

**Intergovernmental Organization Memberships: Examining Political
Community and the Attributes of International Organizations**

Charles Boehmer

Associate Professor
Department of Political Science
University of Texas at El Paso

El Paso, TX 79968
Office Phone: (915)747-7979
Fax: (915)747-6616
crboehmer@utep.edu
<http://utminers.utep.edu/crboehmer/>

Timothy Nordstrom

Associate Professor
Department of Political Science
University of Mississippi

P.O. Box 1848
University, MS 38677-1848
Phone: (662) 915-7232
Fax: (662) 915-7808
Email: tnordstr@olemiss.edu

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Abstract

Why are states jointly members in certain intergovernmental organizations (IGOs) but not others? Despite the proliferation of IGOs and renewed interest in this topic, we lack systematic research to answer this question. Our theory of political community explains why dyads of states are likely to be common members in particular types of IGOs. We analyze and compare functionalist and Deutschian communitarian perspectives about IGO memberships. We test our theory using newly available data on IGO mandates and institutional structure, which allows us to make specific predictions about the types of IGO to which dyads become members. We show that dyads that are economically dependent and/or democratic and enjoying enduring peace are more likely join those IGOs that possess high levels of institutional structure. Militarized interstate conflicts reduce the likelihood of states sharing membership in common IGO, but not substantially, whereas development and alliances also increase IGO memberships between states. Trade ties, however, are the most important determinant of joint membership between states in the most institutionalized IGOs, which is congruent with security communities.

Why do states seek membership in intergovernmental organization (IGO) with other states? There has been a notable proliferation of international organizations since World War II coinciding with decolonization but also with the spread of liberalism, particularly after the end of the Cold War. This has increased the potential reasons for states to join IGO as the number of IGOs has proliferated and expanded by issue area, although surely IGO memberships are not random. Functionalist theory has traditionally explained that states join IGOs for certain goods, such as development and prosperity. The logic of IGO joining from this perspective is generally state-level in origin but is geared toward solving collective action problems by acquiring goods that states cannot provide their citizens unilaterally. The path to such goods is through joining IGOs that do not necessarily require extensive institutional structure to aid integration efforts, meaning these memberships may not be politically contentious.

Some goods, however, can only be achieved through more extensive cooperation and integration, such as through a security community, where a higher level of delegation of authority is required. There has been a renewal of interest in the roles and design of IGOs considering trends toward integration efforts and other increasing interdependencies between states. The production of goods such as enduring peace and extensive economic integration require higher commitments to international organization. Theory must hence be applied to explain why certain types of states join specific types of IGOs. We cannot rely simply on the state-level logic of functionalism for this purpose. These latter topics are bilateral or multilateral in nature, as opposed to merely state level.

To date, the systematic international organization literature does not predict or prescribe which IGOs by issue area and institutional structure states should join to obtain peace and prosperity. Most scholarly emphasis has been on the monadic state attributes that lead to IGO membership more generally, but little work has progressed on the types of IGOs joined more generally and how dyads of states join certain types of IGOs more specifically. Joining many IGOs means a state associates with other members, which is not likely to be random. This makes many state decisions to join IGOs political internally and externally. This is the hole in the literature we hope to help fill; our contribution is that we show how bilateral state attributes predict joint IGO memberships by level of IGO institutional structure and mandate.

Our study is necessary because the relationships that states share with other states should affect not only to which types of IGOs they join but should also relate to the mandates and institutional structures of those IGOs. Let us not forget that IGOs are created for and by states and their institutional structure is a function of their aggregate preference homogeneity. If there are patterns to IGO membership, then we should see this reflected in the institutional form and even the performance of IGOs. This is an area where much of the literature is silent, although scholarly work on integration and security communities are exceptions. States seeking to deeply integrate their economic and security relations should empower IGOs in their structure and mission to over-come collective action problems and yield private goods to their members. Common IGO membership may then later affect economic relations or interstate conflict. We present a theory of political community based in part on Deutsch et al. (1957) explaining why pairs

of states join certain types of IGOs, which allows us to make predictions about heterogeneous types of IGOs and their memberships.

We explore the literature in the next section, placing particular emphasis on past approaches to the study of IGO formation and membership but also to limitations in IGO theory and data. Our theory then follows in the next section where we derive hypotheses of joint state IGO membership that relate to the missions and structure of IGOs. In the subsequent sections, we explain our research design and then test our hypotheses, particularly focusing on predictions made by functionalism relative to a communitarian approach. We find that democracy, development, alliances, and interstate commerce indeed increase the frequency that two states will become intertwined in common IGOs, although trade dependence has the strongest effect and appears related to efforts to integrate and/or form security communities.

Past Work on the Determinants of IGO Membership

Scholarly work that systematically examines joint state memberships in IGOs is limited, which is surprising given the proliferation of IGOs over the past few decades. The study of international organizations has gone through stages, where IGOs were an early focus but then later became of secondary importance in regime theory (Kratochwil and Ruggie 1986; Martin and Simmons 1998). Until recently, the bulk of studies on state membership in IGOs were restricted to functionalism.

Functionalism explains why states join IGOs generally, but not necessarily which types of organizations. Mitrany (1948), Haas (1961), and Jacobson (1984) view IGOs as a means of encouraging low-scale cooperation; states should cooperate in those areas

where they can solve to the problems states have difficulty managing unilaterally. The impetus for such international governance is rooted in a domestic demand for higher living standards driven by more freedom and social power from mass politics and democratization. States should cooperate when their own actions fail to solve distributive and collective action problems. Increasing state interdependence and globalization appears to have increased the need for more IGOs over time (Haas 1976, 1980). Empirical and systematic tests of this theory have been provided by Harold Jacobson and colleagues. Jacobson et al. (1986) examine the determinants of state membership in IGOs. Their study finds that states that are developed, democratic, possess large economies, or have been independent for many years are most likely to join IGOs. Shanks et al (1996) extend Jacobson et al (1986) and find that democratization relates positively to IGO joining.

The studies by Jacobson and colleagues are useful in that they provide some description, one of the first typologies of mandates used to study a wide population of IGOs, and some analysis of the effects of IGOs on state behavior or performance. Yet, a key question left unexplored was whether certain IGOs require varying degrees of institutional structure. The level of institutional structure within an IGO should directly relate to the degree of autonomy or influence with which states endow such organizations. Their use of a typology based on mandate partially relaxes the assumption that IGOs are homogenous, although not to the degree that we can discern in the aggregate which IGOs have more autonomy and institutional structure to solve varying magnitudes of collective action problems. Without this theoretical dimension and related data, we are left with post-hoc explanations for the existence of IGOs, which limits our

ability to explain the actual behavior of IGOs *ex ante*. IGOs seemingly exist because they have a mission and thus possess a certain potential to affect cooperation. The literature is replete with discussion of what institutions, regimes, or IGOs *can* do, but little systematic research explains what they *do* do.¹ Some IGOs may even behave in dysfunctional or pathological ways (Barnett and Finnemore 1999). In fact, many IGOs appear to fail at their missions or even die, although the birth rate of IGOs has exceeded the death rate (Pevehouse, Nordstrom, and Warnke 2003). Functionalism does not allow us to derive predictions about institutional design and performance.

Functionalism predicts that the most democratic and technologically developed states should have the most need for IGOs; however, foreign policy choices to participate in such organizations derive from domestic sources, not necessarily interstate sources. From this perspective, democratic and developed states will in the end join or establish many of the same IGOs but not necessarily with the overt goals of integration or security communities. This literature, however, is silent on how such joining patterns relate to the institutional design of IGOs. Functionalist scholars do not emphasize the overt security ties or economic integration strategies associated with security communities.

¹ See Abbott and Snidal 1998 as a prime example. Their typology of functions relating to the independence and centralization of IGOs is an excellent framework for studying IGOs but needs to be applied empirically and systematically. In addition, the functional approach does not permit us to explain the death or replacement of certain IGOs beyond the possibility that they succeeded at eliminating their problems and were thus no longer needed by states (Shanks et al. 1996), which also suggests that any bureaucratic impulse IGOs may have to carve out their own interests separate from the states that created them (Barnett & Finnemore 1999) do not necessarily prevail in the long-run.

However, the literature has begun to expand on the relationship between democracy and IGO memberships without the functionalist approach by instead explaining that membership in some IGOs is important for democratization and democratic consolidation. Pevehouse (2005) shows that there are incentives for elites in democratizing regimes to join densely democratic regional IGOs to help signal commitment to reform and to consolidate democracy. IGOs, in addition to coercing members that backslide from democracy, may also provide resources to leaders so they can divert side-payments to internal actors, such as the military. This is a richer explanation for the role of democracy compared to functionalist logic because it is politically strategic. Mansfield and Pevehouse (2006), however, show that newly democratized states are more likely to join IGOs than consolidated democracies. There also appear to be some variation in IGO joining as well depending on whether democracies are majoritarian or consensus-based (Rey and Barkdull 2005) and the number of veto players within the domestic environment (Minnich 2005).

Russett et al. (1998) and Russett and Oneal (2001) incorporate this past functional approach, including its strengths and weaknesses, with both a new emphasis on pluralistic security communities, borrowed from Deutsch et al (1957), and Kantian liberalism. They argue that Kant's vision for international organization was a network of IGOs through which liberal states could trade, with the outcome being a transformation of the system away from *realpolitik*. Such an approach allows them to measure the sum of joint IGO memberships between two states, which plausibly reflects what a security community would look like, at least quantitatively, as well as some similarity to the overlapping relations functionalists would expect. However, by counting all IGO

memberships together between two states, one cannot explain why pairs of states share memberships in some IGOs over other IGOs.

However, Pevehouse and Russett (2006) note that while Deutsch et al. (1957) did not specifically discuss IGO networks, the “mutual responsiveness” and “shared norms” are today expressed through IGO networks, especially through the socialization of norms. Using data from Boehmer et al. (2004), Bearce and Bondanella (2007) find support for the idea that only those most institutionalized IGOs are effective in the socialization of states, meaning state preferences converge over time between IGO members. States that are members to preferential trade agreements (PTAs) also enjoy higher trade flows (Mansfield and Pevehouse 2000), which is important for economic integration. A key issue that comes forth from the progression of this research is the sorting out of the multiple logics that lead states to join IGOs. Functionalism very likely plays a role in the rationale of states joining some IGOs, but it also cannot easily account for other strategic behavior in foreign policies and by state elites. Some state decisions to join IGOs are related to intentional attempts to integrate with other states, requiring that norms and policies become congruent in a manner that is particularly relevant for states’ internal politics. Foreign policies based on fostering security communities and integration are typically sensitive internal political matters not to be undertaken in the face of domestic instability or external security dilemmas with other IGO members.

A Theory of Political Community and IGO Memberships

Practically all states of the interstate system are members of at least one IGO; the most active states are members of dozens. Our first step is to outline why states join IGOs and

why there is no shortage of organizations to join. IGOs potentially produce benefits for states such as peace, prosperity, or even more routine goods like receiving mail and avoiding airliner disasters (Ruggie 1972). On first pass, one can think of joining IGOs as a lottery where some but not all will produce benefits for their members. But since joining some (but not all) IGOs is cheap, especially since collecting dues may be problematic, which is endemic in African IGOs, some states will join on the hope of benefits. Joining many IGOs is akin to covering bets not knowing which ones will successfully produce tangible benefits. One can think of this as a version of forum shopping but with a broader range of goods in mind besides juridical conflict resolution (Busch 2007). On second pass, however, when states join certain IGOs with specific member states, this process looks less random than a lottery. In the end, institutional structure and the level of delegation of authority are related to the aggregate characteristics of members (Hawkins et al. 2006).

Much of the literature discussed above associates the state attributes of democracy and economic interdependence with numerous IGO memberships. Our contribution is to show that the most institutionalized IGOs, those that are most important to international integration as part of security communities, are joined or formed by certain states and not others. Where states share a strong preference to integrate and/or form a security community, they will need to empower IGOs to guide such efforts by providing a higher level of institutional structure than more typical, functionalist, IGOs. Naturally, some economic organizations are functional in nature, although those that relate to integration require higher levels of authority and institutional structure to achieve their missions.

Security related IGOs that bind a security community will similarly require higher levels of commitment from states than functionalist IGOs.

Functionalism predicts that states will join IGOs that have low cost but provide some benefit to their citizens, which should make joining these IGOs less politically charged within states, especially for democracies whose citizens have freer outlets to express their demands for higher living standards. Democracy and development have been shown to lead to higher rates of IGO membership, apparently in order to satisfy internal demands for goods. Especially if these functional IGOs mainly coordinate or provide a forum for cooperation with which to overcome collective action problems, then costs may remain low both politically and financially. These should be positive-sum experiences that do not come with a high price tag. For purposes of comparison with the literature and our theory we first state two hypotheses that extend functionalist predictions concerning democracy and development to the dyadic level of analysis.

H₁: The higher the level of democracy between two states, the higher the number of joint memberships in IGOs they should share.

H₂: The higher the level of development between two states, the higher the number of joint memberships in IGOs they should share.

In contrast, the formation of a security community appears to require a more overt decision by states to integrate, which is aided by IGOs. Our conception of a security community is the pluralistic form borrowed from Deutsch et al (1957), just as by Russett and Oneal (2001), although we do not employ the cybernetic component and instead focus more on the broader goals and strategy of integration on the matters of economies, security, and other governmental functions. Deutsch argued that the primary goal of a

security community is to make war unthinkable, which requires that people form connections on multiple levels through intergovernmental organizations and personal connections. Deutsch in much of his research, as well as Russett and Oneal (2001) include discussions of collective identities and other themes taken up by constructivism today. However, we do not theorize about common identities since it does not relate directly with our explanation about why states join IGOs.

Where we do align with Deutsch and not functionalists is in the idea that integration is neither easy to coordinate with other states nor apolitical domestically. Forming and joining IGOs that integrate states in the realms of economics and security is more likely to entail two-level political bargaining games and have more significant domestic costs (but also benefits) compared to membership in functionalist IGOs. Hence, states may face positive-sum gains by cooperating but negotiating and maintaining good-faith enduring commitments is difficult and nonlinear. The development of a pluralistic security community takes time and is reflected in the characteristics of its IGO network. Intergovernmental organizations play a central role in forming the skeleton of a political community and to help foster collective action, although some IGOs will be more important than others in guiding the integration of states on economic and security issues. We also do not expect a single IGO to serve as the basis for a security community.² For example, the European Union is not likely the sole reason for peace and prosperity in Western Europe and likely shares credit with NATO, OECD, OSCE, and many other

² The concept of a security community is overly rigid if it is interpreted as the sole membership in a single IGO, making too much of a dichotomy between nonmembers and members. For example, is the relationship closer between the United Kingdom and France, both EU members, than between the United States and the United Kingdom, in which the latter two are not cooperating to form any regional security community? Hence, we find it is easier to theorize community as a matter of degree by which IGO memberships may provide some proxy.

IGOs. There is also overlap between functionalism and security communities according to Deutsch et al. (1957) and Russett and Oneal (2001). The formation of communal ties between states is above and beyond the goals of functionalism but can also include these lesser goals as well as part and parcel. The key for us then is to differentiate IGOs in a manner that captures a deliberate attempt form political community through integration.

Because integration requires politically sensitive strategies and goals, and is more difficult to obtain multilaterally, states need to empower those IGOs most directly aiding in integration processes. Hence, the benefits and costs of IGO membership vary in reality and cannot be assumed to be homogenous across all IGOs. Unlike functionalist IGOs, these IGOs will require more autonomy and institutional structure to implement their missions. Among the myriad of IGOs available for states to join are those that stand apart by their higher level of institutional structure to produce important private goods. These goods are private because they are only available to members. When an IGO produces significant goods, membership becomes an exclusive good to preserve coherent shared preferences among members and to maximize benefits of cooperation. The community's IGOs should more successfully produce benefits for members because higher levels of trust will expand cooperation and integration, which requires a high degree of commitment from states that is reflected in the autonomy and institutional structure of IGOs. Hawkins et al. (2006) theorize that principles (states) delegate authority to agents (IGOs) in relation to potential benefits and preference heterogeneity.

Again, a key difference between the IGOs within and outside of a political community is the degree to which they have been empowered by their members to govern. By states declaring that they wish to integrate does not lead to integration alone,

and there are many IGOs supposedly possessing this mission but lack any institutional structure to achieve it. This requires trust that will be lacking where states still fear that their security is threatened by other members, such as between Pakistan and India in the South Asian Area of Regional Cooperation (SAARC). Why does SAARC exist? The answer would seem obvious: the states of south Asia, including India and Pakistan, desire peace and prosperity, such as enjoyed in recent decades in Western Europe. What is the difference between SAARC and the EU? The latter's members have learned to trust each other through a gradual process of integration, whereas at the time of Deutsch's writing, fear lingered that Germany might return to its militaristic and expansionist ambitions. The early forerunners of the EU were simple and did not require extensive trust and resources, just like many of the IGOs we see in the developing regions of the world today. Similarly, we should not expect states that face security dilemmas vis-à-vis each other to commit jointly to IGOs structured to implement integration.³

Our next two hypotheses are derived so to test our theory about security communities. We can expect different relationships between our theoretically informed variables when we treat IGOs as a heterogeneous group. The Kantian/Deutschian traditions suggest that economic exchange is an important ingredient in the formation of political community. Flows between countries of various types, especially between

³ One problem that arises in quantitative counts of IGOs, even measuring level of institutional structure, are differentiating those IGOs that are merely functional versus those that are supposed to implement integration agreements but are institutionally constrained. We will examine this directly in future work but for now it is clear at least which IGOs have been endowed by their creator states to guide integration. We assume that those IGOs that are more institutionalized are more capable of delivering the private goods promised through integration.

nonstate actors, should help foster political and economic community. Russett et.al expect that “high volumes of international trade demand stable commitments to the limitation or elimination of tariffs and non-tariff barriers” (1998, 459) and note that many IGOs are formed for purposes of promoting economic exchange between states. Indeed, according to their analysis, highly interdependent dyads are more likely to have higher numbers of joint memberships in IGOs than pairs of states with lower levels of trade. In partial contrast though, we would expect states with high levels of trade to form *institutionalized* IGOs, which is particularly important for those states seeking economic and political integration, as required in the formation of a security community.

H₃: The higher the level of trade between two states, the higher the number of joint memberships in institutionalized IGOs they should share.

In addition, we expect that joint democracy is not alone a good test for political community and offer a different formulation than the functionalist extension stated in H₁. Democracies are often characterized as preferring debate and negotiation and are attributed with higher levels of commitment than other regime types. We agree with Russett and Oneal (2001) that democracy is a major value that if shared between states may form the basis of a security community. Kant posited that democracies would form associations of nations as part of their pursuit of perpetual peace. We should expect theoretically that democracies jointly sharing peace over long periods of time should share common preferences and lack security dilemmas to jointly become members of institutionalized IGOs, which is important in the development of a security community.

H₄: The higher the level of democracy and peace between two states over time, the higher the number of joint memberships in institutionalized IGOs they should share.

Data and Research Design

We test our hypotheses using a sample consisting of nondirected dyads of all states for the years 1951-1992. To be clear, we are interested in explaining joint memberships in IGOs and our sample is based on pairs of states. The dependent variables of this study are the number of memberships two states share in intergovernmental organizations (IGOs) by level of institutionalization and the issue areas of security and economics. We separate memberships in economic and security related IGOs in some of our later models to specifically examine those organizations most important to the concept of a security community. We begin with a count variable aggregating all the shared IGO memberships in a dyad for each year, based on of Russett et al. (1998). This variable ranges from 1 to a maximum of 93 memberships.

We then disaggregate these organizations and reclassify them by level of institutionalization and by issue area using data by Boehmer et al. (2004). As described in the previous section, we expect that certain pairs of states will be more likely to join organizations endowed with differing levels of institutional structure and efficacy. The level of IGO institutionalization is divided into three categories in Boehmer et al. (2004). Minimal IGOs holds plenary meetings and may possess a secretariat but lacks extensive bureaucracy beyond basic research and planning. Structured IGOs contain structures of assembly, non-ceremonial executives, and/or bureaucracies to implement policies and programs, guided by formal rules and procedures. Interventionist IGOs contain mechanisms for conflict resolution such as mediation, arbitration, adjudication, and/or other mechanisms to enforce organizational policies and norms, including the withholding of economic benefits. The variable counting shared membership in

Interventionist organizations aims to capture attempts to coerce both with economics (sanctions) and legal/military mechanisms. The effectiveness or applicability of these tools or responses may differ from case to case making them not directly comparable within a single measure. We thus examine separately IGOs mandated with either security or economic missions.⁴ Variables are created counting shared memberships in organizations that possess either an economic or security component, and additional variables are created disaggregating security and economic organizations by level of institutional structure.

We test for the effects of past interstate conflict on joint IGO memberships. $Dispute_{t-1}$, is employed in our additive models and measures recent interstate conflict between two states and derives from the Militarized Interstate Dispute data set produced by the Correlates of War Project (Jones, Bremer, and Singer 1996), using the corrections of the 2.10 version provided by Zeev Maoz in his DYIMID 1.0 data. A dispute is said to have occurred when one state threatens, displays, or uses military force within a dyad in the previous year. We include *Democracy Low* and *Dependence Low* from Oneal and Russett (1999). *Democracy Low* is constructed from the Polity III data (Jaggers and Gurr 1995), where each state's autocracy score is subtracted from its democracy score, producing an index that ranges from -10 to +10. *Democracy Low* equals the lower of the two state indices in the dyad. *Dependence Low* equals the lower of the sum of a state's exports + imports with its dyadic partner divided by its GDP. Based on the weak-link

⁴ The United Nations, for example, can be coded in both the security and economic count variables, although the near universal membership in the UN specifically makes its effects on states nearly a constant in the analysis. The categories are not mutually exclusive and some organizations clearly fall into more than one class.

assumption, the higher the democracy or dependence score of the lower of the two states in a dyad, the more the states should share IGO memberships. To measure the effect of democratic political community we interact the Democracy Low variable with a variable measuring the time since the last militarized state dispute between the dyadic partners (Democracy Low * Peace Years), based on Beck, Katz, and Tucker (1998). To control for level of economic development we measure the lower of the two states energy consumption per capita in the dyad. These data are based on the COW National Capabilities Data Set (v2.1).⁵ Our variable is again based on the weak-link assumption that the higher the less developed state in a dyad, the more likely two states will share IGO memberships.

Finally, we include four additional control variables. *Distance* and *Allies* are from Oneal and Russett (1999). States that are geographically proximate and allies should be more likely to join the same IGOs. Distance is the natural log of the distance between the capitals or major ports of the two states of a dyad. Allies is dichotomous and measures the presence (1) of a military alliance between the states of a dyad, or not (0). Of course, numerous shared IGO memberships may be artifacts of other effects. States may simply find themselves mutually affiliated with high numbers of organizations because there has been an increasing trend in IGO joining over the past several decades or because both states in a dyad are very active internationally. *AvgIGO* measures the average number of IGO memberships in the system for each given year and is from Oneal and Russett (1999). The higher Diplomatic Missions Low or AvgIGO, the more likely we should

⁵ These data are available at <http://cow2.la.psu.edu/>. See Singer (1987) for a description of the data.

expect dyadic IGO memberships to rise within dyads. *Diplomatic Missions Low* is from Boehmer et al. (2004) and is likewise based on the weak-link assumption and measures the lower value of diplomatic missions sent out around the world between the two states of a dyad.

We treat dyadic IGO memberships as count variables and employ Poisson and negative binomial regressions considering that our reclassification of IGOs by level of institutionalization and issue area produces variables with low frequencies of memberships. Both estimators are essentially based on the same data distribution but the latter can account for over-dispersion in the data, which occurs when the variance of the dependent variable does not equal the mean. This is a situation where there typically exist many zeros in the sample. In the analysis to follow in the next section we first present models by level of institutionalization, which are followed by models combining issue area and institutionalization.

Results

A few general comments are in order regarding the results. First, our data are not generally over-dispersed and we hence present our Poisson estimates. Second, almost all the explanatory variables across the models are statistically significant below the threshold of .05, using a one-tailed test, and most of the signs of the coefficients point in the expected direction. Thus, we concentrate our discussion here on the sign directions of the coefficients and their substantive effects instead of matters of statistical significance.

Overall IGO memberships

We begin with a discussion of all IGOs memberships in a dyad to serve as a baseline for our results by IGO level of structure and mandate. As anticipated, democracy, development, trade dependence, and alliances increase shared memberships in IGOs, whereas participation in militarized disputes and increasing geographic distance between two states decreases joint memberships, as reported in model 1 of Table 1. These results support H₁ and H₂. We also find that trade dependence within a dyad generally leads to more common IGO memberships, although our theory is not particularly concerned with overall memberships. In addition, states that experience a dispute at t-1 are less likely to share joint IGO memberships. Our remaining covariates perform as expected.

The substantive results for model 1 are shown in Table 2. Note that the number of organizations in a dyad varies by category, which means the expected value of Y will vary. Table 2 shows both the expected value of Y and the first difference changes in the expected value of Y given changes in the covariates. We can see that Dependence Low has the strongest positive effect on joint memberships. Joint IGO memberships are also higher for states that are allies or democratic, whereas the effect of joint development is much weaker substantively. Since our interest is with the institutional and issue mandate variables, we now turn to these models.

Shared memberships by institutional level

Models 2 through 4 presented in Table 1 break down joint IGO memberships by level of institutionalization using data for the three dependent variables based on Boehmer et al. (2004). The coefficient estimates are almost all statically significant with the exception that dyadic trade has an insignificant effect on membership in IGOs possessing minimal

institutional structure. The effect of a past dispute also has a negative effect on joint IGO memberships at the .05 alpha level, while all the other coefficients in Table 1 are significant below the .001 alpha level.

Of importance, however, is the relative effect of these covariates on joint memberships. Interdependent dyads appear not only more likely to join the same IGOs, but particularly those that are most equipped to intervene in interstate conflicts (model 4), which supports H₃. This is not surprising since these are the states that should face the greatest number of issues requiring multilateral cooperation and management, especially if they are trying to form a security community. States that are allies though do not necessarily become members of highly institutionalized IGOs relative to other IGOs. Remember that an alliance may or may not be associated with attempts to form a security community. Security community is likely better captured by states joining many of the same interventionist IGOs because these are more likely to help foster integration. Allies has a positive effect on joining all levels of IGOs but particularly those that are the least institutionalized.

Democracy Low has the next strongest effect on IGO memberships in general, although democratic dyads are not necessarily more likely to join the more institutionalized organizations relative to others. H₁ is supported but not necessarily H₄ without a multiplicative model; pairs of democracies are more likely to find themselves members of Minimal IGOs at almost the same rate as interventionist IGOs. The effect of democracy in this additive model is rather homogenous across IGO institutional levels. In comparison, developed dyads are more likely to jointly be members of minimal and structured IGOs but not interventionist IGOs. This lends partial support to functionalist

logic that membership is more likely to occur for developed states in IGOs that are less able to intervene into interstate politics, which is also potentially politically costly in the face of domestic audiences. H₂ is generally supported and offers support for the idea that developed states generally cluster in the same IGOs, controlling for distance, democracy, and the other covariates.

Also of interest is that while the findings in part support the “virtuous circle” proposition advanced by Russett and Oneal, the substantive effect of militarized conflict on joint memberships is surprisingly weak. There is of course some reason to suspect endogenous relationships between IGOs and conflict, although our study helps to elucidate this topic. Clearly any endogeneity here appears to be quite weak across dyadic membership in IGOs. This is important theoretically because there may be several kinds of endogeneity occurring simultaneously that we and others must begin to identify. States that are in conflict may of course form or join IGOs to escape conflict while other IGOs may be a function of peace. Moreover, functionalists expect that even conflicting states may find some minimal reasons to seek low levels of cooperation on matters that do not risk state security. Overall, a recent militarized conflict is an indication that states will be less likely to be members of the same IGOs, but this is not a very strong effect. This membership suppressing effect is strongest, however, for interventionist IGOs, which of course pose more risk to conflicting states due to their autonomy and greater ability to inflict costs for noncompliance of agreements.

Membership in Economic Organizations

Tables 3 and 4 present the results categorizing joint memberships by level of institutionalization in IGOs with an economic component to their mission. Considering

the importance of economic integration within a pluralistic security community, these tests are particularly important for our theory. Here we chiefly focus on the last three models of Table 3. All the results in Tables 1 through 4 show that militarized conflicts reduce joint memberships with the exception of model E2. Instead, there is evidence that militarized conflict neither increases nor decreases higher levels of shared memberships in Minimal Economic IGOs, those with the least amount of institutional structure. Hence there is again some partial evidence of weak endogeneity but in regards to the more institutionalized IGOs. We should especially expect that conflict-prone dyads will be less likely to be members of IGOs that carry some risk to their external security and internal stability. Furthermore, this lack of commitment concerning the empowerment of IGOs is not necessarily from a lack of a culture of law, order, or compromise often associated with democracy. Joint democracy, allies, and development in a dyad actually have their highest effect on Minimal IGO memberships, and Development Low is negatively related to Interventionist IGOs in general (model E4).

We again find some interesting patterns regarding interdependent dyads. States that are highly dependent on each other for trade are likely to join the same IGOs. Note however, that this is particularly the case of the Interventionist economic organizations, supporting H₃. Dependence Low is actually negatively related to joint membership in Minimal or Structured IGOs. Moving from the minimum to the maximum value of trade dependence in a dyad increases the expected membership in Interventionist IGOs by about two organizations (model E4 of Table 4).

Membership in Security Organizations

The pattern of shared memberships in IGOs with security mandates resemble those of economic organizations, which again is important for our theory. Although militarized conflict tends to reduce IGO memberships in Structured and Interventionist organizations, this is not the case for Minimal IGOs. The occurrence of MIDs is *positively* related to membership in Minimal security IGOs, as shown in model S2 of Table 5. This is an interesting finding, albeit a weak association statistically. These are the states that should be least willing to relinquish some of their sovereignty to third parties such as IGOs. These results suggest that these dyads may either attempt to mitigate their conflicts through IGO joining or even attempt to keep their enemies close, so to speak. Evidently joining these IGOs with potential or realized enemies does not have negative security externalities.

However, we again find that conflict-prone dyads will be less willing to be joint members of structured and interventionist security related IGOs. Yet again though, the substantive effect of a past MID on IGO memberships is not particularly large, as revealed in Table 6. This provides more evidence for at least some form of weak endogeneity between peace and IGO memberships, although there may be multiple effects occurring simultaneously that are contradictory and partially cancel each other out and hence weak in the aggregate.

Of course, there are many fewer security IGOs in the sample and categorizing by institutional level further reduces the count variables. For this reason the expected value of Y given the X variables is small, as are the relative changes in the covariates on $E(Y)$. Nonetheless, trade interdependence still has a very strong substantive effect on security

IGO memberships relative to the other covariates. States in dyads more dependent on bilateral trade flows are more likely to select into, or construct, security IGOs that have teeth. Not only do these organizations possess the mandate to intervene into conflicts, but they have the necessary institutional wherewithal to do so. This implies that higher levels of trust and shared preferences, related to political community, lead to more autonomous IGOs capable of affecting state behavior. This is not something states fearing for their security from a dyadic partner should be venturing into with potential enemy states.

Table 6 also shows that Democracy Low is again positively related to joint membership in all security IGOs, but particularly Minimal and Structured security IGOs. Democracy is negatively associated with membership in Interventionist Security IGOs. The reverse is true, however, for developed dyads, which are most likely to join Interventionist Security IGOs by a small degree relative to other IGOs. A simple alliance tie, however, predicts membership in all forms of security IGOs but the strongest effect is on structured IGOs. These results may reflect stronger preferences between developed and democratic states concerning particularly the issue of security relative to other issue areas, which could be partially associated with security community in a limited role. A good example of this may be New Zealand in ANZUS. There was a functional utility for this alliance and IGO for some time until the nuclear issue within New Zealander politics trumped the security ties, which seems to conform more to functionalist theory. Here state preferences seemed to diverge instead of converge within the IGO. In the aggregate, the economic IGOs appear to require the strongest state commitment due to the direct effects on domestic politics.

Trade interdependence again is strongly related to higher levels of international organization. Moving from the minimum to the maximum value of Dependence Low in a dyad increases the expected number of shared memberships in security IGOs by about 2 (model S4 in Table 6). In other words, we should expect that the most interdependent dyads are also those most likely to constitute the membership of Interventionist security organizations.

Security Community and IGO memberships

In this section we test H₄ in particular and also compare it to the effects of trade dependence on joint IGO memberships. Our theoretical expectation is that both H₃ and H₄ will be supported. Testing the latter hypothesis requires the multiplicative term Democracy*Peace Years and offers a reexamination of the additive effects of democracy presented earlier that we believe better capture functionalist predictions compared to those associated with political community. The results of these models across the IGO dependent variables are located in Table 7.

In Table 7 we specifically compare the effects of the democratic peace and trade dependence on IGO memberships. It is logical that particularly democracies at peace for long periods of time may be more likely to become members of the same IGOs, particularly the most institutionalized ones, for reasons similar to the logic for trade dependence. The lack of security dilemmas between democracies may lead to higher levels of bilateral trust in a manner that dispels some costs in bilateral cooperation within domestic environments, no matter whether states seek to integrate economically or not.

The results show that indeed our estimates for democracy behave similarly to those of trade dependence when we condition joint democracy on the amount of time since the last militarized interstate dispute. Both Democracy*Peace and Trade Dependence have their strongest effect on joining interventionist IGOs. Both types of dyads should possess higher levels of trust enough to join/form interventionist IGOs. Interestingly enough, though, trade still has the biggest substantive effect on IGO memberships in interventionist organizations. Both H₃ and H₄ are supported.

The results are mostly similar when we disaggregate IGO memberships by mission with level of institutionalization, although both variables have about an equal effect on joint membership in interventionist economic IGOs. Whereas peaceful democratic dyads are more likely to be joint members of IGOs at all levels of institutionalization, but especially interventionist IGOs, trade dependent dyads are negatively associated with joining minimal and structured economic IGOs. The results are partly similar for security IGOs. Democracy*Peace is negatively related to joining Minimal Security IGOs, but positive for the other two levels of IGOs. Trade dependent dyads are much more likely to join interventionist IGOs and Minimal security IGOs to a lesser degree, but not Structured Security IGOs. The results overall especially highlight that both the democratic peace and trade ties lead to joint membership in interventionist IGOs, which is particularly associated with states integrating or sharing higher levels of trust with each other.⁶

Conclusion

⁶ We also tested for an interaction between democracy and trade, although the estimates are likely affected by some high multicollinearity issues, leading to predictions outside the range expected (apparent micronumerosity and some lack of variance). However, what results we did obtain indicate that states that are both democratic and trade with each other are most likely to be joint members of structured IGOs followed by Interventionist IGOs, but negatively associated with Minimal IGOs.

We set out to further understand the determinants of IGO membership and have argued that security communities require IGOs that have been delegated higher levels of autonomy than functionalist IGOs. This is important because the delegation of such authority is based on the calculation that benefits will surpass costs, including negative security externalities and domestic backlash. The results here generally support our theory but also support aspects of functionalist logic. This is expected given that functionalism and security communities are not necessarily mutually exclusive since the latter may involve the former. States may share common needs for both kinds of IGOs, although those IGOs especially given the mission to guide integration require additional authority and institutional structure.

Our results show that trade dependence between states is strongly related to membership in highly institutionalized economic and security related organizations, which is what we would expect of states that seek to integrate with each other. This is not necessarily the case for higher levels of democracy or development in dyads in our additive models. Does this mean that such variables are less important? No, instead this seems to lend support to functionalist claims that IGOs are important but that their objectives may sometimes remain in more routine issue areas where states can cooperate, as opposed to the larger issues related to political and economic integration. This is in part good news. If the most institutionalized IGOs are more effective at preventing militarized conflicts from occurring, then it is good that such organizations are not restricted to democratic or developed dyads. This only means that democracy and development may not be each necessary to forming highly institutionalized IGOs. By

combining functionalism with political community, it becomes important to explain that not all attributes of dyads lend themselves to membership across all types of IGOs.

The results here give us some sense of optimism that IGOs can foster interstate peace, aid in development, or achieve other goals, although clearly many of the organizations that exist today cannot fulfill their missions without higher levels of commitment from states. Organizational efficacy would appear to be related to the autonomy necessary to implement conflict-resolution mechanisms and potentially apply costs and benefits to actors that comply or not. The findings here point to the importance of interdependence as a factor that may encourage states to surrender aspects of their sovereignty to third parties such as IGOs in order to gain higher benefits and avoid losses. Interdependent states are appreciably more likely to join the same IGOs, but more importantly, particularly those most institutionalized organizations designed to intervene in interstate conflicts. This does not mean, of course, that joint democracy and development do not directly aid cooperation, they just are not necessary for the sake of forming structured and interventionist IGOs. We also do not mean to imply that minimally structured IGOs fail to produce benefits for states, but that they likely produce goods that do not require goods that are costly and related to integration. What is important, though, is that if peace is a product of political and economic integration, then commerce appears most important to forming those IGOs that most highly institutionalized to deliver those goods. Democracies enjoying enduring peace may similarly capitalize on their cooperation through institutionalized IGOs.

Finally, there is good reason to suspect that there may be endogenous relationships between IGOs and peace. Our results begin to shed some light on this

topic and yield interesting results. It appears to not be the case that such endogeneity is either monotonic or absolutely substantial. Indeed, recent militarized conflicts appear to affect joint IGO memberships, although this effect appears much weaker than the other covariates we examined. Moreover, there appear to be multiple forms of endogenous relationships that vary with the type of IGO under consideration. Interstate conflict is clearly negatively related to states cooperating in the most highly structured and interventionist IGOs but does not necessarily suppress membership, and may even increase it, in Minimal IGOs. This is a finding that we should expect from both theories on security communities and functionalism. States may attempt to cooperate where they can based on a calculation of expected benefits and security externalities. Some IGOs may offer the promise of future benefits while others deliver in the present. Future work will need to further untangle these related logical propositions and the state strategies that this study cannot fully accomplish here.

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Table 1 Shared Membership in IGOs by Level of Institutionalization, 1951-1992

Shared IGO memberships Variable	Model 1 Membership in All IGOs		Model 2 Membership in Minimal IGOs		Model 3 Membership in Structured IGOs		Model 4 Membership in Interventionist IGOs	
	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.
Dispute t-1	-0.0967	0.0134	-0.0692	0.0273	-0.2513	0.0249	-0.0662	0.0107
Democracy Low	0.0136	0.0002	0.0215	0.0003	0.0288	0.0003	0.0061	0.0001
Dependence Low	4.0264	0.2563	0.1106	0.3074	1.7771	0.3231	2.9739	0.1880
Development Low	0.0058	0.0007	0.0452	0.0015	0.0789	0.0013	-0.0203	0.0006
Distance	-0.1011	0.0014	-0.2277	0.0029	-0.2540	0.0025	-0.0124	0.0011
Allies	0.3065	0.0029	0.6968	0.0057	0.3230	0.0051	0.1231	0.0020
Diplomatic Missions Sent Low	0.0035	0.0000	0.0072	0.0001	0.0054	0.0001	0.0013	0.0000
Avg. IGO membership	0.0243	0.0003	0.0297	0.0007	0.0250	0.0006	0.0223	0.0002
Constant	3.1736	0.0141	2.4055	0.0282	2.2193	0.0236	2.1448	0.0106

n=108533

n=108533

n=108533

n=108533

Log Likelihood = -362512

Log likelihood = -265335

Log likelihood = -172425

Log likelihood = -287243

Note: All variables are significant at below the .001 level using a two-tailed test except for *Dependence Low* in Model 2, which is highly insignificant, and Dispute t-1 in Model 2, which is <.05.

Table 2 Changes in expected value of IGO memberships given changes in X variables

	Model 1	Model 2	Model 3	Model 4
Shared IGO memberships	Membership in All IGOs	Membership in Minimal IGOs	Membership in Structured IGOs	Membership in Interventionist IGOs
Max value	93	43	21	31
E (Y)	19.1668	3.7996	2.0276	13.0980
X Variables	FD (min to max)	FD (min to max)	FD (min to max)	FD (min to max)
Dispute t-1	-1.76461	-0.2533	-0.4505	-0.8404
Democracy	5.4591	1.7734	1.3065	1.6410
Trade Dependence	19.1440	0.0782	0.7238	8.7057
Economic Development	0.9202	1.4290	1.3362	-2.2127
Allies	6.8735	3.8269	0.7729	1.7159

Note: FD (min to max) is the first difference change in the expected value of Y given changes in each X variable holding the others constant.
 Values calculated using Clarify, 2.1 software, created by Tomz, Wittenberg, and King (2003)

Table 3 Shared Membership in IGOs by Level of Institutionalization and Economic Mandate, 1951-1992

Shared IGO memberships Variable	Model E1 Economic Member All IGOs		Model E2 Economic Member Minimal IGOs		Model E3 Economic Member Structured IGOs		Model E4 Economic Member Interventionist IGOs	
	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.
Dispute t-1	-0.0866	0.0191	0.0887	0.0505	-0.4078	0.0621	-0.0883	0.0123
Democracy Low	0.0179	0.0002	0.0389	0.0006	0.0497	0.0007	0.0062	0.0002
Dependence Low	3.9228	0.2995	-1.7619	0.6379	-2.8658	0.3725	2.2665	0.2427
Development Low	-0.0156	0.0009	0.0268	0.0030	0.0199	0.0035	-0.0312	0.0007
Distance	-0.1434	0.0018	-0.4253	0.0047	-0.4429	0.0061	-0.0145	0.0014
Allies	0.4715	0.0034	1.0024	0.0081	1.2716	0.0113	0.1704	0.0027
Diplomatic Missions Sent Low	0.0029	0.0001	0.0102	0.0002	0.0012	0.0002	0.0004	0.0000
Avg. IGO membership	0.0233	0.0004	0.0371	0.0012	-0.0020	0.0014	0.0220	0.0003
Constant	2.2160	0.0180	2.1284	0.0455	2.3441	0.0567	0.9865	0.0138
	n=108533		n=108533		n=108533		n=108533	
	Log Likelihood = -237224		Log likelihood = -141735		Log likelihood = -76277		Log likelihood = -199303	

Note: Variables are significant at below the .001 level except for Dispute in Model 2 (.507) and Avg. IGO in Model 3 (.162) using a two-tailed test.

Table 4 Changes in expected value of Economic IGO memberships given changes in X variables

	Model E1	Model E2	Model E3	Model E4
Shared IGO memberships	Economic Member All IGOs	Economic Member Minimal IGOs	Economic Member Structured IGOs	Economic Member Interventionist IGOs
Max value	31	17	8	12
E (Y)	5.0600	0.7766	0.2415	3.9345
X Variables	FD (min to max)	FD (min to max)	FD (min to max)	FD (min to max)
Dispute t-1	-0.4175	0.0259	-0.0805	-0.3335
Democracy	1.9333	0.6322	0.2959	0.5003
Trade Dependence	4.9229	-0.3436	-0.0932	1.8937
Economic Development	-0.6592	0.1497	0.0396	-1.0276
Allies	3.0486	1.1900	0.6203	0.7312

Note: FD (min to max) is the first difference change in the expected value of Y given changes in each X variable holding the others constant.
 Values calculated using Clarify, 2.1 software, created by Tomz, Wittenberg, and King (2003)

Table 5 Shared Membership in IGOs by Level of Institutionalization and Security Mandate, 1951-1992

Shared IGO memberships Variable	Model S1 Security Member All IGOs		Model S2 Security Member Minimal IGOs		Model S3 Security Member Structured IGOs		Model S4 Security Member Interventionist IGOs	
	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.
Dispute t-1	-0.1519	0.0252	0.1638	0.0950	-0.4078	0.0766	-0.1204	0.0240
Democracy Low	0.0066	0.0003	0.0191	0.0018	0.0250	0.0009	-0.0026	0.0003
Dependence Low	3.8728	0.2589	9.3661	0.7167	-12.0896	0.8511	7.7772	0.3570
Development Low	0.0242	0.0013	0.0520	0.0077	0.0368	0.0041	0.0158	0.0012
Distance	-0.1505	0.0026	-0.0586	0.0116	-0.5093	0.0096	0.0030	0.0022
Allies	0.8663	0.0049	2.2586	0.0249	1.6750	0.0150	0.3252	0.0044
Diplomatic Missions Sent Low	0.0003	0.0001	-0.0092	0.0004	0.0028	0.0002	0.0009	0.0001
Avg. IGO membership	0.0498	0.0006	0.0616	0.0029	0.0514	0.0017	0.0477	0.0005
Constant	0.1452	0.0245	-3.4403	0.1147	0.8682	0.0796	-1.3260	0.0223
	n=108533		n=108533		n=108533		n=108533	
	Log Likelihood = -127296		Log likelihood = -33946		Log likelihood = -49613		Log likelihood = -107251	

Note: Variables are significant at below the .001 level except for Dispute in Model S2 (.085) and Distance in S4 (.17) using two-tailed tests.

Table 6 Changes in expected value of Security IGO memberships given changes in X variables

	Model S1	Model S2	Model S3	Model S4
Shared IGO memberships	Security Member All IGOs	Security Member Minimal IGOs	Security Member Structured IGOs	Security Member Interventionist IGOs
Max value	7	3	4	3
E (Y)	0.9528	0.0470	0.1123	0.7744
X Variables	FD (min to max)	FD (min to max)	FD (min to max)	FD (min to max)
Dispute t-1	-0.1331	0.0088	-0.0374	-0.0867
Democracy	0.1286	0.0193	0.0616	-0.0395
Trade Dependence	0.8995	0.1876	-0.0994	2.1621
Economic Development	0.1909	0.0202	0.0343	0.1013
Allies	1.3131	0.4023	0.4877	0.2979

Note: FD (min to max) is the first difference change in the expected value of Y given changes in each X variable holding the others constant. Values calculated using Clarify, 2.1 software, created by Tomz, Wittenberg, and King (2003)

Table 7 Changes in expected value of IGO memberships and Democratic Peace

Shared IGO memberships	All IGOs	Minimal IGOs	Structured IGOs	Interventionist IGOs
Max value	93	43	21	31
E (Y)	18.49	3.70	1.90	12.85
X Variables	FD (min to max)	FD (min to max)	FD (min to max)	FD (min to max)
Democracy*Peace	6.2743	0.8451	1.2363	2.1709
Trade Dependence	15.5953	-0.2245	0.3782	7.7645
Economic IGO memberships	All Econ IGOs	Minimal Econ IGOs	Structured Econ IGOs	Interventionist Econ IGOs
Max value	31	17	8	12
E (Y)	4.73	0.75	0.21	3.77
X Variables	FD (min to max)	FD (min to max)	FD (min to max)	FD (min to max)
Democracy*Peace	3.3033	0.2279	0.4500	1.4659
Trade Dependence	3.8050	-0.3528	-0.1003	1.4873
Security IGO memberships	All Sec IGOs	Minimal Sec IGOs	Structured Sec IGOs	Interventionist Sec IGOs
Max value	7	3	4	3
E (Y)	0.92	0.05	0.10	0.74
X Variables	FD (min to max)	FD (min to max)	FD (min to max)	FD (min to max)
Democracy*Peace	0.3372	-0.0415	0.0925	0.3381
Trade Dependence	0.7499	0.1813	-0.0915	1.9290

Note: FD (min to max) is the first difference change in the expected value of Y given changes in each X variable holding the others constant. Values calculated using Clarify, 2.1 software, created by Tomz, Wittenberg, and King (2003)