“Economic Affinity and Liberal Pacificty: Why Democracies Really Kant Fight:
Political Community and Peace”

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Abstract

This paper examines the pacifying effects of political community. We advance a theory based on Deutsch (1957) explaining how pluralistic security communities through the creation of functional networks and the formation of common identity could reduce the risk of militarized tensions, making war unthinkable. We also show that the liberal peace should be explained as a type of political community, but not the only form that could pacify states. A theory of political community should possess great leverage in explaining the lack of militarized conflict, national preferences, trade flows, and IGO formation and joining. Thus, a theory of political community should subsume the liberal peace literature and account for its findings. We test our theory by examining whether political community reduces militarized conflicts in dyads from 1816-2001. We also examine how political community increases state preferences and voting at the UN. We create our measure of political community by measuring the similarity of two states’ portfolios of memberships in IGOs, focusing more specifically on economic and security organizations, with the use of the S-score methodology by Signorino and Ritter (1999). By using the S-score instead of summing IGOs we tap into the spatial aspects of political community that condition the interactions of dyads. Our findings support our theory. When we include our measures of political community the liberal variables of democracy and trade dependence have little remaining explanatory power. Interestingly though, while we show that political community also explains national preferences and affinities, measured using Gartzke’s data (1998), Affinity still has an independent pacifying effect separate from both political community and liberalism, which begs the question what Gartzke’s measure is actually measuring.
1. Introduction

A key source of the peace enjoyed by Europeans in the latter half of the twentieth century may stem from stronger pacific attitudes and institutions associated with “political community.” Today the European Union embodies this concept but should be seen as one part of a broader transcontinental community including Japan, the United States, Canada, and other countries. Russett and Oneal (2001) capture elements of this community through their elaboration on the liberalism/republicanism of Immanuel Kant’s *Perpetual Peace* (1795). Indeed, the interdependence and globalization spreading around the world has a distinct liberal flavor. However, liberalism should be seen as one, but not the only means of forming political community. A deeper and broader conception of political community should subsume liberalism. Deutsch et al. (1957) provide a framework that truly encompasses the liberal peace. Gartzke (1998) tries to put the liberal peace proposition into perspective by tapping into culture, similar world views, and national affinities, but under a perspective, we argue, embodied under the umbrella of political community.

Deutsch’s conception of political community is best represented by the European Union and other relations and organizations including NATO. Yet, democracy would not seem to be a requirement for a political community as long as there is compatibility of “major values” and “mutual responsiveness” (Deutsch et al, 123-129). Liberalism is but one philosophy/ideology that could provide major values for a political community. Deutsch would mostly agree with Russett and Oneal, as well as others that the ultimate
goals of any political community are stable relations, prosperity and ultimately peace. Unless we are to adopt a static or teleological view of the world, we should expect that the future may bring new political communities formed from different ideologies or cultural norms. In fact, perhaps the roots of such communities exist today but may be difficult to identify from a liberal-centric vantage point. The concept of Political Community begins with the most Euro-Centric of examples but then transcends western based paradigms to provide a truly general concept of governance.

In any case, Deutsch’s conception of political community may be better equipped to tap into the processes others have attempted to measure through regime similarity and national affinities. Removing ourselves from the immediate examples of the European Union or Kantian virtuous circles, and rearticulating a theory of political community based on Deutsch et al. (1957), we provide a theory of political community capable of capturing liberalism and other political communities that value the same public goods (stability, peace and prosperity) as the current European Union. While economic and political liberalism have been on the upswing systemically, such trends could one day reverse, as has happened in the past. We should not preclude the emergence of other political communities with the same goals but constituted with different philosophical bases. Though the work of Kant and other classical liberals precede that of Deutsch, the latter’s conception of political community and integration potentially has more leverage regarding explanatory power (King, Keohane, and Verba, 1994) and could subsume the liberal peace proposition.

This paper adopts and rearticulates Deutsch’s conception of political community in order to explain why war has seemingly become improbable between certain countries.
In doing so, our goal is not just to present an alternative theory to the Liberal Peace, but also to form a basis with which to identify other non-liberal political communities that strive toward the same fundamental goals. We seek to accomplish this goal by providing a measure of political community based on two major issue areas, security and economics, that once organized through institutional mechanisms allows for the integration of a political community. For this task, we rely on measuring the concept of political community by linking each state’s common security and economic relations through economic IGOs and security commitments. In order to measure “security communities” we adopt the S-score data created by Signorino and Ritter (1999), and then employ their same method to measure the similarity of two states through their common memberships in various intergovernmental organizations, especially those concerned with economics and security. Beyond simply identifying bilateral connections, the measurement of the economic and security similarity should point toward the networks forming the substance of broader political communities. In doing so, we argue that states will cluster into communities that may produce effects that can be captured within the context of a dyad; the whole may produce something greater than the parts. The integration of a community should yield stability, prosperity, and perhaps peace. And while this approach may not seem to offer a fundamentally different test than the liberal peace proposition, it does allow for the identification of non-democratic political communities. Once again, we reiterate the contention that regime type is a by-product of an underlying affinity, just as Gartzke (1998) does; yet, we give theoretical weight to the underlying explanation. It is here that our approach gains theoretical leverage and may account for more than the liberal peace proposition.
Fully modeling all the dimensions of political community is surely beyond the scope of this particular paper, so we focus here on the link between political community, national affinities, and interstate conflict. We also expect that our approach will retain high leverage in its ability to explain not only why two given states appear unlikely to fight, but in future work predict trade flows, IGO membership, and IGO institutionalization. Thus, the conception of political community should allow us to explain various types of behaviors and interactions with a single theory, further integrating disparate literatures.

2. Literature

Liberalism and Peace

Russett (1998), Russett and Oneal (2001), and Risse (2002) see the liberal peace as a consequence of progress along what Deutsch refers to as the integration of a political community, which includes a common political culture and economic integration supported by networks of institutions to reinforce peaceful relations and prosperity within the community (p. 74: 2001). Extant research shows that joint democracy is strongly related to peace between democratic states (Babst 1972; Doyle 1983a, 1983b; Maoz and Abdolali 1989; Bremer 1992, 1993; Morgan and Campbell 1991; Morgan and Schwebach 1992; Bueno de Mesquita, Bruce, and David Lalman 1992; Lake 1992; Oneal, Oneal, Maoz, and Russett 1996; Leeds and Davis 1999), but explanations for why this is the case have yet to fully develop. Maoz and Russett (1993) and Russett (1993) focus on two principle sources of peace being democracies’ peaceful norms and common structures in
their institutions. States that share similar political norms will more readily agree to
settle their disputes peacefully without resorting to violence or at least escalating to war
(Dixon 1993, 1994). These political norms are a reflection of each state’s political
system but are not held in common in dyads of nondemocracies and democracies.
Second, two democracies may be constrained institutionally from fighting each other,
because of the common lag times involved in the process of going to war. Meanwhile,
several game-theoretic models provide an alternative explanation by showing that the
transparent and participatory nature of democratic systems makes it difficult for them to
bluff, which facilitates the credible signaling of resolve and other information that
reduces uncertainty and the likelihood of conflict escalation (Bueno de Mesquita, et al.
1999; Schultz 1999).

Two other legs of the “Kantian Triangle”, economic interdependence (Polachek,
1992; Mansfield, 1994; Reuveny and Kang, 1996; Oneal and Russett, 1997; Kim, 1998;
Russett, Oneal, and Davis 1998, Oneal and Russett 1999a; Gartzke, Li, and Boehmer,
2001) and mutual membership in intergovernmental organizations (Russett, Oneal, and
Davis, 1998, Oneal and Russett, 1999; Boehmer, Gartzke, Nordstrom, 2003), have
likewise been identified as sources of peace between liberal societies, which along with
democracy are said to create a virtuous circle reinforcing cooperative and peaceful
relations (Russett and Oneal, 2001). Work in this area though continues to sort out
debates about the presence of pacifying effects, and their measurement, associated with
trade (Barbieri, 2002; Barbieri and Peters, 2003; Gartzke and Li, 2003, Oneal, 2003;
Oneal and Russett, 2003) and intergovernmental organizations (Boehmer, Gartzke,
Nordstrom 2003). In the latter case, only certain types of intergovernmental
organizations appear to reduce militarized conflicts, particularly those with higher levels of institutional structure. Thus, simply summing shared IGO memberships should prove unsatisfying empirically and theoretically.¹

**Political Community and International Interactions**

In a broader sense, Deutsch’s conception of political community could subsume the liberal peace findings. For Deutsch et al. (1957), the ultimate goal of political community is to eliminate war through social, economic, and political integration, in addition to inducing stability and prosperity. Deutsch discusses two types of integrated political communities. The first are *amalgamated* communities that have become unified into at least a confederation, with Switzerland a prime example. In short, Deutsch is discussing the unification of sovereign political entities such as Germany or even the United States, where many people become one nation. The second are *pluralistic* communities where states retain legal sovereignty, which would be best typified by the European Union, although it was unclear in Deutsch’s time whether this integration would achieve the levels we see today. Such communities have begun to integrate and form some common association but fall short of full unification as a nation. Thus, the formation of a common identity constitutes the single most important feature of both communities, although this identity will be strongest in amalgamated communities. The integration process entails integration on matters of security, commerce, and other more mundane but nonetheless functional areas of cooperation and coordination.

¹ Moreover, of the three components of the Kantian tripod for peace, the empirical findings of Russett and Oneal (2001) for IGOs are the least robust of the three, sensitive to both sampling and estimator choice.
The primary purpose of such political communities not only aligns nations together through state-level cooperation and international institutions, but builds transnational connections on an interpersonal level as well. The “essential conditions for pluralistic and amalgamated security communities (123-133, Deutsch 1957)”, according to Deutsch, include (1) compatibility of major values, such as common regime types or ideologies, and (2) mutual responsiveness regarding sympathies and loyalties (this latter characteristic matters most for amalgamated communities). Political integration requires connections and empathy between people of different nations, fostered through functional security, economic, and logistic cooperation intergovernmental organizations as well as through transnational social movements. Such a community could not simply be imposed from the top-down, but must be formed with credible functional linkages. The European Union certainly has begun to form an integrated political community along the basic ideas of Deutsch (Wæver 1998), although it would seem more appropriate to think of the European Union as part of a broader community of other liberal states. This leaves open the possibility of other, even nonliberal, communities.

Though not based on political liberalism, the Association of Southeast Asian Nations (ASEAN) has been seen by some as a potential or “nascent” pluralistic security community (Acharya 1996; Khong 1997; Narine 1998). Hurrell (1998) makes a similar case for the southern cone of South America. And while clearly not a security community today, the Gulf Cooperation Council (GCC) of the Arabian states has actively taken steps to create greater community and foster peace (Barnett and Gause 1998), and similar attempts have been made to form a security community by the Baltic states (Väyrynen 1998, 1999, 2000). While these authors concur that ASEAN or the GCC are
presently far from Deutsch’s conception of a pluralistic security community, they claim that these IGOs have moved to form more highly cohesive and integrated communities on matters of security and economics, though they are still both beleaguered in part by regional tensions. However, the wounds of World War Two had not yet healed at the time of Deutsch’s writing, and ASEAN especially shares many of these regional attributes but also goals, the most important being the avoidance of war. Thus, we would agree that the must fundamental criterion of political community is that nations share common political values, whether they be liberal or otherwise (Acharya 1996). Solingen (1997) takes a similar point with the caveat that democracy may not be essential to a security community; common economic liberalization is instead most conducive when considering regional and bilateral security externalities.

State Preferences and Peace

Gartzke (1998: 10) claims that a low willingness on the part of states to fight is not contingent upon joint democracy (or similar regime type), but instead points to the antecedent preferences of states, of which regime type could be seen as a by-product. Other jointly shared national attributes such as similar economic systems and culture may be of greater importance and thus the deeper source of the reduction in conflict observed between liberal states. Gartzke creates a variable “Affinity” based United Nations General Assembly roll-call votes that in tests of conflict reduces the explanatory power of democracy (1998, 2000).

Gartzke’s measure, however, lacks conceptual concreteness and raises questions as to whether states engage in strategic voting at all times in the United Nations. We
agree with Oneal and Russett (1999b) that this variable is overly abstract. So much so that it does not measure the underlying concept. We agree in principle with Gartzke’s contention that state preferences are essential to understanding the liberal peace. Still, it would seem necessary that states take active steps to translate antecedent culture or shared preferences into relationships that are cooperative and functionally institutionalized. For example, two states which share the same culture or inclinations regarding world views which have little contact will not fight because of the lack of willingness but also a lack of opportunity.

3. Theory

A theory of political community should subsume the liberal peace and explain why other associations of states may also enjoy stability and ultimately peace. The overt decision to work towards peace based on mutually shared common political goals is what matters most. A common ideology may be conducive toward such goals, as has been the case of liberalism, but not a necessary ingredient. Gartzke’s view, that national preferences are antecedent to democracy and thus peace, is insightful but incomplete. The most important preference choice is for states to agree to work toward peace and to allow the range of similar preferences to grow over time as states become more integrated functionally. Cooperation may emerge from the destruction of recent conflict or in the face of common threats. It is in this manner that there is hope for ASEAN or other regional associations in the developing world.
In short, our argument is that political community actively translates state preferences into peace, and one result may be the liberal peace. Thus we take a middle ground agreeing in part with both Gartzke and the Liberal Peace literature: state preferences matter and if an active political community is formed, stable relations ensue, despite regime type or ideology. The liberal peace may indeed be a by-product of state preferences, but influence these state preferences in-turn by the active desire to form a stronger and safer political community free of war. Does this mean that harmonious preferences are a prerequisite for peace? No. The origin of a pluralistic security community may arise out of the ashes of war, as did the European Community, or from states with only a few common interests, such as ASEAN, even if these are mostly common threats. The origin of political community may be multifaceted and more likely important that the bonds and institutions between nations become operative in a functionalist manner that makes war unthinkable, whether the basis is liberalism or otherwise. The goal then would seem to be to identify the fundamental attributes of a political community and then depict the dynamic evolution of a community from pipedream to mechanism of peace.

Adler and Barnett (1998) offer a useful definition of political community, a term that can be quite abstract, that we borrow here:

We define a pluralistic security community as a transnational region comprised of sovereign states whose people maintain dependable expectations of peaceful change. Pluralistic security communities can be categorized according to their depth of trust, the nature and degree of institutionalization of their governance system, and whether they reside in a formal anarchy or are on the verge of transforming it. (Chapter 2, 30)

This definition offers a useful starting point, although we prefer to think of “region” more abstractly instead of a distinct geographic region as presented by some studies. We
would also add that because a pluralistic security community may be quite broad it may contain sub-communities within it on a regional level. In this manner, a broader political community may not only include the European Union but also other liberal states such as the USA, Australia, New Zealand, Canada, and Japan. This definition allows us to incorporate international institutions along with the norms and sociological aspects of community discussed by constructivists but not often captured in state-centric international relations scholarship. While it may be difficult to capture norms and culture empirically, *generative regimes* (Young 1999) or IGOs (Russett, Oneal, Davis 1998) may help to spread ideas that may help to build political community. International organization should not only have a functionalist tilt toward reinforcing mutual interests but also create and reinforce common identities.

**International Organization and Political Community**

We direct our attention toward Deutsch’s conception of “pluralistic security communities” and not “amalgamated political communities.” Both types seek stability and ultimately peace through political, economic, and social integration. International organization fosters and reinforces the functionalist and normative ties between states of a community. While functional cooperation on all practical matters remains a goal, the two main issue areas are security and economics.

Political Community’s objective starts simple but allows for the evolution and growth of cooperation from issue to issue as it establishes a myriad of organizations with the hope that peace and prosperity will eventually follow. Deutsch discusses potential thresholds of integration as being necessary, albeit difficult to define and predict when
they might be surpassed. Yet, it would be possible for integration to proceed too quickly; real integration requires a commitment to allow decisions to be made by other members of the community without fear that severe harm will ensue. There is thus a loss of autonomy or even some sovereignty with integration. Hence, political integration cannot be forced without the threat of potential domestic backlash. Similar norms must form within the community to help cement peace and later move toward a common identity. In this manner war may become unthinkable among the members. International organizations are an explicit means to form these connections from the top-down, although people must accept such arrangements from the bottom-up.

**Forming and Joining International Organizations**

States may join intergovernmental organizations (IGOs) for many reasons but the simplest one being the promise of some desired good: peace, prosperity, stability, cultural enrichment, and other sociological benefits. Considering that joining many organizations comes with little cost (especially when dues may not easily be collected), it is not rare to find organizations constituted of members that may have little in common. There is no shortage of IGOs and their proliferation continues at a high rate based on the motivating force of globalization but also on the hope that states will benefit.

Yet, the successful production of goods requires some commitment or even sacrifice of autonomy or sovereignty on the part of states. While some issues may be simple coordination problems that only require collaboration and not subject to the problem of distributional politics, such as common air control system management, others may require an investment in resources and commitments to be bound to other
states that leaders and their citizens may balk at. The adoption of the Euro required such dedication and resources and as such regarded as a momentous decision. States fearing for their security because of the anarchic system will not find the political desire or will to make the necessary commitments to cooperate, particularly if such overtures could be exploited or perceived as a sign of weakness. Hence, political community cannot come into existence immediately but must be formed with simple steps that allow for gradual integration and thus trust.

Signals that political community is taking root between states is found within Intergovernmental Organizations. When functional organizations produce real benefits, they are likely to preclude automatic membership to new members. New members of NATO or the EU must be accepted, and themselves accept certain norms and rules. By requiring states to be liberal politically and economically, NATO or the EU is invoking Deutsch’s vision of political community. New members must have “compatibility of major values” with the goal being “mutual responsiveness and sympathies.” Accepting just any state could weaken and undermine existing political communities, which is a concern in the EU. New members may dilute the shared norms and thus undermine what consensus does exist, delaying further integration if the societies of older members are repelled by the influence of new member states. This type of tension was seen in Europe between established EU states and the newer members from Eastern Europe when many of the latter took a position supportive of the United States and its invasion of Iraq.

We contend that political community is the key to forming functionally successful IGOs. The higher the cohesiveness of the political community, the more IGOs will be empowered to make decisions that would normally be seen as infringements on state
sovereignty under the worst conditions of system anarchy. The lack of distrust allows for greater cooperation on issues both mundane and momentous. It is thus no coincidence then that peace is obtained, and likely prosperity as well, where states through political community have structured IGOs with governance mechanisms of a more institutionalized nature. While the liberal peace literature has begun to highlight the role of international organization in zones of peace, it has not offered an explanation why some IGOs foster peace and others fail to do so. At the center of any political community there must be some IGOs that discriminate against nonmembers in order to preserve the functionality of their governance structures.

Hence, political community has both quantitative and qualitative components concerning international organization. Russett and Oneal (2001) are correct to argue that the liberal political community tends to share many memberships in IGOs. Yet what should matter as well is the quality of these IGOs. Of the hundreds and hundreds of IGOs that exist today, clearly some are more successful than others and some will eventually be defunct only to be replaced with newer organizations. The creation of new regimes will signal one of two possibilities. First, states may find that certain IGOs have little chance of fulfilling their missions and members move their interest to other organizations, as happened within the Andean Pact as some members shifted focus to MERCOSUR, or some IGOs are allowed to become defunct altogether. Second, some IGOs will be terminated and immediately replaced with a successor organization. Some of these new IGOs will be more formally institutionalized than their predecessors. In this latter case, a maturing political community may require stronger institutions to help adjudicate disputes and enforce norms or decisions. Because political and economic
integration will lead to the need and desire to cooperate on a greater range of issues, we should see a propagation of many functional IGOs, many of which will have a single issue area function, some of which may deal with very mundane and what appear to be apolitical issues, as well as the creation of other multifunctional and highly institutionalized central governance IGOs. The bodies of the European Union would represent such an organization. It is no surprise then that many other regional, multifunctional IGOs have similar structures or networks of sub-bodies and agencies: Organization of African Unity (OAU), Caribbean Community and Common Market (CARICOM), Association of Southeast Asian Nations (ASEAN), Organization of American States (OAS), the Arab League, or the South Asian Area for Regional Cooperation (SAARC). The key variable explaining whether any given IGO or network of IGOs (maybe even coupled with certain NGOs) could foster peace lies in the strength of its political community. The European Union would seem to have a higher level of political community than ASEAN, whereas SAARC would appear to have virtually none.²

To summarize, political community should lead to an increase in the common memberships of states in IGOs as cooperation expands functionally from issue to issue. Some of these organizations will cooperate and coordinate on rather mundane, seemingly apolitical issues. As a political community matures, the institutional structure and powers of many of its IGOs will grow as members gain the trust to allow the relaxation of state autonomy and sovereignty. The key issue areas cementing any pluralistic security community are economics and military security, although other less glamorous issue

² Key members of this IGO include India, Pakistan, and Bangladesh. Conflicts between the countries of this region appear to have led to distrust and the inability to empower SAARC with more opportunity to play the role of mediator/arbiter successfully.
areas will also grow in importance. We should thus see increased international organization in all areas but particularly membership and integration along economic and security lines. Our theory should provide leverage over other theories if political community can explain not only zones of peace between states but also flows of trade and investment, UN voting patterns, joint IGO memberships, and the level of IGO institutional structure and powers.

Therefore, our primary research hypothesis is:

**Hypothesis 1:** States with IGO membership similarity are less likely to engage in a Militarized Interstate Dispute.

### 4. Research Design

**Modeling the Explanatory Variable: Political Community**

Joint IGO membership indicates political community more directly than any other operational indicator. Deutsch describes political community as fundamentally being predicated on the communication between citizens of the member states of IGOs. This communication leads to pacific bonds directly facilitated by IGOs. Inherent in this transaction is the acceptance of the peaceful resolution of conflict. As states relinquish more of their decision making authority to intergovernmental organizations, they recognize the existence of an underlying dimension of commonality. Thus, our indicator of political community will fundamentally involve the IGO data set (Pevehouse and Nordstrom, 2003). However, while the data set purports to “explicitly capture state
memberships in the network of international governmental organizations”, there has been little development in how to express this “network” empirically.

We posit that the Signorino and Ritter’s S score captures this network best. Signorino and Ritter’s “S Score” (1999) is a measure of similarity that encapsulates the dynamic of political community as reflected by the entire network of IGO membership. Conceived as an alternative superior to \( \tau_b \) correlations for assessing similarity of alliance portfolios, the “S” statistic is a simple cumulative variance based measured. Signorino and Ritter convincingly demonstrate that while \( \tau_b \) is an appropriate approach to measuring rank-order correlation, it does not measure similarity. That is, \( \tau_b \) reflects the extent that states rank their alliance commitments to paired members in the same order where “S” measures the extent to which states have the same type of alliance commitments. These are two different questions entirely.

Signorino and Ritter illustrate this contention with several counter-intuitive outcomes in the conventional \( \tau_b \) calculations. They demonstrate that a perfect negative association (\( \tau_b = -1 \)) will not imply the complete dissimilarity of alliance policies (p. 119). They also show that not all identical alliance policies can be measured with association (pg. 120, given the computational problem of dividing by zero). As such, Signorino and Ritter demonstrate the need then create a method to measure similarity with political applications in mind.

The similarity statistic, “S”, attempts to alleviate three forms of bias imposed by using \( \tau_b \) to measure political similarity. First, \( S \) incorporates computations that assess the degree of difference between two patterns of political preference, be they decisions of UN voting, alliance membership or IGO membership and then weights that difference
according to the possible number of choices. Rather than assessing the association in voting patterns, the S statistic assesses how many times the divergence from similarity occurred. A difference on several votes by the United States and the United Kingdom, for example, will be mitigated by many votes that year. Therefore, it is more intuitive to think of it as a “difference” statistic, rather than an explicit “similarity” statistic.

The second source of bias S confronts is the assumption that all issue points are equally weighted. In politics, all voting decisions are not necessarily equally important. For instance, one vote at the UN may involve whether to support peacekeeping in Korea and another might involve whether to fund a study on the effects of cow flatulence. Also, as Signorino and Ritter point out, all alliance members are not equally important. A state would much rather have the United States guarantee its security than Bhutan. The “S” statistic allows different issue choices to be weighted appropriately. In the case of alliance choice, relative state power will weight alliance partners more appropriately.

Finally, Signorino and Ritter posit that political similarity should be a function of several factors, factors that are open to theoretical development. Whatever these factors turn out to be, they allow their measure to expand to respectively incorporate them. The S score allows different dimensions of similarity to be introduced into a single measure. To this end, S is a spatial statistic rather than a linear metric. In its whole application, it is a spatial measure of total foreign policy similarity.

All three contributions of the S statistic make it much better suited for measuring political community, aggregate IGO similarity, than the bivariate correlation of $\tau_b$. While we intend to eventually incorporate all three features of the S statistic to measuring political community, the first task is to apply the metric to IGO membership choices.
In applying the “S” concept to the IGO data, several challenges were confronted. First, it is necessary to understand the content of the IGO dataset and what constitutes an IGO. The current IGO codebook echoes Wallace and Singer (1970) in stating three criteria for an IGO. First, it must consist of at least three members of the state system as defined by the Correlates of War project. Second, an IGO must at a minimum officially meet once a decade. Finally, an IGO must meet the institutional criteria of a permanent secretariat and actual headquarters. The original Wallace and Singer (1970) data were merged with the data from 1965-2001 but is left in its original five-year period form. This data set arrays the membership of all states in the international system in all internationally recognized intergovernmental organization. We use version 2.1a which contains membership data based on the IGO-year unit of analysis. For instance, each case represents the exact countries that were members of an IGO’s in any given year from 1870 to 2000.

The Intergovernmental Organization similarity scores were computed explicitly according to the formula in Signorino and Ritter (1999:127). This formula computes an S statistic for any two arrays that contain choice based data according to the following formula:

\[
S(P^i, P^j, W, L) = 1 - 2 \frac{d(P^i, P^j, W, L)}{d_{\text{max}}(W, L)} \tag{4}
\]

where

\[
(P^i, P^j, W, L) = \sum_{k=1}^{N} \frac{W_k}{\Delta_k^{\text{max}}} | l_k(p') - l_k(p) | \tag{5}
\]

and

\[
d_{\text{max}}(W, L) = \max_{X^i, X^j} d(X^i, X^j, W, L)
\]
\[ = \sum_{k=1}^{N} \frac{W_k}{\Delta_{k}^{\text{max}}} (I_k^{\text{max}} - I_k^{\text{min}}) \quad (6) \]

At first glance, these formulae may seem overly complex and inaccessible. Contrarily, once the mathematic symbolism is stripped off, this procedure is quite straightforward. The variables of interest are divided into parts 5 and 6. Part 5 is simply the sum of the differences weighted by either a uniform or a disproportionate scheme. Part 6 is the sum of the weights in the case a disproportionate scheme was employed in part 5. Part 4 is the formula that unites these parts arithmetically.

In the case of the IGO data, the particular arrays of country members were paired with other country members. The first computational step, after deciding which data to calculate, is to decide if a weighting scheme makes sense theoretically. For our purposes, we assume a uniform weighting scheme and do not weight any of the IGOs as being more strategically important. This will have the base effect of discounting the sum of the differences computed in the third step by the number of IGOs that year.\(^3\) The second step then determines the maximum difference along each dimension being calculated. In essence, this is the theoretical range. In the IGO data a state has the choice of 3) being an observer, 2) being an associate member, 1) being a full member or 0) not being a member therefore this would be 3. The third step compares all IGO memberships for the state pair and computes the cumulative difference. The fourth step then puts all these

\(^3\) We will weight IGOs by institutional structure once we have completed this stage of the data collection.
calculations together, as in part 4 above. As stated above, the IGOs were all weighted equally so the cumulative differences in country pair membership were discounted by the number of IGOs that year and the range of variability (3). Dyadic S statistics were computed for all country pairs that were members of the international system that year.

**S-All IGOs**

The first similarity index was created with the IGO data (Pevehouse and Nordstrom, 2003) following the example above very closely. This index indicates joint membership similarity for all Intergovernmental Organizations in the international system for a dyad in the system that year. This indicator is theoretically bound from -1 to 1 but as Table 1 indicates, only ranges in our data from .3 to 1. This is an artifact of using the IGO data where there will be many state pairs that jointly do not belong to the same organizations. Signorino and Ritter discuss that the S statistic will be affected by the inclusion of irrelevant choices and show more similarity than might be expected. Fortunately, this will affect the entire data set equally and not bias any particular dyad. It will have the cumulative effect of decreasing the range while keeping meaningful variation in the score. Thus .3 indicates a great deal of dissimilarity while 1 indicates total similarity.

**S- Economic IGO**

After compiling aggregate S scores, we conduct further data collection. The COW version of the IGO data set does not give a clear delineation of what constitutes
each IGO’s primary purpose. Therefore, one of the authors further identified the important characteristics of IGOs in independent data collection (Boehmer 2003). We currently have a working delineation of security and economic IGOs. Therefore, similarity statistics were computed for economic IGOs and security IGOs.

Here we take advantage of the elasticity of the S statistic computation again. In addition to providing a more valid measure of the computation of similarity, Signorino and Ritter allow the construction of a spatially motivated multidimensional indicator. Theoretically, we believe that “Political Community” is a function of many dimensions of IGO facilitated communication. The indicator constructed above for all IGOs conflates these myriad dimensions. Operationally, it would be superior to take each relevant dimension, weight them accordingly, and insert them into the indicator. We start by disaggregating the IGOs into security and economic purposes. In the future we will finish the data collection and provide a relevant typology for all IGOs.

Therefore, a similarity score was computed for IGOs that focus on economic purposes. This is a proxy for the similarity of economic community. Again, this indicator is theoretically bound from -1 to 1 but empirically varied only from .4 to 1. Like the indicator for the similarity of all IGOs, we assess the individual explanatory power of this indicator.

**S-Security IGO**

For the same purposes discussed above, we also create an index for security IGOs. Effectively, this is a proxy for “Security Community” similarity. This indicator
also has a theoretical boundary from -1 to 1 but varies from .16 to 1 and is used as a separate explanatory variable.

**S-IGO**

S-IGO is the spatial composition of the separate issue area IGO scores. Currently our measure is the separate effects of economic IGO similarity and security IGO similarity. This is the preferred indicator of IGO similarity as it captures the spatial dimensionality of different elements of IGO choice. Recall that one of the discussed benefits of Signorino and Ritter’s score is the ability to attach many policy portfolios to an overall policy space. While they conceive of this policy space for an overall foreign policy position, we consider it from the perspective of IGO community building, or political community. Since we are currently weighting Security Community similarity and Economic Community similarity equally, the score is an average of S-**Economic-IGO** and S-**Security-IGO**.

**Modeling the Dependent Variable: Militarized Interstate Disputes**

This study addresses the application of military ability in achieving state sanctioned goals ranging from short disputes without death to sustained interstate war with many states joining. The appropriate scientific unit of analysis for studying the incidence of armed aggression by one state on another is the militarized interstate dispute, which is any sanctioned act by one state to another that involves the threat, display or use
of military means (Jones, Bremer, Singer 1996). This work focuses primarily on explaining the occurrence of militarized interstate conflict as a process. Essentially, the behaviors we are interested in are those class of disagreements between states that are unable to be reconciled through peaceful means such that one (or more) of the parties to the dispute feels constrained to use military means to solve the dispute in their favor. Once the military is utilized to resolve the crisis, the conflict formally becomes a Militarized Interstate Dispute (MID). MIDs describe a very specific state of affairs within a between two states.

A Militarized Interstate Dispute occurs between two defined state actors, a dyad. The frequency of conflict at the dyadic level is assessed through the onset of new dispute. The onset of a dispute is analyzed dyadically. The non-directional dyadic data matrix was created with EUGENE (Bennett and Stam 2000). Dyadic conflict data were obtained from the Correlates of war MID 3.0 data set (Ghosn, Palmer, Bremer, 2003). We use all dyads from 1816-2001, which is 623,355 dyad-years. The operationalization employed for the onset of a militarized interstate dispute is whether there was a new mid onset, threat, display or use of force, in the year of interest. Thus, only the first year of

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4 A few research design concerns emerge when using MIDs in a statistical study. First, in order to make correct statistical inferences, it is necessary to not only include the incidents but also the non-incidents. The dyad-year is any interaction of two states defined in a year, regardless if they had a dispute or not. For each year, or partial year, a nation-state is recognized in the COW state system database. The basic data matrix has that state paired with every other nation-state that is recognized that year.

5 Another key issue concerns which state in the dyad initiates the conflict, or in other words, the direction of the dyad. The hypotheses listed above have no a priori expectation concerning which dyad member begins the dispute. That is, we are interested in the effect of political community on the entire dyad, not on any particular nation-state. Thus, this study uses non-directed dyad years. Once a state is paired in a year, the observation is not repeated when the direction of the dyad is reversed. Often, dyadic studies are directional, where there are theoretically relevant reasons for the direction of hypotheses. We have no such theoretical reason to be interested in the direction of the conflict. As such, the non-directional dyad-year is the basic data collection unit for the data matrix assembled for this study.
the dispute is analyzed.\textsuperscript{6} The summary statistics in Table 1 indicate the measures of central tendency for the new dispute onset variable.

\textbf{Control Variables}

The effect of political community on the process of conflict is methodologically and theoretically complex. Therefore, we are hesitant to introduce variables that are not a clear theoretical control. Other variables are frequently inserted into analyses as “common controls.” That is, control variable that are used on other grounds than being correlated with the main explanatory and dependent variable. We believe that is it important to examine bivariate relationships in depth as typically, control variables are inserted without careful consideration. As Ray reminds us (2003) while reiterating King, Keohane and Verba (1994), some control variables are really intervening variables and should not be introduced.

Geographic distance is included as a necessary control variable as we expect a relationship between contiguity and conflict and contiguity and shared IGO membership. We use actual distance rather than simple contiguity since distance captures both the contiguity effect of conflict (when distance equals zero when two states are contiguous) and best reflects the propensity of states to engage in joint IGO membership.

As we are attempting to assess competing explanations, and directly challenge Russett and Oneal’s findings as well as try and incorporate Gartzke’s (1998) findings, we also include UN voting similarity, regime type and economic interdependence. The

\textsuperscript{6} Occasionally, two disputes occur in the same dyad-year. Theoretically, we are most interested in the most intense conflict that year. Thus, when we aggregate the data by dyad-year I keep the most intense conflict, or if there were two equally intense conflicts, the longest dispute duration of the lot.
bilateral measure of economic interdependence is measured as country i’s exports to
country j and i’s imports from j, all relative to national income. Taken dyadically, the
lower of the two values is inserted into the model. Economic interdependence is
expected to have a constraining, negative, influence on conflict. Russett and Oneal made
this data available.

Second, as we are testing competing explanations, we include indicators for the
democratic peace. The likelihood of conflict is a function of the degree of political
constraint experienced by the less constrained. According to the democratic peace
argument, dyads comprised of two democratic states should be less conflict prone than
other combinations of regime types. Thus, we expect a negative coefficient for this
variable when both states in a directed-dyad are democratic. We use a regime type
variable that is measured as the difference between a state's Polity III (Jaggers and Gurr
1995) democracy and autocracy scores. Thus, democracy is measured by the lower
democracy score in the dyad and is expected to have a negative relationship. This
indicator varies from 10 (most liberal) to −10 (most illiberal).

An alternative explanation is based on the preference similarity of nations. There
are two measures for preference similarity: alliance similarity and United Nations voting
similarity. Alliance similarity is useful because it is available for the full time span but it
is not as reflective of changes as another type of preference similarity, United Nations
voting similarity indices (Gartzke 1998). As Gartzke states, alliance similarity lacks
variance during the postwar period and many newer postcolonial nations were obviously
allied informally and shared preferences but never codified this similarity in alliance
treaties. Each state’s “S” statistic with the reigning hegemon is computed by Eugene (Bennett and Stam 1999).

Other control variables used in the specification for Russett and Oneal’s model (1999c) include alliance and major power dyads. Major powers are more active internationally and are thus expected to be more conflict prone. This is a dichotomous indicator equaling one if either state is a major power. Major power states are defined using the Correlates of War criteria (Singer and Small 1982). Capability Ratio is a measure of the dyadic balance of power reflecting the realist view that a preponderance of power inhibits conflict (Lemke and Reed, 1998; Singer and Small, 1982). Thus, a negative relationship is expected. Finally, alliance is a dichotomous indicator equaling one if a formal alliance exists, this is expected to constrain violent state behavior (Gibler and Sarkees, 2002; Reiter, 2000; Small and Singer, 1969).

**Model Estimation**

With the goal in mind is maximizing certainty about inferring to the data, it is necessary to consider how to best ascertain the statistical effect of an explanatory variable on a regressor when the regressor is dispute or no dispute. Due to the dichotomous nature of the dependent variable, the use of ordinary least squares regression is inappropriate. Therefore, we utilize the estimator Logit to maximize the likelihood that the estimates derived are indicative of the process indicated by the data. Logit is specifically appropriate for the estimation of models with dichotomous dependent variables (Aldrich and Nelson, 1984).
However, using Logit on dyadic data over time may have potential inferential problems; particularly in violation of the first assumption of causal inference, unit homogeneity. Unit homogeneity assumes that all units with the same value of the explanatory variables have the same expected value of the dependent variable. For instance, we believe that political community suppresses conflict in most dyads with similar IGO membership. Unit homogeneity assumes that, on average, over many replications the suppressing effect will be the same. Furthermore, unit homogeneity assumes that conflict that did occur in those similar dyads did so randomly and without a systematic pattern. All error, deviations from the expected value, should be random. In other words, the case name provides no additional insight as the independent variables.

However, as several recent methodological critiques point out (e.g. Beck, Katz and Tucker, 1998; Green, Kim and Yoon, 2001), analyses of binary cross-sectional time serial (BCTS) data frequently and egregiously violate this assumption and causal inference without mind to this statistical assumption is potentially wrong. Particularly, the differences of units should not vary systematically; all units should be homogenous with respect to their relationship with the dependent variable. Unmeasured heterogeneity lends to two inferential problems. First, if the heterogeneity is not related to the causal variable then the model is inefficient. That is, the standard errors are biased. If the heterogeneity is systematically related to the explanatory variable then the parameter estimates themselves are biased.

Unit heterogeneity is frequently observed across time. It is assumed that the probability of observing an event is independent of the observation of previous events, a specific form of heterogeneity. In particular, the question of temporal dependence is also
the source of recent controversy in the scientific study of conflict. The relationship of previous conflict to future conflict is fairly well established. Thus, a dyad conflict in year \( t \) is more likely to be conflictual in year \((t+1)\).

There are several “corrections” suggested by statistical methodology for remedying any potential deleterious effects induced by autocorrelation (or temporal heterogeneity). Namely the Beck, Katz, Tucker (1998) spline technique purports to account for auto-correlation and is widely used in contemporary conflict studies (e.g. Gartzke, Li and Boehmer, 2001; Reed, 2001; Lemke and Reed, 2002). As stated above, normal dyad-year data is likely to violate the independence assumption. The correction developed by Beck, Katz, and Tucker allows us to deal with the problem of auto-correlation in the data by creating three cubic splines generated by the duration of peace in the dyad. The spline technique allows the possibility to assess the effect of variables on the initiation of disputes independent of time (or temporal heterogeneity).

As mentioned above, in addition to inducing biased coefficients, systematic differences in the units of analysis (heterogeneity) induces inefficiency, biased standard errors. As a result, standard errors may be incorrect, thus affecting tests of significance. In other words, observations share similarities in some cases, these similarities violate the assumption of independent observations. For example, in this data repeated observations of dyads will have similarities, even though they are observed at different points in time. Fortunately, there is a statistical solution. The source of this similarity (dyads) can be theoretically identified and mollified with robust standard errors (Beck 1996, Huber 1967, White 1978). Clustering on dyad similarity will take care of heteroskedasticity issues within each dyad. The estimates are considered robust because they provide
correct standard errors in the face of violations of the model. As White (1982) states, robust standard errors use the “minimum ignorance estimator” since the estimators proved the best approximation to the true probability density function, and hence the true likelihood value for the standard error.

5. Findings and Analysis

We provide the results of our logit analyses in three tables. Table Two provides evidence in support of our theory that political community fosters peace. Controlling for the effects of time and distance, we see that all four of our measures of political community reduce the probability of a MID occurrence between pairs of states. Model one includes our measure of political community based on the networks of all IGOs. Disaggregating similar IGO memberships by the issue areas of security and economics has similar effects on militarized conflicts. Our final model includes the combination of both issue areas and the results remain similar. Figure one shows the range of the substantive effect across the range of S-IGO, based on model 4. Rather than simply summing the common IGO memberships of two states, we measure political community through the S-score formula to tap into both the quantitative dimension (number of IGO memberships) as well as the broader network of relationships of political community. This improves over existing measures. In summary, all four measures of IGO similarity are negatively related to the outbreak of new MIDs.

[Table 2 here]

[Figure 1 here]
In Table Three we compare our results to the work of Gartzke (1998, 1999) and Russett and Oneal (2001). We include our composite variable, S-IGO (Economic/Security), into the Russett and Oneal model and it is still negative and significant at below the 0.05 level. Of additional interest is that while Democracy remains weakly significant at below the 0.10 level, Dependence is statistically insignificant. We also compare our measure of political community with Gartzke’s Affinity explanation in model two. Both Political Community (S-IGO) and Affinity appear to have complimentary pacifying effects. Model three includes both the Affinity variable with Russett and Oneal’s model. Again, political community appears to be a stronger source of peace, as measured with S-IGO (Economic/Security), than either democracy or trade alone. Affinity is again highly significant statistically in model three and that it has a slightly stronger substantive effect than political community on the probability of a MID onset. Moving from the minimum to the maximum values of both Affinity and S-IGO (Economic/Security), the relative risk of a MID onset is more than five times less likely (5.3 and 5.5 risk quotients respectively, as reported in Table four). Figures two through four also show that these two variables are both have stronger pacifying effects on dyads of states than democracy. Moreover, we believe that a more fully specified measure of common economic and security IGOs weighted by the level of institutional structure (contingent upon further data collection), would provide stronger results. Signorino and Ritter suggest that the S-score should be weighted with additional data when theoretically appropriate to capture more spatial dimensions of the processes under investigation.

[Tables 3 and 4 here]
Considering that Affinity continues to perform well in our models relative to our political community variables, and that Affinity continues to compete successfully against the liberal peace variables of democracy and trade, one could suspect that Affinity and political community are either proxies for each other or simply complementary. Table five examines this possibility with Affinity as the dependent variable. The model specifications used here are similar to that of Gartzke (1999). A review of all four models allows us to dismiss the notion that our political community variables are simply a proxy of Affinity.

While an S-score calculation based on all the joint IGO membership portfolios of two states is positively related to common voting patterns at the United Nations, this is not the case for our other three IGO similarity variables. In fact, when we disaggregate the joint connections of two states to IGO networks these are negatively related to Affinity. This is very interesting and indicates to us that in order to predict Affinity we may need to examine the similarity of all IGO relations between states but also other state commonalities. This brings us to conjecture about what Affinity is actually capturing if it is not so clearly an artifact of political community in the manner we have suspected and measured. While Table five shows that democracy, trade dependence, bilateral alliances may help us to predict Affinity, one could still wonder what other factors lead to similar state preferences considering there is no clear theoretical supposition to guide such a model. Perhaps more fully developed measures of political community, as we plan to provide, could show that Affinity is in part a product of political community but that in its current use overly abstract and not based on theory.
6. Discussion and Conclusion

We began with a theory of political community based on the work of Deutsch et al. (1957) that highlights the role of networks of international organizations that form the functional structure and governance mechanisms of political, societal, economic, and security integration. The goal of a pluralistic security community is to construct common identities to promote stability and eventually war will become unfathomable. This could be accomplished by forming and increasing connections between peoples. The two major issue areas are security and economics but IGOs are also necessary to provide governance on more mundane issues, many seemingly apolitical, that proliferate as nations integrate. Thus, we should observe that IGOs will both proliferate, many formed for single functional purposes, and the most important ones become more highly institutionalized and thus autonomous. Relations among the Scandinavian countries provide the best example, with Denmark being the country with the most IGO memberships globally, as a member of both the EU and other Nordic organizations.

We explain how IGOs proliferate and develop with the dynamic integration of political communities with a focus on economic and security issues. We show that where states share similar networks of IGO memberships the risk of militarized disputes is reduced. Moreover, the pacific effects of political community are stronger than democracy and trade dependence. This is interesting since Russett and Oneal (2001) claim that the Kantian peace as a form of political community. We do not disagree. However, their measure of IGOs does not easily lend itself to capturing both the quality
and quantity of international interactions in such communities. Democracy and trade interdependence can surely be integral components of a pluralistic security community, as we would observe in NATO or the EU; however, their theory is not presented as one of political community and the three legs of the Kantian Tripod are left in an additive form in their models. Modeling political community strictly through bilateral relations will thus in the end be theoretically and empirically unsatisfying.

A key advantage of the S-score formula/methodology is that it provides for a means to further develop our measure of political community by weighting additional dimensions in the future. We began by creating a single measure capturing economic and security relations as opposed to including bilateral alliances or trade relations additively into our models. And because we agree with Deutsch that what matters most is that a pluralistic community shares ‘major values’ and ‘mutual responsiveness’, regime type is captured by our measures and need not be included separately. Indeed, the inclusion of our political community variables decreases the explanatory power of regime type. We argue that what matters most is a political community and not common regime type. The results here suggest that joint democracy has a pacifying effect but that even nondemocratic states may enjoy peace if they are members of the same pluralistic security community.

Regarding Gartzke’s Affinity measure, we agree conceptually that state preferences should be positively associated with less militarized conflict and that these may even precede democracy, interstate commercial ties, and IGO formation. State preferences through Affinity are shown here to reduce the occurrence of militarized conflicts, and the strength of this effect is shown here to be slightly stronger than political
community. But what is the actual source of Affinity beyond the variables examined here? We thus agree with Oneal and Russett (1999b) that Gartzke’s measure is overly abstract but that we also add that it is not grounded in a particular theory, unlike our measure of political community.

This project has now completed the first step to constructing and testing a theory of political community capable of subsuming the findings of both the liberal peace and Gartzke’s measure of Affinity. In this manner we believe our project has explanatory leverage over these other literatures and will expand our research on political community to explain commercial flows and IGO formation and structure in future studies. Trade and investment flows should be higher between members of a political community. And as mentioned, members of a pluralistic security should form more functionalist IGOs and also empower the most central IGOs providing central governance with the institutional structures to operate autonomously. Moreover, this study poses a puzzle in regard to the Affinity measure. We still suspect that political community should explain UN voting patterns and plan to employ simultaneous equations is some future project to sort out the causal direction between the two variables.
REFERENCES


Wallace and Singer (1970). Intergovernmental Organization Dataset 1.0

Werner, Suzanne. 2000. "The Effects of Political Similarity on the Onset of Militarized


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### TABLE 2: THE EFFECTS OF AFFINITY, REGIME TYPE AND IGO SIMILARITY ON DISPUTES

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Robust standard errors in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%
### TABLE 3: THE EFFECTS OF AFFINITY, REGIME TYPE AND IGO SIMILARITY ON DISPUTES: COMPETING SPECIFICATIONS

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<td>-12.6516</td>
<td>-5.6359</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(10.2748)</td>
<td>(8.7564)</td>
<td></td>
</tr>
<tr>
<td>Alliance</td>
<td>-0.0248</td>
<td>0.0409</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.1810)</td>
<td>(0.2022)</td>
<td></td>
</tr>
<tr>
<td>Major Power Dyad</td>
<td>1.4600</td>
<td>1.3609</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.2680)*****</td>
<td>(0.2636)*****</td>
<td></td>
</tr>
<tr>
<td>Capability Ratio (logged)</td>
<td>-0.1539</td>
<td>-0.1411</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0543)*****</td>
<td>(0.0530)*****</td>
<td></td>
</tr>
<tr>
<td>Country Distance (logged)</td>
<td>-0.4136</td>
<td>-0.4393</td>
<td>-0.4485</td>
</tr>
<tr>
<td></td>
<td>(0.0211)*****</td>
<td>(0.0155)*****</td>
<td>(0.0226)*****</td>
</tr>
<tr>
<td>UN Voting Affinity (lagged)</td>
<td>-1.3404</td>
<td>-0.8522</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.2665)*****</td>
<td>(0.2722)*****</td>
<td></td>
</tr>
<tr>
<td>Time since last MID</td>
<td>-0.4470</td>
<td>-0.4139</td>
<td>-0.4491</td>
</tr>
<tr>
<td></td>
<td>(0.0380)*****</td>
<td>(0.0350)*****</td>
<td>(0.0421)*****</td>
</tr>
<tr>
<td>(peaceyrm-k1) cubed</td>
<td>-0.0020</td>
<td>-0.0020</td>
<td>-0.0020</td>
</tr>
<tr>
<td></td>
<td>(0.0003)*****</td>
<td>(0.0003)*****</td>
<td>(0.0003)*****</td>
</tr>
<tr>
<td>(peaceyrm-k2) cubed</td>
<td>0.0009</td>
<td>0.0010</td>
<td>0.0010</td>
</tr>
<tr>
<td></td>
<td>(0.0002)*****</td>
<td>(0.0001)*****</td>
<td>(0.0002)*****</td>
</tr>
<tr>
<td>(peaceyrm-k3) cubed</td>
<td>-0.0000</td>
<td>-0.0001</td>
<td>-0.0001</td>
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<tr>
<td></td>
<td>(0.0000)</td>
<td>(0.0000)*****</td>
<td>(0.0000)*</td>
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<tr>
<td>Constant</td>
<td>1.2631</td>
<td>4.1216</td>
<td>2.1373</td>
</tr>
<tr>
<td></td>
<td>(0.8757)</td>
<td>(0.9577)*****</td>
<td>(0.9449)*****</td>
</tr>
<tr>
<td>Observations</td>
<td>197216</td>
<td>301671</td>
<td>177336</td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-2593.54</td>
<td>-3331.14</td>
<td>-2200.24</td>
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</tbody>
</table>

Robust standard errors in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

### TABLE 4 RELATIVE EFFECT OF IMPORTANT EXPLANATORY VARIABLES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Relative Risk Reduction</th>
<th>Absolute Risk Reduction</th>
<th>Risk Reduction of One Standard Deviation</th>
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</thead>
<tbody>
<tr>
<td>IGO Similarity</td>
<td>5.3</td>
<td>-.0017</td>
<td>-15.3 %</td>
</tr>
<tr>
<td>Low Democracy</td>
<td>1.6</td>
<td>-.0003</td>
<td>-13.0 %</td>
</tr>
<tr>
<td>UN Affinity</td>
<td>5.5</td>
<td>-.0023</td>
<td>-21.4 %</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Similarity (All IGOs)</td>
<td>0.1012 (0.0283)***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Similarity (Economic IGOs)</td>
<td></td>
<td>-0.7691 (0.0154)***</td>
<td></td>
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<tr>
<td>Similarity (Security IGOs)</td>
<td></td>
<td></td>
<td>-0.5113 (0.0105)***</td>
<td></td>
</tr>
<tr>
<td>Similarity (Security and Economic IGOs)</td>
<td></td>
<td></td>
<td></td>
<td>-0.9452 (0.0160)***</td>
</tr>
<tr>
<td>Country Distance (logged)</td>
<td>-0.0067 (0.0015)***</td>
<td>-0.0151 (0.0016)***</td>
<td>-0.0184 (0.0017)***</td>
<td>-0.0222 (0.0018)***</td>
</tr>
<tr>
<td>Low Democracy Score for the Dyad</td>
<td>0.0015</td>
<td>0.0013</td>
<td>0.0020</td>
<td>0.0020</td>
</tr>
<tr>
<td>Trade Dependence (lagged)</td>
<td>3.9027 (0.3654)***</td>
<td>4.3306 (0.3270)***</td>
<td>4.2481 (0.3751)***</td>
<td>4.6832 (0.3758)***</td>
</tr>
<tr>
<td>Capability Ratio (logged)</td>
<td>-0.0282 (0.0011)***</td>
<td>-0.0335 (0.0011)***</td>
<td>-0.0290 (0.0011)***</td>
<td>-0.0325 (0.0011)***</td>
</tr>
<tr>
<td>Alliance</td>
<td>0.1151 (0.0049)***</td>
<td>0.1217 (0.0047)***</td>
<td>0.1243 (0.0051)***</td>
<td>0.1254 (0.0051)***</td>
</tr>
<tr>
<td>Constant</td>
<td>0.6132 (0.0294)***</td>
<td>1.4397 (0.0195)***</td>
<td>1.2604 (0.0179)***</td>
<td>1.6711 (0.0217)***</td>
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<tr>
<td>Observations</td>
<td>192517</td>
<td>218606</td>
<td>178061</td>
<td>178061</td>
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<tr>
<td>Number of Dyads</td>
<td>10138</td>
<td>11565</td>
<td>9368</td>
<td>9368</td>
</tr>
</tbody>
</table>

Standard errors in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%
Fig 1: IGO Similarity and Dispute Onset

The graph illustrates the relationship between economic and security IGO similarity and the probability of a militarized dispute. As the similarity increases, the probability of conflict decreases.

Pr(Militarized Dispute) vs Economic and Security IGO Similarity
Fig. 3: Low Democracy and Dispute Onset (Competing Models)
Fig3: Low Democracy and Dispute Onset (Competing Model)
Fig 4: UN Voting Affinity and Dispute Onset (Competing Models)