Civil–Military Structure, Political Communication, and the Democratic Peace*

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Looking beyond the democratic/Kantian peace argument that highlights the pacifying effect of regime type on international conflict, this study explores additional, potentially important domestic factors that may influence conflict – most notably, civil–military structure, such as degree of civil versus military control and military manpower system. It also looks into the effects of political communication in terms of diplomatic channels and open media. On the basis of logistic regression analysis for 120 countries during the period from 1950 to 1992, the authors report that strong military influence is more likely to lead to the onset of militarized interstate disputes, wars, and international crises while the presence of conscripted soldiers, diplomatic activities, and open media makes that less likely. These results hold up in the presence of the three Kantian peace variables (i.e. democracy, economic interdependence, and joint membership in international organizations) and other control variables that are standards within contemporary research designs. Thus, the authors conclude that the four factors are important complements to understanding the impact of domestic traits on interstate conflict beyond the conventional regime-type explanation of the democratic/Kantian peace.

* The authors wish to thank Charles R. Boehmer, Benjamin Fordham, J. Joseph Hewitt, John R. Oneal, Kenneth Schultz, Doug A. Van Belle, Michael Brzoska (Associate Editor), and three anonymous reviewers for their helpful comments at the various stages of this article. Seung-Whan Choi may be reached at whanchoi@uic.edu and Patrick James may be reached at patrickj@usc.edu. The data used in this article are available from http://www.prio.no/jpr/datasets.

1 Recently, democratic peace studies have extended to the liberal and even Kantian or neo-Kantian peace, which encompasses trade as well as international organizations. For the purposes of this study, we use the term ‘democratic/Kantian peace’. Examples from the recent wave of democratic peace studies, which incorporate an increasing range of political and economic variables, include Gartzke (1998); Mousseau (2000); Russett & Oneal (2001); Prins (2003); and Bueno de Mesquita et al. (2003).
As will become apparent, the preceding set of four regime-related (or structural) variables can help to further account for the path from international conflict to peace. Unfortunately, these four aspects have not as yet been represented in a systematic way within the vast literature of linkage politics. When ideas related to these four variables appeared in our previous studies, the main focus was on how leaders become involved in militarized disputes during a relatively short time period, not on how they initiate militarized disputes, wars, and international crises (e.g. Choi & James, 2003, 2004, 2005, 2007). This study attempts to refine the conceptual discussion revolving around these four aspects and conduct more rigorous empirical analysis of all the possible conflict-related alternatives in the same model during the period from 1950 to 1992, so that it can compare the performance of the four variables with that of the democratic/Kantian peace. We believe that these additional factors provide important complements to understanding the impact of domestic traits on interstate conflict beyond the conventional democratic/Kantian peace phenomenon.

Below, we identify causal mechanisms between each of the four variables and conflict, provide their proper measurement, and conduct rigorous empirical testing at a dyadic level for 120 countries during the period from 1950 to 1992.

Civil–Military Structure and Political Communication

Most of the democratic/Kantian peace studies draw attention to the dampening impact of regime type on conflict by simply differentiating democracies from non-democracies. They have not yet paid attention to foreign policy decisionmaking on conflict. Since the leader of a state initiates war, causes of war can be inferred directly from how he or she acts in times of crisis, rather than from what kind of political regime he or she belongs to. It is likely that to come up with a viable national security decision, leaders need to go through certain internal processes that include discussion with key policymakers and the review of possible military and diplomatic options. At the initial stage, leaders’ war decisionmaking may be influenced by civil–military structure, a relatively neglected aspect of regime type. How civilian and military leaders interact and what kinds of military manpower systems are feasible are two main issues with respect to civil–military structure. However, it is also plausible that leaders will attempt to resolve a crisis through political communication in the form of diplomacy or signaling via news media. By tracing such internal decisionmaking choices by leaders, this study focuses on four factors: military influence, military manpower, diplomacy, and media. A more detailed discussion of each variable follows below.

It is essential, especially in times of crisis, for national leaders to convene for policy decisions that include both political and military measures. Put differently, there arise policy interactions between civilian and military officials who provide their own expertise in response to external threats. Some students of civil–military relations argue that civilian supremacy in civil–military interactions is one of the most important attributes of liberal democracy and contributes to decreasing military adventurism (e.g. Janowitz, 1981; Perlmutter, 1986; Diamond, 1999: 11; Feaver & Gelpi, 2004: 8). In their classic works, Huntington (1957) and Betts (1977) assert that, compared with their civilian counterparts, the military are not likely to advocate the use of force, since the lives of their personnel are at stake. In the same vein, Andreski (1992) contends that civilian officials initiated the most aggressive and successfully imperialist militarism in modern times, while military dictators were pacific in response to national security issues. Several studies of US
foreign policy suggest the existence of civilian hawks and military doves, especially during the post-Vietnam War period. Feaver & Gelpi (2004), for example, look into US military leaders since 1816 and find that they generally have been reluctant to use force, while civilian leaders reveal the most hawkish voices in government. The Powell doctrine perhaps most directly conveys the basic arguments of hawkish civilian and dovish military (Campbell, 1998). Further, within civilian regimes in the United States, Latin America, and Eastern Europe, the military do not generally adopt a hawkish standpoint relative to civilians.

Other students of civil–military relations, however, claim that, while civilian leaders are anticipated to be dovish, military leaders are expected to be hawkish, at least in relation to each other (e.g. Allison, Carnesale & Nye, 1985). Barnett (1970: 369) identifies the powerful influence of the German army as a crucial factor in producing World War I. During the era of imperial Japan, to cite what is arguably the archetypal case, the weak leadership of civilian elites versus the military leadership often caused international disputes. In the same vein, Brecher (1996: 220) reports that ‘[the military] in power are likely to employ violence or more severe violence, even if alternative techniques of crisis management are available’. Recently, we used a proxy measure for the degree of military control over civilians, using annual military expenditure, and inferred from the data analysis that military officials are more likely than civilian ones to be involved in militarized interstate disputes (e.g. Choi & James, 2004, 2005).

This study takes on the military hawkish argument because it is in line with the conventional wisdom that where you stand depends where you sit (Allison, 1971; Gray, 1975: 86; Allison & Zelikow, 1999). Since top military officials are what Lasswell (1997) called ‘specialists on violence’ or are soldiers, specially trained (but not necessarily indoctrinated) to protect national security and interests, they should have a lower aversion to use of force than do civilian leaders. Thus, it is likely that, when military influence is greater than civilian in times of crisis, the policy choice is use of force. In this line of thinking, whenever military influence increases within two states in a dispute, higher stakes will ensue through a tendency toward military attacks. In other words, all other things being equal, as military power rises in at least one state within a dyad, military means are expected to come to the fore. Thus, the hypothesis about civil–military relations is as follows:

**H1**: Dyads with strong military influence in civil–military interactions are more likely to initiate international conflict with each other.

The military manpower system is a second component of military structure that may be associated with the likelihood of military adventurism. The choice between conscription and voluntary service can be thought of as an indicator of the balance of political power between civilians and the military in domestic politics. In response to possible external threats, national leaders, in general, can select their military recruitment from the alternatives represented by conscripts and volunteers. Given their recruitment selection, in turn, they face a different structural constraint in using soldiers on the battlefield (Anderson & Honegger, 1982).

Leaders may be afraid of using conscripted soldiers too readily, owing to a potential public outcry. Many people whose sons and daughters are in service are likely to raise loud voices against military actions that produce casualties. In particular, in democratic societies, where public opinion matters, the leadership’s disposition toward use of force may be greatly reduced (Luttwak, 1996; for a dissenting view, see Feaver & Gelpi, 2004). German leaders, for example, face great political difficulties in
seeking to deploy their conscripted soldiers, even for UN peacekeeping missions. Despite President George W. Bush’s request for non-combat support in Iraq, the Korean government almost refused. Seoul could not provide troops easily because of fierce opposition from ordinary citizens who were fearful of losing relatives and friends serving in the military. Owing to these structural constraints, leaders may avoid conscription altogether, even when aggressive intentions may exist; examples, at various times, might also include Pakistan, Saudi Arabia, Nigeria, and others. By contrast, the public is less likely to be concerned about voluntary soldiers, whose profession is to fight for compensation at the possible expense of their lives. In this case, a voluntary system is likely to provide national leaders with more leeway in pursuing a military response. A good example is the US voluntary manpower system, under which presidents frequently use military force with relatively limited political risk, aside from the most dramatic instances (Hendrickson, 2002).²

It is likely that, when two states in a dyad maintain conscription as their means to prepare for national security, both are aware of the possible adverse public opinion against precipitous use of their conscripted sons and daughters, which in turn should make leaders more cautious about military options in foreign policy. Thus, the hypothesis about military manpower system is as follows:

\[ H2: \text{Dyads composed of states with conscripted soldiers are less likely to initiate international conflict with each other.} \]

² Some empirical findings suggest that conscription leads to more conflict than a voluntary system (e.g. White, 1989; Ross, 1994; Anderson, Halcoussis & Tollison, 1996). Our previous work was based on the military capability perspective that conscripts provide leaders with possibly quicker and higher military readiness or preparedness, rather than on the democratic public opinion perspective presented in this study (Choi & James, 2003). More importantly, our previous findings are about militarized dispute involvement, not the onset of conflict.

In a time of a crisis, national leaders may try to resolve the situation through political communication in the form of diplomacy or signaling via news media. Dougherty & Pfaltzgraff (2001: 79) summarize a wide range of research that confirms ‘a crucial role in the preservation of peace’ for diplomacy.³ To avoid direct military confrontations, leaders may resort to contacts through diplomats at various levels, such as ambassadors, envoys, ministers, chargés d’affaires or mediators when they are available. As Singer & Small (1966) and Small & Singer (1973) properly point out, when two states exchange diplomatic missions with each other, this provides the initial foundation for a peaceful settlement of disagreements via negotiation and bargaining. (Examples like the notorious case of the Japanese before Pearl Harbor are so visible precisely because they go against the norm.) If diplomatic options already are available within an interstate dyad before a dispute occurs, leaders may utilize their diplomatic contacts to circumvent bloody battles. Contrarily, the presence of fewer diplomats not only means more difficulty in pursuing a political or diplomatic means in the quest for a peaceful resolution, but also suggests a degree of isolation in the diplomatic ‘amphitheater’. Thus, the hypothesis about diplomacy is as follows:

\[ H3: \text{The more diplomatic channels in a dyad, the more constrained its members are from initiating international conflict with each other.} \]

³ Nonetheless, the classic realist, Morgenthau (1985: 569–575), argued that the importance of diplomatic channels had declined dramatically because of frequent summit meetings, advancement of communication technology, etc. Morgenthau’s observation may be in line with our previous empirical findings, which show a negative relationship between diplomatic contacts in place and militarized dispute involvement (Choi & James, 2005).
for effective political communication. Mass media independent from state control are likely to empower the public’s eyes and ears to detect government wrongdoing, resulting in domestic constraints on democratic leaders (Graber, 1986: 258). This benign effect of open media is implied by Fearon’s (1994) and Smith’s (1998) exegesis of audience costs, Schultz’s (1998) analysis of political opposition, and Bueno de Mesquita & Siverson’s (1995) notion of leadership survival. Although these studies do not necessarily address how audience costs are connected with media, each assumes that open media permit public input to be heard. This, in turn, should make a given leader at least a bit more cautious out of fear for political survival; in particular, independent news media make it harder for a leader to bluff and not get caught. In a similar vein, Slantchev (2005) properly points out that, as long as freedom of the media from political manipulation is guaranteed, open media enable leaders to generate audience costs. By contrast, it is unlikely that authoritarian leaders face audience costs because they own or control mass media and manipulate them for their political interests. In this case, they have no obstacles to staying in power even with major policy failures such as backing down in a crisis or losing a war (see Mueller, 1992; Owen, 1997; Van Belle, 2000).

There exist a few studies that have tested the possibility of the pacifying effect of media on conflict. Although Eyerman & Hart (1996) and Schultz (1998) do not use a direct measurement of media, their studies conclude that information and communication (possibly via open media) produce audience costs at the dyadic level. On the basis of global press freedom data from 1950 to 1992, Van Belle & Oneal (2000: 72) present a more advanced study on media effects. They report that, ‘when the media [are] independent of governmental control and able to report events objectively, national leaders are constrained in resorting to force, reducing the likelihood that a state will become engaged in a militarized interstate dispute’. In a similar vein, we found that media openness is negatively related to militarized interstate dispute involvement (Choi & James, 2007). Along those lines, we argue that, when both states in a dyad maintain a high degree of open media, the likelihood of conflict should be minimized significantly. Thus, the hypothesis about open media is as follows:

\( H_4: \) Dyads composed of states where open media exist are less likely to initiate international conflict with each other.

Operationalization and Data Sources

Students of civil–military relations have put forward, but not as yet tested with aggregate dyad-year data, the notion that strong military influence over civilians may contribute to various military disputes or acts of aggression. Recently, we designed a proxy indicator for civil–military relations that took the increase in annual military expenditure as representing military influence (Choi & James, 2004, 2005). The measure suffers from at least one significant drawback, however. As Feaver & Gelpi (2004: 94) point out, it may be likely to capture the effects of perception of external threats rather than ascendance of military influence, for, as leaders perceive greater threats, they are likely to expand their defense spending to meet the presumed dangers. In other words, our previous proxy indicator may not be likely to directly address civil–military issues as discussed in the previous section.

We introduce a more direct measure to systematically test the overall influence of the military on a cross-national basis. We utilize the Cross-National Time-Series Data Archive (also referred to as CNTS), which offers a comprehensive listing of international and
state-level data.4 The Archive contains political information on the regime type of each state based on three categories: (1) civilian, (2) civilian–military, and (3) military. A civilian regime is defined as a government controlled by a non-military component of the nation’s population. A civilian–military regime refers to outwardly civilian government effectively controlled by the military. Civilians hold only those posts (up to and including that of Chief of State) for which their services are needed for ongoing conduct of government operations. An example would be the retention of the Emperor and selected civilian cabinet members during the period of Japanese military hegemony between 1932 and 1945. A military regime means direct rule by the military, usually (but not necessarily) following a military coup d’état. The governing structure may vary from utilization of the military chain of command under conditions of martial law to institution of an ad hoc administrative hierarchy with at least an upper echelon staffed by military personnel. Among these three regime types, the civilian regime alone maintains civilian control over the military. To capture strong military influence, the civilian–military relations variable is coded 1 if at least one state in each dyad-year is either military or civilian–military regime and 0 otherwise.5

Since students of conflict studies have paid little attention to the implications of military manpower recruitment selection, there have been no readily available manpower data in the form of extensive cross-sectional, time-series data. Fortunately, we were able to locate the two most comprehensive and representative references on each state’s military manpower preferences: Horeman & Stolwijk (1998) and Prasad & Smythe (1968). These two sources provide a historical description of military manpower. We compiled each state’s conscription information based on the two sources and then used several other raw data references for cross-checking and clarification to increase data reliability and validity.6 The conscription variable is coded 1 if both states in each dyad-year have a conscription system, 0 otherwise.

To our best knowledge, there are no data on diplomacy that measure the actual use of diplomatic channels between countries, one of the most challenging tasks for empirical research. Singer & Small’s (1966) and Small & Singer’s (1973) diplomatic importance scores and their updated data provide the number of diplomatic missions (i.e. an ambassador, envoy or minister, and chargé d’affaires). These are likely to capture the opportunity to use a variety of diplomatic channels and may further assess the actual exercise of diplomacy between countries. In this sense, we utilize the Singer & Small dataset that measures the total number of diplomatic missions received in each state. The number of diplomats is bound to capture power status as much or more than a predilection for talking things out, so we weight the raw data using gross domestic product (GDP) to take into account unusually high foreign ministry budgets or high numbers of diplomatic offices. In this context, we divided the number of diplomats by GDP to normalize, creating diplomats/GDP ratios. Following the weak link assumption that the score for the fewer diplomats in a dyad is taken to be the stronger determinant of how much conflict to expect (see Dixon, 1994), the dyad-year is then recorded as the smaller of the two ratio values.

4 The CNTS is a product of the State University of New York (Binghamton), launched in the fall of 1968 by Arthur S. Banks under the aegis of the University’s Center for Comparative Political Research (subsequently the Center for Social Analysis). For more details, see http://www.data-banks.stehosting.net/Default.htm.
5 It is plausible that, even if civilian control over the military prevails, the former may be anything but risk averse in terms of using the military, which is not considered in the measure.
Open media are measured as a dichotomous variable. The variable is coded 1 if both states in each dyad-year have guaranteed, independent open media capable of functioning as an area of political competition or debate; it is 0 otherwise (i.e. the press and news media are either restricted or controlled by the government, or there are no press and news media). We utilize Van Belle’s (2000: 137–148) global press freedom data collection.7 Table 1 provides a summary of hypotheses and operationalization (and data sources).

Logistic Regression Model-Building

We test the four hypotheses by replicating a standard dyadic research design. Oneal & Russett’s (1999) Kantian peace model has emerged as one of the most frequently replicated studies in the field of international relations, so it is used to provide the foundation for model-building here. This will establish the significance of our empirical findings relative to those of Russett & Oneal’s (2001) overall program of research, most notably Triangulating Peace,8 as well as minimize bias that might inadvertently appear in our own research design. Oneal & Russett’s Kantian peace model consists of three well-known Kantian peace variables drawn from a neoliberal perspective and five control variables from a realist perspective. The three Kantian peace variables are democracy, economic interdependence, and joint membership in international organizations; each of them is expected to produce a dampening effect on conflict. The five realist control variables are capability ratio, alliances, non-contiguity, geographic distance, and only minor powers: the likelihood of conflict is expected to decrease in the presence of each control.9

We combine our four variables with Oneal & Russett’s (1999) Kantian peace model as follows:10

\[
\text{international conflict} = \alpha_0 + \beta_1(\text{military influence})_{-1} + \beta_2(\text{conscription})_{-1} + \beta_3(\text{diplomats})_{-1} + \beta_4(\text{open media})_{-1} + \beta_5(\text{democracy})_{-1} + \beta_6(\text{economic interdependence})_{-1} + \beta_7(\text{joint membership in international organization})_{-1} + \beta_8(\text{capability ratio})_{-1} + \beta_9(\text{alliances})_{-1} + \beta_{10}(\text{noncontiguity})_{-1} + \beta_{11}(\text{geographic distance})_{-1} + \beta_{12}(\text{only minor powers})_{-1} + \varepsilon
\]

Although Oneal & Russett’s data analysis spans from 1886 to 1992, ours covers a shorter time period, from 1950 to 1992, owing to data availability.11 This time period covers 120 countries during the Cold War era and a few post-Cold War years, one of the most theoretically and empirically interesting periods in conflict studies. Oneal & Russett’s original study used militarized interstate dispute (MID) involvement rather than onset as the dependent variable for international conflict.12 Oneal & Russett (1999: 23) note that MID involvement and onset produced nearly identical results’, and they report the results only for MID involvement in their

7 It is plausible that the press is primarily disposed to support leaders’ decisions about war, which is not considered in the measure. On media bias, see Bennett & Paletz (1994); Graber (2003).
8 While Oneal & Russett (1999) includes all dyads in the analyses, Russett & Oneal (2001) is limited to politically relevant dyads only.
9 To save space, we do not get into the details of the well-known Oneal & Russett (1999) Kantian peace model.
10 Selection effects (see Reed, 2002) might be raised as a concern here because it seems plausible that the military will have more control when states are engaged in hostility. The use of a one-year time lag is intended to control for this problem.
11 The data-related constraints are mainly due to open media, where data exist from 1948 to 1994 only. When there is no yearly data information for any of the four variables, it is treated as a missing observation.
12 A MID is defined as ‘a set of interactions between or among states involving threats to use military force, displays of military force, or actual uses of military force’ (Gochman & Maoz, 1984: 587).
Table I. Hypotheses and Operationalization (and Data Sources)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hypothesis</th>
<th>Operationalization (and data source)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military influence</td>
<td>Dyads under military influence are more likely to initiate conflict</td>
<td>1 if at least one state in a dyad-year is under military influence (data from the CNTS Archive)</td>
</tr>
<tr>
<td>Conscription</td>
<td>Dyads with a conscription system are less likely to initiate conflict</td>
<td>1 if both states adopt conscription (data from various surveys and statistical books)</td>
</tr>
<tr>
<td>Diplomats</td>
<td>The more diplomats in a dyad, the less likely the initiation of conflict</td>
<td>The smaller value of the number of diplomats divided by GDP (data from Small &amp; Singer’s datasets)</td>
</tr>
<tr>
<td>Open media</td>
<td>Dyads with open media are less likely to initiate conflict</td>
<td>1 if both states have free or imperfectly free news media (data from Van Belle’s dataset)</td>
</tr>
<tr>
<td>Democracy</td>
<td>The more democratic the dyad, the less likely the initiation of conflict</td>
<td>The smaller value of the democracy scores (data from Oneal &amp; Russett’s collection)</td>
</tr>
<tr>
<td>Economic interdependence</td>
<td>The more economically interdependent the dyad, the less likely the initiation of conflict</td>
<td>The smaller value of the trade-to-GDP ratios (data from Oneal &amp; Russett’s collection)</td>
</tr>
<tr>
<td>Joint membership in IOs</td>
<td>The more joint memberships in IOs in a dyad, the less likely the initiation of conflict</td>
<td>Number of international organization memberships shared (data from Oneal &amp; Russett’s collection)</td>
</tr>
<tr>
<td>Capability ratio</td>
<td>The more preponderant the military capabilities in a dyad, the less likely the initiation of conflict</td>
<td>Logarithm of ratio of higher to lower power capability (data from Oneal &amp; Russett’s collection)</td>
</tr>
<tr>
<td>Alliances</td>
<td>Dyads under alliance are less likely to initiate conflict</td>
<td>1 if both states are linked by defense treaty, neutrality pact, or entente (data from Oneal &amp; Russett’s collection)</td>
</tr>
<tr>
<td>Noncontiguity</td>
<td>Non-contiguous dyads are less likely to initiate conflict</td>
<td>1 if both states are not contiguous by land border or less than 150 miles of water (data from Oneal &amp; Russett’s collection)</td>
</tr>
<tr>
<td>Geographic distance</td>
<td>The farther apart two dyadic states are, the less likely the initiation of conflict</td>
<td>Logarithm of dyadic distance in miles between capitals or major ports (data from Oneal &amp; Russett’s collection)</td>
</tr>
<tr>
<td>Only minor powers</td>
<td>Dyads with no major power involvement are less likely to initiate conflict</td>
<td>1 if only minor powers involved (data from Oneal &amp; Russett’s collection)</td>
</tr>
</tbody>
</table>

We prefer MID onset over involvement as the dependent variable, because our hypotheses focus on leaders’ initiation of military action. As in Oneal & Russett, all 12 independent variables are lagged by one year, so they are not affected by the dependent variable of a dispute to be explained. The empirical testing is based upon Oneal & Russett’s logistic model with peace years correction, depicted in the third column of Table II.14

13 Results for MID involvement are similar to those for onset that will be reported in the next section.

14 For more information on peace years correction models, see Beck, Katz & Tucker (1998).
The logistic regression model focuses on the causes of MIDs in general, including wars. Interstate wars are, however, relatively uncommon, and it is not easy to identify patterns with regard to why and how they break out. Russett & Oneal (2001: 94) point out that ‘the influences and constraints that affect the occurrence of wars do not appear to differ much from those that are relevant to militarized disputes in general’. Although we do not dispute the argument that the causes of war in particular also tend to be the causes of MIDs in general, we test the model against the onset of wars, the highest hostility level of MIDs. In this way, we can also distinguish between those MIDs where the threat to use force was made and those MIDs where military force was actually used at the highest level. This is crucial for assessing the theoretical implications of the civil–military structure.

We also test the logistic regression model with a well-defined population of international crisis dyads compiled by Hewitt (2003) on the basis of International Crisis Behavior (ICB) data (see also Brecher & Wilkenfeld, 2000). It is intriguing to test the model with ICB onset as the dependent variable, since crisis dyads tend to be more severe than dispute dyads (Hewitt, 2003: 685). This testing will provide an opportunity to determine the extent to which results based on militarized interstate disputes hold up for international crises as well. For this analysis, the dependent variable in the equation will be replaced with Hewitt’s (2003) onset of international crises dyads, which indicate whether any of the dyad-years in Russett & Oneal’s (1999) original data experience an international crisis in year $t$. A crisis dyad is defined as (1) a pair of states such that both participants are recognized members of the international system; (2) when leaders in at least one of the dyads perceive a heightened probability of military hostilities, a threat to basic national values, and a finite time within which to make a decision; and (3) when at least one member of the dyad perceives that the other has directed a threatening or hostile action against it.

### Empirical Results

Table II presents the empirical results based on the logistic regression model from the previous section. The following data analysis focuses mainly on the four newly introduced variables and Oneal & Russett’s three Kantian peace variables – the main theoretical interests in this research. Model 1 is the replicated results of Oneal & Russett’s (1999) Kantian peace model where their dependent variable of MID involvement is replaced with onset. The replicated results for the Kantian peace variables, in terms of statistical significance, concur with Oneal & Russett’s original findings except for the insignificance of economic interdependence.

Model 2 shows that, as hypothesized, military influence matters, significant at the 0.001 level, but conscription does not. It can

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15 Among the recent exceptional book-length expositions that identify such patterns and develop generalizations on war are Midlarsky (2000); Vasquez (2000); Russett & Oneal (2001); Lemke (2002); Bueno de Mesquita et al. (2003).


17 Stata Statistical Software (version 8.2) is used for the replications and empirical tests.

18 We have conducted three diagnostic tests for multicollinearity: the $R^2$ statistic, variance inflation factor (VIF), and tolerance. No serious multicollinearity problem is detected between independent variables.

19 A statistical model with a large number of control variables may make its results much more difficult to interpret (or even meaningless), so we follow Achen’s (2002) ‘Rule of Three’ and run various combinations of three variables in a model. All of the results concur with what we report in Tables II and III and thereby assuage the preceding concerns.

20 The smaller total number of observations resulted from the shorter study period and missing observations from ongoing MIDs as well as from the four newly introduced variables.

21 The insignificance of interdependence is likely to be attributed to the shorter study period and the new dependent variable of MID onset.
be inferred that the increased influence of military leaders over civilians contributes to the likelihood of MID onset.\textsuperscript{22} It appears that political communication-related variables produce a pacifying effect on conflict. The diplomats variable is statistically significant at the 0.01 level; the open media variable is statistically significant at the 0.001 level. As expected, with the presence of diplomats as well as a high degree of independent

\textsuperscript{22} We have tested two other measures of civil–military relations: (1) when both states in each dyad-year are militarized, and (2) when one state is militarized and the other state is not. The results are similar to those reported in Tables II and III: strong military influence leads to conflict.
news media, the likelihood of an interstate dispute becomes lower. Interestingly enough, the democracy variable becomes insignificant once the four new variables are plugged into the equation. The economic interdependence hypothesis is not supported. The international organizations variable shows statistical significance, but is counterintuitive (which concurs with Oneal & Russett's original findings).

One may suspect that the open media variable is closely associated with Oneal & Russett's democracy variable, which could have contributed to the insignificance of the latter in Model 2. We disagree with this view. Built on Polity III, the Oneal & Russett democracy variable measures five institutional aspects of democracy: competitiveness of participation, regulation of participation, competitiveness of executive recruitment, openness of executive recruitment, and constraints on the executive (Gurr, Jaggers & Moore, 1991). The democracy variable, however, does not capture the effect of independent open media. In this sense, the open media variable measures a quite different aspect of democracy from the one that appears in the Kantian peace research program of Oneal & Russett.

Nevertheless, we choose to implement and test two precautionary measures in response to the above concerns about overlapping measurement. First, we empirically separate the effect of open media from that of democracy. That is, to control for the media effect and to distinguish those two independent variables empirically, we adopt the orthogonal method by regressing Oneal & Russett's composite indicator of democracy on our simple indicator of open media, and then use the residual (i.e. residual = institutional democracy – α – β₁ × open media) as the democracy variable that is orthogonal to open media and measures the sole effect of the five attributes of democracy other than that of media openness. In doing so, we can detect exactly how open media independently affect MID onset. Model 3 presents the results for the orthogonal method. Once again, while open media have statistical significance at the 0.001 level, democracy does not turn out to be significant.

Second, we introduce a reduced form of Model 2, in which Oneal & Russett's democracy variable is dropped from the equation to extinguish any remaining concerns about a possible conceptual incompatibility between open media and democracy in the same logistic regression model. Model 4 reveals that open media have a strong dampening effect on the onset of MIDs. In other words, although we remove the democracy variable and rerun the reduced equation, the results in Model 4, especially with respect to open media, are very similar to those in Models 2 and 3.

In sum, civilian control over the military, diplomats, and open media appear to be contributing factors in connection to peace at a dyadic level of aggregation.

Model 5 distinguishes between those MIDs where the threat of force occurred and MIDs where military force was actually used. The dependent variable is the onset of war. When we ran this war initiation in model, the open media variable was automatically dropped out of the equation because there was no variation between media and war, which reduced the total dyad-years to 78,327, dropping 17,653 observations. In other words, all the open media dyads (i.e. a value of 1) perfectly correspond to no onset of war (i.e. a value of 0). Consequently, the equation could not estimate the effect of the dropped observations on the other 11 variables. Model 5 reports the results free from the dropping problem by not including the media variable in the Stata

23 Spearman's rho reports a correlation of 0.59 between open media and democracy. The Spearman's rho does not go beyond the 0.80 threshold that is generally regarded as a strong connection (see Menard, 1995).

24 For more details, see Gujarati (1995); Li & Resnick (2003).
command line. In this way, we keep the same dyad-years of 95,980 as the previous models for comparison. As speculated upon earlier, the onset of war is related closely to the civil–military structure (i.e. both military influence and conscription), but not related to diplomats. It appears that civilian supremacy is likely to contribute to a more peaceful world; in addition, the presence of voluntary soldiers is likely to lead to a more conflictual world. The conscription variable turns out to be insignificant when the dependent variable is the onset of MIDs, but becomes significant when it is replaced with the onset of war. This evidence suggests that the conscription hypothesis works well only with war initiations that tend to evoke the worst casualty phobia among ordinary citizens. Each of the three Kantian peace variables seems to lose its effectiveness in predicting war occurrence.

Model 6 reports the results where the dependent variable is ICB’s onset of international crises. The results are similar to those in the MID onset Models 2, 3, and 4, except for the democracy variable, which shows statistical significance at the 0.001 level, but in a counterintuitive direction. This is a startling result that will require more attention in future research, perhaps with modeling that focuses on stages of escalation. Perhaps the more democratic dyads are at greater risk of crisis onset, but less so for escalation from crisis to war. At any rate, with the many precautions concerning overlapping concepts (e.g. democracy and open media) and multicollinearity, we believe the basic association revealed here to be credible and worthy of further investigation.

The results in Table III are obtained for politically relevant dyads only, which students of conflict processes look into most commonly, owing to their relatively dispute-prone nature, that is, the most ‘dangerous’ ones. In terms of the effect of each variable of interest, the results are similar to those in Table II.

In sum, it appears that international conflict is related closely to the characteristics of regimes such as military influence, diplomats, and open media (and conscription with war onset), but not likely with regime type in and of itself (i.e. in the context of democratic versus non-democratic). In addition, conflict processes do not seem to occur as a side-effect of the free market economy, at least in the light of economic interdependence in the empirical analysis reported here. It is possible that, with large samples, even a small effect can be statistically significant, but substantively trivial. Thus, it becomes increasingly important to estimate the substantive effects of variables as the sample size increases. Table IV shows the substantive significance of the seven theoretically interesting variables in the logistic regression models. As compared with a typical dyad during the period from 1950 to 1992, the likelihood that the more military-influenced dyads in the second column will initiate a dispute is increased 91%; for voluntary military manpower systems, the increase is 24%; for diplomats, the decrease is 24%; and for open media, the decrease is 82%. For democracy and international organizations (IOs), the increase is 20% and 23%, respectively, with a decrease of 9% for independence. As compared with a politically relevant dyad, the likelihood of a dispute in the fifth column is increased 74% with strong military influence and 28% with voluntary soldiers; but decreased 21% for diplomats and 71% in the presence of open media. For democracy, the increase is 17% although the coefficient is not statistically significant; for IOs, the increase is 24%; and for interdependence, the decrease is 10%. Substantive analysis for war (i.e. in columns 3 and 6) and ICB
Table III. Predicting International Conflict, 1950–92: Politically Relevant Dyads

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 7</th>
<th>Model 8</th>
<th>Model 9</th>
<th>Model 10</th>
<th>Model 11</th>
<th>Model 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military influence</td>
<td>0.571*** (0.156)</td>
<td>0.571*** (0.156)</td>
<td>0.538*** (0.148)</td>
<td>2.149** (0.851)</td>
<td>0.481* (0.279)</td>
<td></td>
</tr>
<tr>
<td>Conscription</td>
<td>−0.255 (0.159)</td>
<td>−0.255 (0.159)</td>
<td>−0.256 (0.163)</td>
<td>−1.389* (0.702)</td>
<td>−0.135 (0.243)</td>
<td></td>
</tr>
<tr>
<td>Diplomats</td>
<td>−1.269** (0.443)</td>
<td>−1.269** (0.443)</td>
<td>−1.272** (0.445)</td>
<td>0.449 −1.198*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open media</td>
<td>−1.266*** (0.319)</td>
<td>−0.999*** (0.280)</td>
<td>−0.987*** (0.278)</td>
<td></td>
<td>−3.108*** (0.755)</td>
<td></td>
</tr>
<tr>
<td>Democracy</td>
<td>−0.033* (0.015)</td>
<td>0.022 (0.016)</td>
<td></td>
<td>0.046 (0.094)</td>
<td>0.064*** (0.021)</td>
<td></td>
</tr>
<tr>
<td>Democracy, orthogonal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joint membership in IOs</td>
<td>0.016^ (0.007)</td>
<td>0.013^ (0.006)</td>
<td>0.013^ (0.006)</td>
<td>0.014^ (0.006)</td>
<td>0.023 (0.039)</td>
<td></td>
</tr>
<tr>
<td>Capability ratio</td>
<td>−0.192** (0.076)</td>
<td>−0.248*** (0.071)</td>
<td>−0.248*** (0.071)</td>
<td>−0.243*** (0.071)</td>
<td>−0.529 (0.336)</td>
<td></td>
</tr>
<tr>
<td>Alliances</td>
<td>−0.508* (0.259)</td>
<td>−0.312 (0.213)</td>
<td>−0.312 (0.213)</td>
<td>−0.318 (0.220)</td>
<td>−1.262 (1.021)</td>
<td></td>
</tr>
<tr>
<td>Noncontiguity</td>
<td>−1.391*** (0.260)</td>
<td>−1.429*** (0.258)</td>
<td>−1.429*** (0.257)</td>
<td>−1.425*** (0.257)</td>
<td>−2.058* (1.054)</td>
<td></td>
</tr>
<tr>
<td>Geographic distance</td>
<td>−0.124 (0.088)</td>
<td>−0.160* (0.088)</td>
<td>−0.160* (0.088)</td>
<td>−0.155* (0.087)</td>
<td>−0.050 (0.226)</td>
<td></td>
</tr>
<tr>
<td>Only minor powers</td>
<td>−0.307 (0.317)</td>
<td>−0.453 (0.290)</td>
<td>−0.453 (0.290)</td>
<td>−0.433 (0.296)</td>
<td>−0.955 (1.290)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>−0.441 (0.740)</td>
<td>0.593 (0.740)</td>
<td>0.460 (0.718)</td>
<td>0.375 (0.714)</td>
<td>−2.680 (2.212)</td>
<td></td>
</tr>
<tr>
<td>Chi²</td>
<td>349.29 (0.740)</td>
<td>374.39 (0.740)</td>
<td>374.39 (0.718)</td>
<td>366.53 (0.714)</td>
<td>1,018.77 (2.212)</td>
<td></td>
</tr>
<tr>
<td>P of Chi²</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>−1.612.49 (0.37)</td>
<td>−1.577.15 (0.37)</td>
<td>−1.577.15 (0.37)</td>
<td>−1.578.61 (0.37)</td>
<td>75.18 (0.37)</td>
<td></td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>0.23</td>
<td>0.24</td>
<td>0.24</td>
<td>0.24</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>18,693</td>
<td>18,693</td>
<td>18,693</td>
<td>18,693</td>
<td>17,584</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05; **p < .01; ***p < .001, one-tailed tests.
*p < .05; ^p < .001, one-tailed test but wrong sign.

onset (i.e. in columns 4 and 7) produces a similar conclusion. This analysis of substantive effects reinforces the importance of military influence, diplomats, and open media (and conscription in case of wars) in the quest for peace.

Conclusion

This study has offered a potentially important refinement to the research enterprise on linkage politics and especially the democratic/Kantian peace. The empirical analysis is the
first attempt to systematically test a set of four factors (i.e. civil–military relative influence, conscription, diplomats, and open media) against three salient conflict phenomena (i.e. the onset of MIDs, wars, and international crises) for 120 countries during the period from 1950 to 1992. Empirical results from the logistic regression analysis indicate that civilian supremacy, diplomatic channels, and open media (and voluntary soldiers in case of wars) are essential in accounting for such international conflict. In sum, the preceding findings reveal that civilian supremacy, diplomatic channels, and open media (and voluntary soldiers in case of wars) are essential in accounting for such international conflict. In sum, the preceding findings reveal that civilian supremacy, diplomatic channels, and open media (and voluntary soldiers in case of wars) are essential in accounting for such international conflict. In sum, the preceding findings reveal that civilian supremacy, diplomatic channels, and open media (and voluntary soldiers in case of wars) are essential in accounting for such international conflict. In sum, the preceding findings reveal that civilian supremacy, diplomatic channels, and open media (and voluntary soldiers in case of wars) are essential in accounting for such international conflict. In sum, the preceding findings reveal that civilian supremacy, diplomatic channels, and open media (and voluntary soldiers in case of wars) are essential in accounting for such international conflict. In sum, the preceding findings reveal that civilian supremacy, diplomatic channels, and open media (and voluntary soldiers in case of wars) are essential in accounting for such international conflict.

Table IV. Substantive Effects of International Conflict

<table>
<thead>
<tr>
<th>Variable</th>
<th>All dyads</th>
<th>Politically relevant dyads</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MID onset (%)</td>
<td>War onset (%)</td>
</tr>
<tr>
<td>Military influence = 1</td>
<td>91</td>
<td>500</td>
</tr>
<tr>
<td>Conscription = 0</td>
<td>24*</td>
<td>200</td>
</tr>
<tr>
<td>Diplomats + 1 st. dev.</td>
<td>−24</td>
<td>0*</td>
</tr>
<tr>
<td>Open media = 1</td>
<td>−82</td>
<td></td>
</tr>
<tr>
<td>Democracy + 1 st. dev.</td>
<td>20*</td>
<td>0*</td>
</tr>
<tr>
<td>Economic interdependence + 1 st. dev.</td>
<td>−9*</td>
<td>0*</td>
</tr>
<tr>
<td>Joint membership in IOs + 1 st. dev.</td>
<td>23</td>
<td>0*</td>
</tr>
</tbody>
</table>

*indicates that the coefficient has no statistical significance.
The baseline values are as follows: 0 for civilian influence, 1 for conscription, 0 for no open media, mean for continuous variables, 0 for contiguity, 0 for non-alliance, and 1 for only minor powers.

For future research, it is important to probe who actually initiates the conflict using a directed dyad-year dataset. Since one of the main purposes of this study was to compare the effects of the four factors in the context of Oneal & Russett’s Kantian peace model, which uses non-directed dyad-years, we leave this investigation for future research. Given that data availability has limited our research scope, collecting data and conducting a more extensive analysis becomes a priority for purposes of greater generalization. Future research also should look into the following two issues: (1) whether military attitudes are changing – becoming more belligerent – as they become more powerful relative to civilian; and (2) whether conflict becomes more likely with increased mistrust between civilian and military regimes.

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