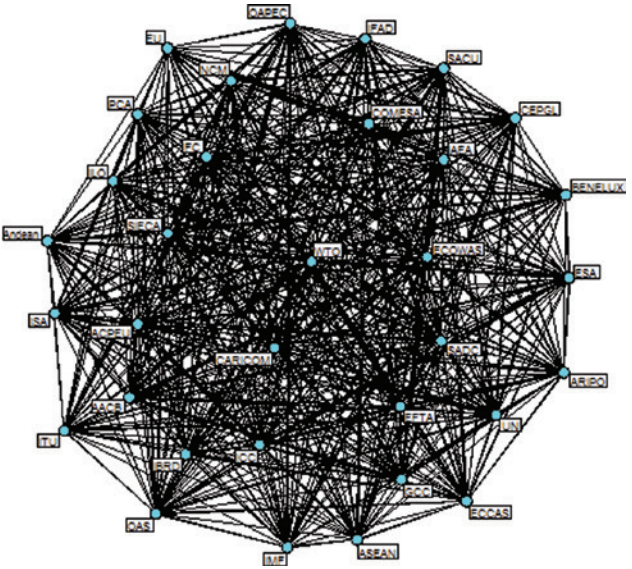

Figure 3: High hardness IGO network in 2005.

standard descriptive statistics for these networks which may be used as predictors of the extent to which states are affected by the web of IGOs and law in which they find themselves immersed. Table 3 below shows the number of nodes and edges, as well as density and centralization of the highly legalized IGO network in each year. Changes in the number of nodes reflect changes in the general number of IGOs in the system, whereas changes in the number of edges reflect variation in the number of IGOs that become highly legalized. Density reflects the "thickness" of the highly legalized IGO network, while centralization expresses the extent to which the network revolves around a specific set of highly central IGOs.

We also look at highly legalized IGOs as affiliation –two-mode– networks in which states are the nodes and are connected by shared membership in high hardness IGOs. We created a weighted affiliation matrix the cells of which contain the number of high hardness IGOs shared by state dyads. We do not provide a graphical representation of these networks because the resulting graphs are too dense to display any clear pattern of association. However, we can still extract very useful statistics at the network and dyad level that further illustrate how scholars may benefit from these data to explore a variety of propositions about the role of IGOs in shaping state behavior and in creating international law.

In Figure 4 below, for example, we compare the distribution of dyadically shared ties in all IGOs, regardless of the type, with the distribution of shared ties in

Table 3: Standard descriptive statistics of the IGO hardness network.

Year	Nodes	Edges	Density	Centralization
1980	275	378	0.010033	0.08915537
1981	283	435	0.010901	0.09258979
1982	284	435	0.010825	0.09229882
1983	292	465	0.010945	0.09278351
1984	294	496	0.011516	0.09493197
1985	299	496	0.011133	0.09351908
1986	302	496	0.010913	0.09269103
1987	309	528	0.011096	0.09340497
1988	309	528	0.011096	0.09340497
1989	315	528	0.010676	0.09181742
1990	322	528	0.010217	0.09003115
1991	329	528	0.009786	0.08831208
1992	335	528	0.009438	0.08688928
1993	340	496	0.008607	0.08332897
1994	351	595	0.009687	0.08795743
1995	352	630	0.010198	0.09002849
1996	353	630	0.01014	0.08980025
1997	350	630	0.010315	0.09048842
1998	350	666	0.010905	0.09277739
1999	342	595	0.010204	0.09002933
2000	339	595	0.010386	0.09074149
2001	334	595	0.010699	0.0919534
2002	345	630	0.010617	0.09165876
2003	350	630	0.010315	0.09048842
2004	352	630	0.010198	0.09002849
2005	354	630	0.010083	0.08957314

highly legalized IGOs only. We note that, of course, the average number of shared ties in highly legalized IGOs is considerably smaller than the average number of shared ties for all IGOs, but that the distribution of shared ties in highly legalized IGOs is considerably more normal and less skewed than the distribution resulting from all shared IGO memberships. This should have observable consequences on the estimation of models that explore the impact of shared IGO membership on state behavior.

6 Discussion and conclusions

This paper provides a starting point to begin thinking about how IGO attributes relate to international law. Our results show that our Hardness measure predicts

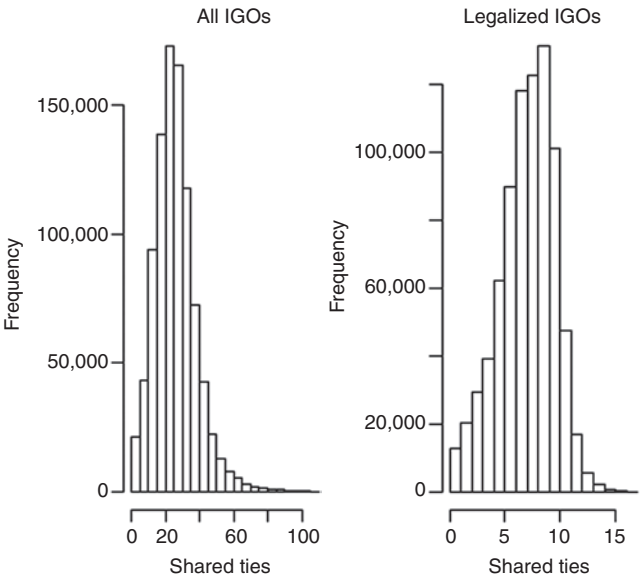

Figure 4: Frequency distributions of dyadic ties for all IGOs and highly legalized IGOs.

IGOs with regulatory and generative missions. The results are encouraging and suggest that IGOs' institutional traits are important factors in capturing differences between individual organizations both in terms of their ability to contribute to the creation of international law and in terms of their mission. In summary, we speculate that states highly tied to the networks of highly legalized IGOs with regulatory or generative mission share a high degree of commitment to international law, and should be less likely to militarize their conflicts. The next steps in the project are to complete the data collection so that the hypotheses raised here can be tested and, in the longer run, to explain the state attributes that lead them to become embedded in this international relations network and to use these network ties and connections to explain various forms of state cooperation and compliance.

Acknowledgement: The data for this paper has in part been funded through a University Research Initiative (URI) grant, and the College of Liberal Arts, through the University of Texas at El Paso.

References

Abbott, K., Snidal, D., (1998), Why States Act through Formal International Organizations. The Journal of Conflict Resolution, vol. 42, no. 1, pp. 3–32.

Abbott, K., Keohane, R., Moravcsik, Slaughter, A., Snidal, D. (2000). The Concept of Legalization. International Organization, vol. 54, no. 3, pp. 401–419.
Abbott, K., Snidal, D., (2000) Hard and Soft Law in International Governance, International Organization, vol. 54, no. 3, pp. 421–456.
Alvarez, J.E., (2005) International Organizations as Law-Makers, Oxford University Press, Oxford.
Bearce, D.H., Sawa, O., (2005), How Do Commercial Institutions Promote Peace? Journal of Peace Research, vol. 42, no. 6, pp. 659–678.
Bearce, D.H., Bondanella, S., (2007), Intergovernmental Organizations, Socialization, and Member-State Interest Convergence, International Organization, vol. 61, no. 4, pp. 703–733.
Boehmer, C., (2011). IGO Attribute Dataset. Data file: The University of Texas at El Paso.
Boehmer, C., Nordstrom, T., (2008), Intergovernmental Organization Memberships: Examining Political Community and the Attributes of International Organizations, International Interactions vol. 34, no. 3, pp. 282–309.
Boehmer, C., Gartzke, E., Nordstrom, T., (2004), Do Intergovernmental Organizations Promote Peace? World Politics, vol. 57, no. 1, pp. 1–38.
Cox, R., Jacobson, H., (1973), The Anatomy of Influence: Decision Making in International Organization, Yale University Press, New Haven, CT.
Donno, D., Metzger, S., Russett, B., (2015), Screening Out Risk: IGOs, Member State Selection, and Interstate Conflict, International Studies Quarterly, vol. 59, no. 2, pp. 251–263.
Dorussen, H., Ward, H., (2008), Intergovernmental Organizations and the Kantian Peace: A Network Perspective, Journal of Conflict Resolution, vol. 52, no. 2, pp. 189–212.
Goodliffe, J., Hawkins, D., (2006), Explaining Commitment: States and the Convention against Torture, Journal of Politics vol. 68, no. 2, pp. 358–371.
Goodliffe, J., Hawkins, D., Horne, C., Nielson, D., (2012), Dependence Networks and the International Criminal Court, International Studies Quarterly, vol. 56, no. 1, pp. 131–147.
Greenhill, B., (2010), The Company You Keep: International Socialization and the Diffusion of Human Rights Norms, International Studies Quarterly vol. 54, no. 1, pp. 127–145.
Hafner-Burton, E.M., Montgomery, A., (2008), Power or Plenty: How Do International Trade Institutions Affect Economic Sanctions? Journal of Conflict Resolution, vol. 52, no. 2, pp. 213–242.
Haftel, Y.Z., (2007), Designing for Peace: Regional Integration Arrangements, Institutional Variation, and Militarized Interstate Disputes, International Organization, vol. 61, no. 1, pp. 215–237.
Haftel, Y.Z., Thompson, A., (2006), The Independence of International Organizations: Concept and Applications. Journal of Conflict Resolution, vol. 50, no. 2, pp. 253–275.
Hansen, H.E., Mitchell, S.M., Nemeth, S.C., 2008. IO Mediation of Interstate Conflicts: Moving Beyond the Global versus Regional Dichotomy. Journal of Conflict Resolution, vol. 52, no. 2, pp. 295–325.
Hawkins, D., Lake, D., Nielson, D., Tierney, M., (2006), Delegation and Agency in International Organizations, Cambridge University Press, Cambridge.
Hooghe, L., Marks, G., (forthcoming), Delegation and Pooling in International Organizations, Review of International Organizations, vol. 10, no. 3, pp. 305–328.
Huth, P.K., Croco, S., Appel, B., (2011), Does International Law Promote the Peaceful Settlement of International Disputes? Evidence from the Study of Territorial Conflicts since 1945. American Political Science Review, vol. 105, no. 2, pp. 415–436.
Ingram, P., Robinson, J., Busch, M.L., (2005), The Intergovernmental Network of World Trade: IGO Connectiveness, Governance and Embeddedness, American Journal of Sociology, vol. 111, no. 3, pp. 824–858.

Jacobson, H., (1984), Networks of Interdependence: International Organizations and the Global Political System, Knopf, New York.
Kadushin, C., (2012), Understanding Social Networks: Theories, Concepts, and Findings, Oxford University Press, New York.
Koremenos, B., Lipson, C., Snidal, D., (2001), The Rational Design of International Institutions, International Organization, vol. 55, no. 4, pp. 761–799.
Mansfield, E.D., Bronson, R., (1997), Alliances, Preferential Trading Arrangements, and International Trade, American Political Science Review, vol. 91, no. 1, pp. 94–107.
Mansfield, E.D., Pevehouse, J.C., (2000), Trade Blocs, Trade Flows, and International Conflict. International Organization, vol. 54, no. 4, pp. 775–808.
Morrow, J., (2007), When Do States Follow the Laws of War? American Political Science Review, vol. 101, no. 3, pp. 559–572.
Newman, M.E.J., (2010), Networks: An Introduction, Oxford University Press, New York
Pevehouse, J., Nordstrom, T., Warnke, K., (2004), The Correlates of War 2 International Governmental Organization Data Version 2.0, Conflict Management and Peace Science, vol. 21, no. 2, pp. 101–119.
Prorok, A.K., Appel, B.J., (2014), Compliance with International Humanitarian Law: Democratic Third Parties and Civilian Targeting in Interstate War, Journal of Conflict Resolution, vol. 58, no. 4, pp. 713–740.
Simmons, B.A., (2002), Capacity, Commitment, and Compliance: International Institutions and Territorial Disputes, Journal of Conflict Resolution, vol. 46, no. 6, pp. 829–856.
Slaughter Burley, A.-M., (1993), International Law and International Relations Theory: A Dual Agenda, American Journal of International Law, vol. 87, no. 2, pp. 205–239.
Valentino, B.A., Huth, P.K., Croco, S.E., (2006), Covenants without the Sword: International Law and the Protection of Civilians in Times of War, World Politics, vol. 58, no. 3, pp. 339–377.
Volgy, T.J., Fausett, E., Grant, K.A., Rodgers, S., (2008), Identifying Formal Intergovernmental Organizations. Journal of Peace Research, vol. 45, no. 6, pp. 837–850.
Von Stein, J., (2008), The International Law and Politics of Climate Change: Ramification of the United Nations Framework Convention and the Kyoto Protocol, Journal of Conflict Resolution, vol. 52, no. 2, pp. 243–268.
Von Stein, J., (2010), International Law: Understanding Compliance and Enforcement, in Denemark, R., (ed.), International Studies Compendium, Wiley-Blackwell, Oxford, UK.
Ward, M.D., Stovel, K., Sacks, A., (2011), Network Analysis and Political Science, Annual Review of Political Science, vol. 14, pp. 245–264.
Wasserman, S., Faust, K., (1994), Social Network Analysis: Methods and Applications, Cambridge University Press, New York.
Young, O., (1999), Governance in World Affairs, Cornell University Press, Ithaca, NY.

Article note: Prepared for the 16th Jan Tinbergen European Peace Science Conference, Milan, June 20–22, 2016. Previous versions were presented at 74th Annual Convention of the 2016 Midwest Political Science Association, Chicago, IL, April 7–10, 2016 the 2016 International Studies Association, Atlanta, GA, March 16–19, 2016, and the annual meeting of the American Political Science Association, San Francisco, CA September 5, 2015.