Contracting for Peace: Do Nonaggression Pacts Reduce Conflict?

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Nonaggression pacts are often concluded between states with conflicting interests, and we consider their use as conflict management devices. Because nonaggression pacts raise domestic and international audience costs for aggressors, they should reduce the likelihood of conflict. We test this proposition while taking into account possible selection bias in the conclusion of nonaggression pacts, and we find that nonaggression pacts indeed seem to reduce conflict between signatories. Our finding lends support to the liberal institutionalist argument that institutions can constrain state behavior and also suggests that nonaggression pacts are an effective conflict management tool.

The debate regarding the impact of international institutions has long been at the center stage of international relations research. Realists claim that international institutions exist as a reflection of the political will and intentions of the states that create them but do not exert any independent influence on state behavior (e.g., Mearsheimer 1994/1995). Liberal institutionalists, on the other hand, argue that institutions are more than scraps of paper, that they constrain states in order to make long-term cooperation possible (e.g., Keohane 1984; Mitchell and Hensel 2007). The crux of the problem is that states decide if and when to conclude an agreement and thus it is difficult to distinguish the agreement's effect from the states' a priori intentions. Here we contribute to the debate regarding the role of international institutions by theorizing about nonaggression pacts and using a matching procedure to study their constraining effect. We examine whether nonaggression pacts are successful at what they are often designed to do: can they reduce conflict among the signatories?

We are interested in this question not only because it provides a novel subject area for testing whether institutions matter but also because of its potential policy implications. Fortna (2003, 2004) suggests that former belligerents can attain a more durable peace by concluding highly institutionalized cease-fires that contain such provisions as peace-keeping, third-party guarantees, and demilitarized zones. Unfortunately, these provisions also tend to be costly to implement and thus should only be put in place after significant conflict has occurred. What we do not know is whether states can "contract for peace" in situations in which their disagreements have not yet reached the level of full-blown interstate war. Are there alternative conflict management agreements that might help states avoid escalation? It appears that nonaggression pacts, in which states formally and publicly promise not to use force against each other, may be a promising tool to quell conflict between antagonists.

Previous research usually treats nonaggression pacts as a form of alliance rather than a type of conflict management agreement. We argue that this conceptualization is problematic and show that nonaggression pacts are different from other types of alliances. Many nonaggression pacts have important similarities to peace treaties and cease-fires: they tend to be signed between states with a significant history of conflict and an expectation that future conflict is possible; and their goal is to reduce the likelihood of future fighting. Furthermore, while nonaggression pacts are usually not as institutionalized, they nevertheless share at least one common mechanism with peace treaties and some cease-fire agreements. By formalizing and publicizing their pledges not to threaten or use force, the signatories impose audience

costs on whoever violates the agreement. Just as Fortna's (2003, 2004) research shows that formal cease-fire agreements decrease the likelihood that conflict resumes, we argue that nonaggression pacts are a type of formal conflict management agreement that makes the initial onset of conflict less likely.

Previous studies evaluating the effect of nonaggression pacts have found that they either have no effect on the likelihood of conflict between signatories (Leeds and Mattes 2007) or actually increase conflict (Gibler and Vasquez 1998; Sabrosky 1980). We argue that these studies do not take into account an important piece of the puzzle. Because nonaggression pacts are often signed between states with a significant history of conflict, the baseline probability for conflict in these dyads is high. To address this selection bias and reduce model dependence we employ a matching procedure (e.g., Diamond and Sekhon 2008; Ho et al. 2007). This approach provides more comparable treatment and control samples, and we find that nonaggression pacts have a conflict-reducing effect. Our result thus lends support to the liberal institutionalist argument regarding the constraining effect of international institutions and at the same time points to nonaggression pacts as an alternative, potentially promising, and low-cost conflict management tool.

Literature Review

The traditional alliance literature has tended to study alliances from a capabilities aggregation perspective, focusing on how alliances affect the interactions between the allies and third parties (e.g., Walt 1987). However, a number of scholars emphasize that alliances can also be seen as conflict management tools that help administer the relations between the allies.

Schroeder (1976) points out that states sometimes ally with those they consider a threat in order to conciliate or constrain the opponent. While Schroeder asserts that alliances may fulfill conflict management functions in addition to capability aggregation, Weitsman goes further and suggests that "under certain circumstances alliances are formed for the sole purpose of keeping peace among adversaries" (2004, 4). These "tethering alliances" may not necessarily lead to an actual settlement of the differences between the allies but will prevent conflict, at least in the short term. By contrast, Gibler's (1996, 1997) work on territorial settlement treaties (TSTs) suggests that alliances may indeed constitute dispute settle-

ments and promote the long-term prospects for peace. Bearce, Flanagan, and Floros (2006) also discuss a mechanism by which alliances maintain peace between signatories. Because alliances often establish regular and institutionalized military contacts, signatories attain reliable information regarding their relative capabilities. This lowers the risk of conflict stemming from asymmetric information.

While these studies point to the conflict-managing effects of alliances, none of them explicitly address nonaggression pacts. Schroeder and Weitsman exclude nonaggression pacts, stipulating that only promises to use force to achieve a common goal qualify. Gibler considers nonaggression/neutrality pacts but very few of the TSTs identified by him are nonaggression/neutrality alliances; many more are defense pacts. Bearce, Flanagan, and Floros's argument does not require them to separate out alliances by the particular type of obligation they contain.

Nonaggression pacts are the focus of a recent study by Long, Nordstrom, and Baek (2007). Long and his colleagues argue that certain provisions, including promises of nonaggression and peaceful dispute resolution and the creation of military or other permanent organizations within the alliance framework, signal a commitment to peace and facilitate the exchange of information between the parties. They find that all of these institutional features, with exception of the creation of permanent organizations, increase the durability of peace between allies.

It is important to note that Long, Nordstrom, and Baek's conceptualization of nonaggression pacts is quite broad. According to them, nonaggression provisions include promises not to threaten or use force against one another, the commitment not to assist internal or external enemies of one's ally, and a pledge to refrain from interfering in the ally's internal affairs. Their conceptualization of nonaggression provisions thus includes the standard nonaggression promise, a neutrality promise, and additional provisions about not aiding domestic enemies or interfering in domestic politics. Long, Nordstrom, and Baek also consider alliances in which states only have nonaggression promises together with alliances in which a nonaggression promise is featured alongside any other combination of defense, offense, and consultation provisions.

In contrast to Long and his colleagues, we focus on what one might call more "pure" nonaggression agreements. We consider only agreements that include a pledge not to threaten or use force against one another and that potentially add a promise not to

help a third party in an attack on the ally but that have no other (i.e., defensive, offensive, or consultation) obligations. In other words, we examine agreements in which states have either committed only to a nonaggression clause or have combined a nonaggression clause with a neutrality promise but share no other alliance obligations.[1] According to the Alliance Obligations and Provisions (ATOP) 3.0 data (Leeds et al. 2002), about 21% of alliances include a nonaggression provision by itself or combine a nonaggression and a neutrality clause but have no other obligations.

Are Nonaggression Pacts Different?

While many analyses routinely include nonaggression pacts[2] alongside other kinds of alliances, a number of scholars have argued that nonaggression pacts are different. For example, referring to the 1970 nonaggression agreement between West Germany and the USSR, Levy writes that "surely we would not want to consider these states 'allies'" (1981, 588). Furthermore, Leeds and Savun argue that "because pure nonaggression pacts require no active coordination, [. . .] their formation and termination are governed by different processes" (2007, 1125) than those of other types of alliances.

Nonaggression pacts entail obligations distinct from other types of alliances. Defense alliances, offense pacts, and promises for consultation all include provisions regarding the allies' collaboration with respect to third parties. States are supposed to defend each other against external enemies, attack a third party, or consult in the event of a threat from a third party. Pure nonaggression pacts, on the other hand, regulate the relationship between the signatories with no regard to third parties. While the addition of a neutrality provision to a nonaggression pact adds a reference to third parties, these agreements are still different from defense, offense, or consultation pacts in that they do not demand joint action or coordination. Rather, they prohibit states from taking action. Nonaggression pacts commit states *not* to threaten or use force and an additional neutrality provision commits the signatories *not* to join or help a potential enemy.

The different nature of their commitment suggests that nonaggression pacts are signed under different circumstances than other kinds of alliances. Despite the fact that Schroeder's (1976) and Weitsman's (2004) research on a few particular alliance cases suggests that some alliances are the result of states' attempts to reduce tensions between them, alliances other than nonaggression pacts codify similar interests rather than constrain hostile relations. This seems particularly clear with respect to defense pacts. Why would a country be willing to sacrifice soldiers and resources to aid a state with which it has significant disagreements? States that sign offense pacts also have interests in common: they anticipate that there are significant gains to be made from jointly mobilizing against a third party. And underlying consultation pacts is the expectation that the signatories have sufficient common interests to be willing and able to coordinate and act jointly should a crisis arise.

While the relations between states that commit to defense, offense, and consultation obligations should be friendly and cooperative, it is not clear that this would necessarily be the case for states that choose to conclude nonaggression pacts. Why would states promise to abide by principles of nonaggression and in some cases also pledge not to help an attacker but not include other defense, offense, or consultation obligations?

The first and more common reason why states form nonaggression pacts is because there is an expectation that conflict between them is possible or even likely. Countries that have friendly relations do not need assurances of nonaggression because neither side expects that conflict could occur. Even if the costs of signing a nonaggression pact are low, these countries are unlikely to be willing to bear these

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[1]We exclude pure neutrality pacts because there are significant differences in underlying motives. As Leeds (2003) argues, neutrality pacts may be a way to ensure noninterference when a state intends to behave aggressively towards a third party. Alternatively, the motivation behind a neutrality promise may be akin to nonaggression pacts: it ensures that a potential enemy not only refrains from initiating an attack but also does not aid an attack by a third party. It would appear that if a neutrality pledge is combined with a nonaggression promise, the motivation of the agreement is more likely to be defensive rather than offensive, while the motivation for pure neutrality pacts is less clear. This contention is supported by the fact that the neutrality promise in nonaggression/neutrality pacts is significantly more likely to be conditional on being attacked (i.e., being the victim rather than the aggressor) than in pure neutrality pacts. Readers might wonder about the Molotov-Ribbentrop pact, which was a nonaggression/neutrality pact, but which precipitated Germany's attack on Poland. This pact is highly atypical. None of our other agreements contain provisions regarding the division of gains from future conflict or the acquisition of territory and only one other agreement (South Africa-Swaziland 1982) is secret but it does not appear to be directed against another state.

[2]In the remainder of the paper, we use the term nonaggression pacts to refer to both pure nonaggression pacts and nonaggression/neutrality pacts.

costs given the low utility they would derive from the agreement. Peace will endure with or without a nonaggression pact. On the other hand, states that have a history of conflict or that are rivals may be suspicious of one another and might try to alleviate their fears by concluding agreements that are aimed at preventing armed conflict. These countries are more likely to sign nonaggression pacts since they can derive much greater benefits from doing so. Nonaggression pacts have the potential to prevent violent conflict and redirect the resolution of underlying disagreements to more peaceful channels. A number of historical cases illustrate this selection bias wherein nonaggression pacts are signed by conflict-prone states. For example, Finland and the USSR, who had competing territorial claims, signed a nonaggression pact in 1932. The United States and the USSR, emerging out of a protracted cold war, signed one in 1992, and long-term enemies Israel and Jordan signed a nonaggression pact with an additional neutrality provision in 1994.

A second reason for why leaders might conclude nonaggression pacts is because these are a low-cost way of establishing diplomatic relations between states that do not interact much. Since nonaggression pacts do not require any active military cooperation such as joint military exercises, they provide a convenient vehicle for establishing a bond between states. For example, the nonaggression pacts between Moldova and Kyrgyzstan (1992), Turkey and Philippines (1949), and Bulgaria and Mongolia (1995) fall in this category. These nonaggression pacts are focused on the relations between the states, but not as a means of preventing conflict. Rather, they are signed in order to improve members' diplomatic and commercial relations.

In the following section, we distinguish these different types of nonaggression pacts from one another and from more conventional alliances. We show that there is a subset of nonaggression pacts that is formed when states have particularly conflictual relations. We argue that these agreements share more commonalities with conflict management agreements than with alliances.

The Nature Of Nonaggression Pacts: Descriptives

We rely on the ATOP 3.0 data in order to obtain a list of all alliances between 1815 and 2003 (Leeds et al. 2002). We modify the ATOP data in two ways. First,

we drop all multilateral alliances.[3] We believe that bilateral alliances are a better reflection of the actual relationship between two states. Multilateral alliances may be concluded because other states in the alliance push for a multilateral pact. Thus the terms of a multilateral alliance may be different from what a dyad would have chosen independently. For example, a multilateral nonaggression promise may be concluded as part of a regional cooperation package because of hostile relations between two members, while all other signatories have friendly relations. Under these conditions, we might not find that nonaggression pacts are more likely to be signed when the signatories have hostile relations because this effect is diluted by the large number of signatories with friendly relations. Second, we only consider alliances between states that do not already have a bilateral alliance. If we want to get a clear picture of when and why states sign nonaggression pacts, we need to ensure that our analysis is unaffected by existing alliances. Therefore, we eliminate alliances that are renegotiations or renewals of previous alliances.

After these modifications, we have 451 cases of bilateral alliance onset. We divide these cases into nonaggression and nonaggression/neutrality pacts and other alliances. Other alliances may include pure offense pacts, defense alliances, neutrality pacts, consultation pacts, or any combinations thereof; other alliances may also include alliances that combine a nonaggression promise or a nonaggression/ neutrality pledge with offensive, defensive, or consultation provisions. There are 119 nonaggression pacts (92 pure nonaggression pacts and 27 nonaggression/neutrality agreements) and 332 other alliances.

In order to distinguish the two types of nonaggression pacts discussed earlier, we employ the concept of political relevance.[4] Dyads in which states are not proximate and neither state is a major power are unlikely to interact much and the possibility of both conflict and cooperation is reduced. These are the kinds of dyads that might conclude nonaggression pacts as a way to bond without making too strong or costly of a commitment. On the other hand, we expect that nonaggression pacts signed between politically relevant states, i.e., states that have the

[3]This leads to the exclusion of 12 nonaggression pacts and 91 other alliances.

[4]Operationally, politically relevant dyads in this paper are pairs of states that are separated by 400 miles of water or less or in which at least one state is a major power. We use Eugene (Bennett and Stam 2000) to identify politically relevant dyads.

potential to interact with each other and thus to fight, are more likely to be motivated by the fear that conflict between the signatories is possible.

In our sample, 75 nonaggression pacts were signed by politically relevant dyads and 44 by non-politically relevant dyads. When we compare the two sets of nonaggression pacts we find differences between them that reflect the contention that they are indeed two distinct types of agreement. A higher proportion of nonaggression pacts of nonpolitically relevant dyads calls for cooperation in areas such as the economy, tourism, and culture (mean = 0.91, SE = 0.04) than nonaggression pacts of politically relevant dyads (mean = 0.63, SE = 0.06), p = 0.001. The former are also significantly more likely to commit states to conclude additional cooperative agreements in the future (mean = 0.49, SE = 0.08) compared to the latter (mean = 0.28, SE = 0.05), p = 0.026. While nonaggression pacts between non-politically relevant states appear to be directed at establishing future cooperative ties, nonaggression pacts between politically relevant states are more focused on the possibility of future conflict. The proportion of nonaggression pacts that mention the possibility of future conflict is much higher among politically relevant dyads (mean = 0.18, SE = 0.04) than among nonpolitically relevant dyads (mean = 0.02, SE = 0.02), p = 0.013. Pacts by politically relevant dyads also tend to include more specific and detailed statements regarding nonaggression than pacts between nonpolitically relevant states which tend to be more formulaic. Statements such as "the parties' relations are based on the principles of [. . .] nonaggression" (Belarus-Tajikistan, 2000, Art.1) are more typical of nonaggression pacts between non-politically relevant states, while statements such as "The Parties confirm their obligation to refrain from resorting directly or indirectly to any form of threat or use of force and from adopting any other measures which may disturb the peace in any sector of their mutual relations" (Chile-Argentina, 1984, Art.2) are more typical of nonaggression pacts between politically relevant countries.

Our next step is to compare the 75 nonaggression pacts between politically relevant states to 246 politically relevant dyads with other, more conventional, alliances based on three history of conflict measures. First, we use the dyad's lagged International Interactions Score (IIS) which captures the dynamic aspect of the dyad's history of conflict by weighting past conflict occurrence by hostility level and time elapsed (Crescenzi and Enterline 2001). Second, we examine whether dyads that sign nonaggression pacts are more likely to be strategic rivals (Thompson 2001). While the IIS provides information regarding military clashes between the states, the strategic rivalry variable allows us to assess whether they perceive each other as hostile competitors even if they have not engaged in overt military conflict. Third, we examine whether the alliance text itself refers to unresolved conflict or the possibility of future conflict.

We find that nonaggression dyads have a lower IIS (mean = −0.20, SE = 0.04) than dyads with other alliances (mean = −0.10, SE = 0.02), p = 0.018. There is also a higher proportion of strategic rivals among nonaggression pact dyads (mean = 0.29, SE = 0.05) than among other allies (mean = 0.20, SE = 0.03), p = 0.086. Similarly, they are more likely to mention unresolved conflict (mean = 0.18, SE = 0.04) in the agreement text than other alliances (mean = 0.04, SE = 0.01), p = 0.000. Finally, a higher proportion of nonaggression pact dyads (mean = 0.68, SE = 0.05) refer to the possibility of future conflict than other alliance dyads (mean = 0.23, SE = 0.03), p = 0.000.

These indicators suggest that politically relevant dyads with nonaggression pacts have significantly more hostile relations than politically relevant dyads that sign other types of alliances. While Schroeder (1976) and Weitsman (2004) are probably correct to argue that alliances such as defense pacts can sometimes serve as a way to conciliate or constrain an opponent, this is distinctly more likely to be the function of nonaggression pacts.

Nonaggression Pacts: Alliances or Peace Agreements?

The results from the previous section confirm the notion that nonaggression pacts are concluded under two distinct sets of circumstances. Some nonaggression pacts are intended to establish a basis for future cooperation between states that have relatively little interaction and others are signed between states in contentious dyads. That nonaggression pacts are mixed in this way and some are concluded under more hostile conditions than other types of alliance commitments has both practical and theoretical implications.

For one, scholars studying alliances should consider carefully whether to include nonaggression pacts. For example, whenever a joint alliance variable is used with the intent of measuring shared interests,

it may be advisable to include only alliance ties other than nonaggression pacts, especially if the focus is on politically relevant dyads. Secondly, and at a more basic level, the customary categorization of nonaggression pacts as a form of alliance is questionable. It seems that many nonaggression pacts are more similar to peace treaties or cease-fires than to alliances (Leeds and Savun 2007). Like peace treaties and cease-fires, nonaggression pacts are often signed when states have hostile relations and there is an expectation that future conflict is possible. Peace treaties or cease-fires are concluded when hostility between the opponents has been severe and they have fought full-blown wars, while nonaggression pacts are more likely to be concluded between states with somewhat lower levels of conflict.[5] But irrespective of previous hostility levels, nonaggression pacts are often aimed at reducing the chance of future violence, just like peace treaties and cease-fires. Our previous analysis shows that this is particularly the case for nonaggression pacts signed by politically relevant dyads. In the remainder of the paper, we focus on this particular subset of nonaggression pacts and examine whether these nonaggression pacts reduce conflict.

It is important to note that peace treaties and cease-fires tend to be more highly institutionalized than nonaggression pacts. We know from Fortna's (2003, 2004) research that cease-fires include a variety of mechanisms that help reduce the chance of recurrent conflict (e.g., force withdrawal, demilitarized zones, peacekeeping). Nonaggression pacts, on the other hand, tend to be relatively simple agreements. They may include provisions for mediation or arbitration (35%), call for regular meetings between the parties and/or set up permanent commissions (32%), and a few even provide for a reduction in arms (7%).[6] However, provisions such as troop withdrawal, demilitarized zones, arms control etc. are relatively uncommon.

This difference in degree of institutionalization is not surprising considering that putting in place demilitarized zones, peacekeepers, confidence-building measures etc. is costly. Leaders are only willing to

enact these mechanisms when the previous conflict was severe and more intricate measures appear necessary. If states have competing claims but have not threatened or used violence or if few or only minor disputes have occurred, they may lack the political will to implement expensive measures. Under these circumstances leaders are more likely to resort to concluding less highly institutionalized nonaggression pacts.

While nonaggression pacts tend to be less institutionalized, this does not necessarily mean that they will be ineffective at preventing conflict between signatories. Nonaggression pacts formalize and publicize the promise not to threaten or use force against the other side and sometimes add a pledge not to aid a third party in an attack. By doing so, they increase the signatories' costs of aggression. Many international relations scholars have argued that formal and public commitments impose significant reputational costs on noncompliance and thereby constrain the behavior of states (e.g., Lipson 1991; Simmons and Hopkins 2005). A violation of a formal commitment can entail both domestic and international audience costs. Tomz shows that, at least in democracies, citizens "are far more likely to oppose policies that would violate international law than to oppose *otherwise identical* policies that would not trammel upon the law" (2008, 3). Potentially even more significant are the international ramifications of violating a formal commitment. Attacking another state or aiding an aggressor are already likely to be viewed negatively by the international community but doing so in disregard of an existing formal international commitment increases the chance that sanctions are imposed. Other states may punish an aggressor by withdrawing foreign aid or diplomatic support when they observe such a blatant violation of international law. Furthermore, a violation of a nonaggression pact can damage a country's reputation and standing in the long run. The country may be perceived as "not only untrustworthy but [. . .] also a deceitful enemy" (Lipson 1991, 512), and any future promises of nonaggression may lose their credibility.

Fortna's research (2004) provides some support for the notion that formal agreements constrain the conflict behavior of adversaries. While the evidence from her statistical tests is not strong, she does find that formal cease-fires reduce the hazard of future conflict by about 50%. Furthermore, her case studies on India-Pakistan and Israel-Egypt reveal that leaders were often concerned about the repercussions of breaking a formal international commitment.

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[5]Among the 75 politically relevant dyads that conclude nonaggression pacts, seven had interstate wars in the previous 10 years and another 27 had a militarized interstate dispute in the previous 10 years; 22 were strategic rivals.

[6]These percentages are generated using the list of politically relevant bilateral nonaggression pacts with renewals/renegotiations excluded. It is possible that some nonaggression pacts include provisions that have not been coded by ATOP but are similar to those that Fortna codes.

Insofar as the formalization of commitments increases the probability and extent of international and domestic audience costs, nonaggression pacts, which are formal and public agreements, should have a negative effect on conflict between the signatories. More specifically, nonaggression pacts should reduce conflict between politically relevant states.[7]

H1: Nonaggression pacts between politically relevant states reduce conflict between signatories.

This hypothesis stands in contrast to existing work. Sabrosky (1980), who uses the COW alliance data and examines type II alliances (i.e., pure non-aggression pacts, pure neutrality pacts, and combinations thereof) finds that this category of alliances is particularly conflict prone. Gibler and Vasquez's (1998) bivariate findings on conflict proneness among allies suggest that type II alliances are positively related to great power war but unrelated to war involving one or more allies. Considering only pure nonaggression pacts, Leeds and Mattes (2007) show that while the coefficient relating nonaggression pacts to conflict is negative, it is not statistically significant.

It is important to note, however, that the existing tests may not be appropriately designed to get at the effect of nonaggression pacts because they do not adequately account for the selection bias in who concludes these agreements. As we demonstrated earlier, politically relevant dyads that sign nonaggression pacts tend to have hostile relations and might thus be particularly conflict prone. Without controlling for the increased conflict proneness of non-aggression pact dyads, these pacts will appear to have a positive effect on conflict, as demonstrated by Sabrosky's (1980) and some of Gibler and Vasquez's (1998) bivariate results. This finding should not be seen as an indication that nonaggression pacts cause conflict—there is no good theoretical reason to expect this—but rather as an indication that dyads that adopt nonaggression pacts are also more likely to fight. This suspicion is confirmed by the fact that in a better specified model, such as Leeds and Mattes's (2007), the effect of nonaggression pacts on conflict becomes negative even though it is not statistically significant. While Leeds and Mattes control for a number of factors that increase conflict, they do not control for the dyad's history of conflict and imbalances between nonaggression pact dyads and control cases remain. We propose an approach that addresses selection bias in the adoption of nonaggression pacts more directly and thus allows for a more reliable assessment of whether nonaggression pacts work.

Do Nonaggression Pacts Reduce Conflict?

To assess the effect of nonaggression pacts we use a matching procedure that allows us to compare dyads with nonaggression pacts to dyads that do not have nonaggression pacts but are otherwise similar, particularly on the level of hostility between the dyad members. Matching has been developed as a means of making causal inferences from observational data when it is not possible to conduct randomized experiments (Ho et al. 2007; Rosenbaum 2002; Rubin 2006). Matching or the combination of matching and model-based adjustments has been shown to provide results that are closer to experimental benchmarks than relying on model-based adjustments alone (Hill, Ritter, and Zanutto 2004; Ho et al. 2007). In this paper, matching is used to identify a set of similar control dyads which are compared to dyads with nonaggression pacts.[8]

Our observations are politically relevant dyad-years between 1920 and 2001.[9] Focusing on politically relevant dyads ensures that we examine the conflict-reducing effect of those nonaggression pacts that are signed between hostile states and whose goal is conflict prevention. Generally the use of politically relevant dyads is quite standard in studies of militarized conflict (e.g., Leeds 2003; Russett and Oneal 2001). Many dyads lack the capacity to fight and while their inclusion leads to a significant increase in the number of observations, this does not necessarily provide any additional leverage for understanding conflict.

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[7]Nonaggression pacts of nonpolitically relevant dyads should not have a pacifying effect. These dyads sign nonaggression pacts not to prevent conflict but as an inexpensive way of establishing relations. Furthermore, long distances and limited power impose such significant constraints on fighting that the reputational costs of violating a nonaggression pact will have little added effect. We confirm this expectation using the same procedures employed to test H1. Results are in the online appendix. The fact that the results regarding nonpolitically relevant nonaggression pacts are in line with our expectations suggests further support for our argument and confirms our conceptual distinction between different types of nonaggression pacts.

[8]While matching has been shown to be a useful tool in adjusting for observed sources of bias, it does not allow us to rule out unobserved sources of bias (Rosenbaum 2002). However, insofar as there are unobserved variables that are related to both nonaggression pacts and conflict we indirectly account for these factors by including measures of prior conflict history.

[9]We use 1920 as the starting point because no nonaggression pacts were signed prior to this date, and we want to avoid matching our twentieth-century treatment cases to control cases from the nineteenth century.

Treatment cases are politically relevant dyad-years during which bilateral nonaggression or non-aggression/neutrality pacts are signed according to the ATOP 3.0 data. As before, we exclude from our treatment cases nonaggression agreements with additional defense, offense, or consultation obligations and renegotiations/renewals of previous agreements. Control cases are selected from the pool of politically relevant dyad-years that have no bilateral or multilateral alliance of any kind.

We match control cases to treatment cases based on the dyads' history of conflict, capability ratio, major power status, contiguity, trade dependence, and regime type. It is important to match on history of conflict because we have shown a hostile history to be an important characteristic of politically relevant dyads that sign nonaggression agreements, and this characteristic is also related to an increased propensity for conflict. We match on the two history of conflict measures that we introduced previously, i.e., the IIS and strategic rivalry.

The other control variables are standard additions to models of international conflict (e.g., Russett and Oneal 2001). Information on relative capabilities, major power status, and contiguity comes from EUGENE (Bennett and Stam 2000). Relative capabilities are operationalized as the natural log of the ratio of the stronger state's CINC score to the weaker state's CINC score (Singer 1987). If at least one of the states is a major power as defined by Small and Singer (1982) during a given dyad-year the observation is coded 1. Contiguity is coded 1 for directly land contiguous dyads and 0 otherwise. To obtain a measure of trade dependence, we follow Oneal, Russett, and Berbaum (2003) and combine the Oneal and Russett (1999) trade data with Gleditsch's (2002) data. Oneal and Russett's data set covers 1885–1992, while Gleditsch's data set covers 1950–2000 and resolves many of the missing data concerns in Oneal and Russett's data. Based on the weakest link assumption, we operationalize trade dependence as the level of trade dependence of the less dependent member of the dyad. Similarly, the effect of regime type is measured using the lower democracy score in the dyad. Like Russett and Oneal (2001), we also control for regime difference by including the higher democracy score in the dyad. The lower and higher democracy scores are operationalized using the countries' 21-point POLITY IV scores (Marshall and Jaggers 2002).

We match politically relevant dyad-years in which a nonaggression pact was initiated to politically relevant dyad-years without nonaggression pacts based on the values of the control variables in the year the nonaggression pact was signed. This allows us to reduce observed biases between the treatment and control samples without controlling for intermediate outcomes (Gelman and Hill 2007; Ho et al. 2007).

Since a number of our control variables are continuous, exact matching is not feasible. As an alternative we use a genetic matching algorithm (Diamond and Sekhon 2008; Sekhon 2008). The cases were matched on the covariates described above as well as propensity scores that were estimated from a model with those covariates.[10] The procedure produced a sample of 56 treated cases matched to 56 controls.

Table 1 provides the means, standard deviations, and lower and upper quartiles of the treatment and control groups before and after matching. The last column of the table also shows p-values from Kolmogorov-Smirnoff tests between treatment cases and controls.[11] The matched sample is much better balanced than the raw data on all variables and should thus provide a more reliable basis for comparison.

Once we identified the matched cases, we merged the outcome variable with these data. The outcome variable is the number of unique onsets of militarized interstate disputes (MIDs) within a dyad (Maoz 2005). We consider MIDs in which the states were initiators or joiners. We conduct separate analyses for the relationship between nonaggression pacts and MIDs generally, and nonaggression pacts and MIDs that involve the use of force (i.e., level 4 and 5 MIDs only). Nonaggression pacts usually prohibit both the threat and use of force and should therefore prevent any kind of MID. However, we also use a less stringent criterion to examine whether nonaggression pacts can at least fulfill their main purpose— reducing the number of violent incidents between the signatories.

We calculate the outcome variables, i.e., the number of all MIDs and the number of violent MIDs, for a five-year period as well as a 10-year period subsequent to the signing of the nonaggression pact. The same procedure is used to create the outcome variables for the control cases. In the event that the nonaggression pact lasted less than five (10) years, we

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[10]We used the linear predictor from a logit model of treatment assignment (Sekhon 2008).

[11]Additional graphical summaries used to assess balance as well as a list of the matched treatment and control cases are included in the online appendix available at http://journals.cambridge.org/JOP.

TABLE 1 **Covariate Balance Before and After Matching**

	Mean	S.D.	Lower Quartile	Upper Quartile	p-value
Capabilities					
Treatment	2.46	1.78	.971	4.04	
Controls Before	3.68	1.93	2.23	5.09	.000
Controls After	2.45	1.71	1.25	3.81	.965
Major Power					
Treatment	.5	.504	0	1	
Controls Before	.827	.379	1	1	.000
Controls After	.5	.505	0	1	1
Contiguity					
Treatment	.679	.471	0	1	
Controls Before	.110	.313	0	0	.000
Controls After	.679	.471	0	1	1
Polity Low					
Treatment	−5.89	4.46	−8	−6	
Controls Before	−4.16	6.08	−8	−2	.087
Controls After	−5.91	4.35	−8	−6.5	.999
Polity High					
Treatment	2.27	7.28	−6	9.5	
Controls Before	4.85	6.81	−1	10	.000
Controls After	2.25	7.48	−6	10	.995
IIS					
Treatment	−.213	.340	−.340	0	
Controls Before	−.036	.156	0	0	.000
Controls After	−.212	.338	−.380	0	.928
Strategic Rival					
Treatment	.286	.456	0	1	
Controls Before	.032	.176	0	0	.000
Controls After	.286	.456	0	1	1
Trade					
Treatment	.0008	.001	.00002	.001	
Controls Before	.0008	.002	.00000	.0005	.007
Controls After	.0008	.001	.00003	.001	.868
Propensity Score					
Treatment	−5.25	1.59	−7.05	−4.04	
Controls Before	−7.10	.931	−7.48	−7.13	.000
Controls After	−5.25	1.59	−7.10	−4.01	.998

Note: p-values for continuous variables are obtained from a bootstrap K-S test (Diamond and Sekhon 2008, Sekhon 2008). For binary variables, a difference of means test is used. The propensity score is the linear predictor (Sekhon 2008).

limit the observation period of the DVs to the duration of the nonaggression pact. Based on our theoretical argument, we do not expect nonaggression pacts to reduce conflict when they are not formally in effect anymore. Countries are only bound by and experience costs for violating agreements that are in force. At the same time, we want to avoid biasing the test towards our hypothesis by examining control cases for a longer period than their corre-

sponding treatment case. Thus, if a nonaggression pact was in effect six years we also observe the matched control case for six years rather than the full 10-year period.[12]

We chose five-year and 10-year benchmarks to assess whether nonaggression pacts have an effect in the short run as well as the longer run. Because we expect that the conflict-reducing effect of nonaggression pacts may decline over time, we do not consider a time period longer than 10 years after the nonaggression pact was signed. If nonaggression pacts reduce conflict because they increase reputational costs for conflictual behavior it is more likely that these costs will be felt early on. After more than 10 years a nonaggression pact might be less prominent in people's mind and thus should impose less of a constraint. Furthermore, the more time passes after the conclusion of the agreement, the more domestic and international changes the signatories are likely to experience. This can affect the signatories' perception of the desirability of their pact and make violation of their commitment more likely (Leeds 2003).

To analyze these data we first use t-tests. We find that within the first five years after enactment, nonaggression pact dyads experience less MIDs (mean = 0.55, SE = 0.15) than comparable dyads without nonaggression pacts (mean = 0.91, SE = 0.17), p = 0.11. Within the first five years, nonaggression pact dyads also have fewer violent MIDs (mean = 0.39, SE = 0.12) than similar dyads without nonaggression pacts (mean = 0.79, SE = 0.16), p = 0.05. Considering a 10-year interval after signature, nonaggression pact dyads have less MIDs (mean = 1, SE = 0.21) than control cases (mean = 1.63, SE = 0.33), p = 0.11. They also have fewer violent MIDs in the first 10 years (mean = 0.66, SE = 0.14) than the control group (mean = 1.3, SE = 0.28), p = 0.05.

Nonaggression pacts have a consistently negative effect on conflict, but it appears that they are more effective at preventing violent conflict. This is not surprising as the reputational costs for using force in spite of a nonaggression pact should be higher than

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[12]To ensure that this coding decision does not bias the results, we reran our analysis specifying the observation period to be the full five or 10 years, whether the nonaggression pact was in effect or not. The results are robust. There are also five nonaggression pacts that are observed for less than 10 years because one of the signatories lost independence as a result of being taken over by the other state (e.g., Russia-Estonia in World War II). The fact that these cases exit the data prematurely as a result of aggression might bias the findings. To investigate this possibility we performed an analysis excluding these nonaggression pacts and their corresponding controls. The findings are again robust. Results are available in the online appendix.

TABLE 2 Post-Matching OLS Regression Estimates for the Effect of Nonaggression Pacts on Conflict

	All MIDs, 5yrs		Violent MIDs, 5yrs		All MIDs, 10yrs		Violent MIDs, 10yrs	
Nonaggression Pact	−0.358 (0.195)	*p = 0.069*	−0.394 (0.169)	*p = 0.022*	−0.627 (0.340)	*p = 0.068*	−0.644 (0.279)	*p = 0.023*
Capabilities Ratio	−0.029 (0.067)	p = 0.668	0.002 (0.058)	p = 0.972	−0.049 (0.116)	p = 0.675	0.015 (0.095)	p = 0.877
Polity Low	−0.011 (0.025)	p = 0.661	0.001 (0.022)	p = 0.973	−0.005 (0.044)	p = 0.905	−0.010 (0.036)	p = 0.790
Polity High	0.011 (0.016)	p = 0.507	0.004 (0.014)	p = 0.797	0.036 (0.028)	p = 0.194	0.032 (0.023)	p = 0.158
IIS	−1.697 (0.325)	p = 0.000	−1.615 (0.282)	p = 0.000	−2.786 (0.568)	p = 0.000	−2.181 (0.466)	p = 0.000
Trade Dependence	−104.0 (96.8)	p = 0.285	−113.0 (84.0)	p = 0.181	−102.9 (169.0)	p = 0.544	−192.7 (138.6)	p = 0.167
Constant	0.614 (0.296)	p = 0.040	0.524 (0.257)	p = 0.044	1.122 (0.517)	p = 0.032	0.828 (0.424)	p = 0.053
N	112		112		112		112	
R²	0.294		0.329		0.288		0.285	

Note: Standard errors are shown in parentheses. Significance tests are two-tailed.

the reputational costs associated with threatening or displaying force. The international community is more likely to impose sanctions on a state that attacks its opponent in violation of a nonaggression pact than on a state that threatens or tries to intimidate an opponent. Given that the use of force is more likely to be penalized than the threat or display of force, nonaggression pacts should be better at deterring signatories from engaging in actual violence than from simply threatening or displaying it. The results from the t-test also suggest that nonaggression pacts have a slightly stronger effect on reducing conflict within the first five years after conclusion compared to later. This finding is commensurate with the idea that the effect of nonaggression pacts declines over time. People may start forgetting about the existence of the pact or, due to changes in the domestic or international environment, they may conclude that the pact is not as valuable as it was in the past. As a result, the violation of an older nonaggression pact is less likely to entail reputational sanctions and thus older pacts are less likely to be able to constrain the signatories.

One potential criticism of these t-tests is that even after matching there are remaining imbalances between the treatment and control samples on the observed covariates that could bias the results. To account for these remaining imbalances we include the control variables with remaining imbalances in linear regression models of each of the outcome measures.[13] The findings from this analysis are shown in Table 2. The results suggest that nonaggression pacts reduce the expected number of all MIDs by 0.358 over a five-year period (p = 0.069) and by about 0.627 over a 10-year period (p = 0.068). For violent MIDs, nonaggression pacts reduce their occurrence by 0.394 over a five-year period (p = 0.022) and 0.644 over a 10-year period (p = 0.023). Like in the t-tests, the effect is stronger for violent conflicts and most of the effect occurs in the first five years of the pact.

The results consistently show a negative and statistically significant effect of nonaggression pacts on conflict. However, regression estimates can be sensitive to high leverage, high influence observations. While inspecting the matched sample, we found that the data contain several possible outliers, as a few cases have a relatively large number of MIDs.

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[13]Given the relatively small sample, we chose to focus on linear model estimates. Results from Poisson and negative binomial models are included in the online appendix. The estimates for nonaggression pacts are all negative and statistically significant at conventional levels.

To investigate the sensitivity of our results to outliers we used multiple approaches. First, we excluded cases that had standardized residuals larger than three and reestimated the linear models. The only result affected by eliminating outliers is the effect of nonaggression pacts on all MIDs in the first 10 years after signing. Here the coefficient is no longer statistically significant at conventional levels. While dropping outliers changes the results slightly, overall the analyses still suggest that nonaggression pacts reduce conflict.

Second, we ran 250 genetic matches to determine whether different plausible matched samples would produce different results. Because treatment cases were matched with a variety of different control cases, a review of the results of all 250 matches provides insight regarding the robustness of the results. These matches produced a range of estimates, but all were negative and the mean effect of nonaggression pacts across these matches was statistically significant at conventional levels for violent MIDs for the five-year and 10-year periods and nearly significant at conventional levels for all MIDs.[14] Again, this indicates that nonaggression pacts are better at reducing violent conflict between signatories than they are at preventing threats or displays of force. Third, we conducted an analysis where we matched treated cases to multiple controls. The estimates from this analysis also suggest that nonaggression pacts reduce the likelihood of conflict, especially the likelihood of violent conflict. Results from these additional analyses are available in the online appendix.

We also find qualitative evidence that nonaggression pacts reduce conflict in a case study of the 1991 Spanish-Moroccan nonaggression pact. While Spain and Morocco trade at high levels and have tried to cooperate in a variety of areas, their relationship has traditionally been highly problematic (Gillespie 2000; Magone 2009). There are serious disagreements over the ownership of the cities of Ceuta and Melilla, the future of the Western Sahara, fishing in Moroccan waters, and illegal immigration. As a result of these disagreements, Morocco and Spain engaged in a number of MIDs and could be considered strategic rivals until 1991 when they signed a nonaggression pact (Thompson 2001). This agreement is widely seen as the basis for their relationship (Gillespie 2000; Gonzáles Campos 2004). From the perspective of Spain its most important feature was that it provided

"reassurance that Morocco would refrain from military action in support of her claims to Ceuta and Melilla" (Gillespie 2000, 61). The treaty "both structures the relations with Morocco and makes them more predictable" (Marquina 1999, 246).

Despite the conclusion of the nonaggression pact, Spain and Morocco continued to have a troubled relationship. Moroccan politicians persistently restated claims to Ceuta and Melilla and even argued that the return of these two enclaves was a priority for Morocco (Gonzáles Campos 2004). There were also prolonged and tense discussions surrounding the conclusion of EU-Moroccan fisheries agreements in 1995 and 1999 and, in 2001, Morocco recalled its ambassador (Gillespie 2000; Magone 2009). Despite these obvious tensions, Spain and Morocco's disagreements were primarily verbal and the need to resolve conflicts peacefully, as emphasized in the nonaggression pact, was frequently restated at the highest levels (BBC 5/30/1995; BBC 3/5/1997).

It is certainly imaginable that without the nonaggression pact both sides, and especially Morocco, might have been more willing to threaten or use force in pursuit of their interests.[15] In fact, the Spanish-Moroccan relationship turned significantly more hostile in 2002 when Morocco occupied the uninhabited Perejil Island. Spain immediately demanded the withdrawal of Moroccan troops and, after Morocco's refusal, evicted Moroccan soldiers. This incident occurred a little more than 10 years after the conclusion of the nonaggression pact, and it provides support for our argument that the constraining effect of formal nonaggression promises might decrease over time. It also shows the international repercussions a country might face when violating a nonaggression pact as the EU threatened Morocco with economic sanctions (BBC 7/13/2002; *The Times* 7/15/2002) and only rescinded the threat after Morocco showed no resistance to the eviction from the island. Generally, the confrontation over Perejil ended much more peacefully than it might have without the existence of the nonaggression pact. "Spain regarded the island as part of its territory and this almost led to widespread military conflict between the two countries" (Magone 2009, 405). Yet, the Spanish government also emphasized that it "wishes to maintain fruitful relations of friendship and cooperation with the Kingdom of Morocco" (*Washington Times* 7/19/2002). Similarly, "Morocco denounced the Spanish

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[14]The main sample used to present the results achieved a very high level of balance (the smallest p-value from the K-S tests was .868), and the estimates produced by it are similar to the mean estimates from the 250 matches.

[15]It is important to note that while Spain has been a member of NATO since 1982, the enclaves of Ceuta and Melilla are "excluded from NATO's security umbrella" (Europa Publications Limited 2004, 1004).

action as equivalent to a declaration of war, but maintained that it sought a diplomatic solution to the crisis." (Europa Publications Limited 2004, 8839; BBC 7/20/2002). This shows that, even after more than 10 years after its signature, the nonaggression pact provided some restraint on both sides. The treaty was reaffirmed by both Spain and Morocco as a result of the crisis (BBC 7/15/2002; BBC 12/8/ 2002), and it has remained a prominent cornerstone of their relations.

Conclusion

This paper examines the efficacy of nonaggression pacts as a conflict management tool. We argue that despite the fact that nonaggression pacts are often conceptualized as a form of alliance, they are actually quite different from other, more conventional alliances. Nonaggression agreements are primarily focused on regulating the relationship between the signatories rather than being directed towards threats by third parties. There are two reasons why states sign nonaggression pacts: (1) as a low-cost means to establish cooperative relations between parties that do not interact frequently or (2) as a way to prevent conflict between hostile states.

We argue that the second type of nonaggression pact, which tends to be concluded by politically relevant dyads, is more closely related to conflict management agreements, such as peace treaties or cease-fires, than to alliances. These nonaggression agreements are often signed between particularly hostile states, and they rely on a mechanism that can also be found in peace treaties and cease-fires. By formalizing and publicizing the commitment to non-aggression, nonaggression pacts increase the costs of fighting and should thus reduce military conflict.

Previous studies found that nonaggression pacts either do not prevent conflict (Leeds and Mattes 2006) or even increase conflict (Gibler and Vasquez 1998; Sabrosky 1980). These studies do not take into account the fact that nonaggression pacts, especially those signed by politically relevant dyads, tend to be concluded between states that are particularly conflict-prone. To assess the effect of nonaggression pacts we need to compare nonaggression pact dyads to dyads that do not have such pacts but that are otherwise similar in terms of their propensity for conflict. We use a genetic matching procedure to identify a sample of controls that is very closely matched to the treated cases. Linear regression is used

to further account for remaining imbalances. The results consistently show that nonaggression pacts reduce the occurrence of conflict. We also find that nonaggression pacts are more effective at preventing violent MIDs and that their effect is strongest in the first five years after conclusion.

Our work contributes both to the debate regarding the role of international institutions and the literature on conflict management. The fact that nonaggression pacts appear to be effective at reducing conflict provides support for the liberal claim that institutions are not merely scraps of paper. This finding also underscores the importance of formalization as one of the central mechanisms through which institutions constrain the behavior of states. Given the low institutionalization of nonaggression pacts, we believe that the conflict-reducing effect of nonaggression pacts is primarily due to the fact that the formalization of the nonaggression promise raises the reputational costs of aggression. It is of course possible that other mechanisms are at work as well. It might be interesting to examine, for example, whether nonaggression pacts that provide for regular consultations between signatories are even better at preventing conflict, given that they add information provision as an additional mechanism for conflict avoidance.

Generally, the analysis of nonaggression pacts can make an important contribution to the conflict management literature. While there has been significant progress in our understanding of when and how third parties can help with the management of interstate conflict (e.g., Bercovitch and Gartner 2008; Mitchell and Hensel 2007), there is much less work on how the parties themselves can manage their disagreements peacefully. This is an important area of research because there are times when third-party help may not be available and we need to examine which techniques the states themselves can use to avoid conflict. Nonaggression pacts can of course be facilitated by third parties but they are also a tool that is available even when no third parties volunteer to become involved. The study of nonaggression pacts thus contributes to the relatively small literature on bilateral conflict management by scholars such as Hensel (2001), Huth and Allee (2003), and especially Fortna (2003, 2004) who examines cease-fires in order to identify mechanisms that allow states to reduce the chance of future fighting. Here we point out that while cease-fires appear to be successful at reducing conflict between former belligerents, they also tend to rely on mechanisms that are relatively costly to implement. The costliness of these

mechanisms makes them unattractive for states that have hostile relations and that might have had minor disputes but that have not (yet) fought full-out wars. For these sorts of dyads, nonaggression pacts are an alternative, potentially promising, and low-cost tool of bilateral conflict management.

Acknowledgments

References

Bearce, David H., Kristen M. Flanagan, and Katharine M. Floros. 2006. "Alliances, Internal Information, and Military Conflict among Member-States." *International Organization* 60 (3): 595–625.

Bennett, D. Scott, and Allan Stam. 2000. " *EUGene*: A Conceptual Manual." *International Interactions* 26 (2): 179–204.

Bercovitch, Jacob, and Scott Sigmund Gartner. eds. 2008. *International Conflict Mediation. New Approaches and Findings*. New York, NY: Routledge.

Crescenzi, Mark, and Andrew J. Enterline. 2001. "Time Remembered: A Dynamic Model of Interstate Interaction." *International Studies Quarterly* 45 (3): 409–31.

Diamond, Alexis, and Jasjeet S. Sekhon. 2008. "Genetic Matching for Estimating Causal Effects: A General Multivariate Matching Method for Achieving Balance in Observational Studies." Typescript. http://sekhon.berkeley.edu/papers/GenMatch.pdf (April 11, 2009).

Europa Publications Limited. 2003. *The Middle East and North Africa, 2004. Regional Surveys of the World*. 50th edition. London, UK: Europa Publications.

Fortna, Page. 2003. "Scraps of Paper? Agreements and the Durability of Peace." *International Organization* 57 (2): 337–372.

Fortna, Page. 2004. *Peace Time: Cease-fire Agreements and the Durability of Peace*. Princeton, NJ: Princeton University Press.

Gelman, Andrew, and Jennifer Hill. 2007. *Data Analysis Using Regression and Multilevel/Hierarchical Models*. New York, NY: Cambridge University Press.

Gibler, Douglas M. 1996. "Alliances that Never Balance: The Territorial Settlement Treaty." *Conflict Management and Peace Science* 16 (1): 75–97.

Gibler, Douglas M. 1997. "Control the Issues, Control the Conflict: The Effects of Alliances that Settle Territorial Issues on Interstate Rivalries." *International Interactions* 22 (4): 341– 68.

Gibler, Douglas M., and John A. Vasquez. 1998. "Uncovering the Dangerous Alliances, 1495- 1980." *International Studies Quarterly* 42 (4): 785–807.

Gillespie, Richard. 2000. *Spain and the Mediterranean. Developing a European Policy toward the South*. New York, NY: St. Martin's Press.

Gleditsch, Kristian Skrede. 2002. "Expanded Trade and GDP Data." *Journal of Conflict Resolution* 46 (5): 712–24.

Gonzáles Campos, Julio D. 2004. "Las Pretensiones de Marruecos sobre los Territorios Espanoles en el Norte de África (1956–2002)." Documento de Trabajo (DT) N° 15/2004. http://www.realinstitutoelcano.org/documentos/98/DT-15-2004-E.pdf

Hensel, Paul R. 2001. "Contentious Issues and World Politics: The Management of Territorial Claims in the Americas." *International Studies Quarterly* 45 (1): 81–109.

Hill, Jennifer, Jerome Ritter, and Elaine Zanutto. 2004. "A Comparison of Experimental and Observational Data Analyses." In *Applied Bayesian Modeling and Causal Inference from Incomplete-Data Perspectives*, eds. Andrew Gelman and Xiao-Li Meng. Hoboken, NJ: John Wiley and Sons Inc, 49–60.

Ho, Daniel E., Kosuke Imai, Gary King, and Elizabeth A. Stuart. 2007. "Matching as Nonparametric Preprocessing for Reducing Model Dependence in Parametric Causal Inference." *Political Analysis* 15 (3): 199–236.

Huth, Paul K., and Todd L. Allee. 2003. *The Democratic Peace and Territorial Conflict in the Twentieth Century*. New York: Cambridge University Press.

Keohane, Robert O. 1984. *After Hegemony: Cooperation and Discord in the World Political Economy*. Princeton, NJ: Princeton University Press.

Leeds, Brett Ashley. 2003. "Alliance Reliability in Times of War: Explaining State Decisions to Violate Treaties." *International Organization* 57 (4): 801–27.

Leeds, Brett Ashley, and Michaela Mattes. 2007. "Alliance Politics during the Cold War: Aberration, New World Order, or Continuation of History?" *Conflict Management and Peace Science* 24 (3): 183–99.

Leeds, Brett Ashley, Jeffrey M. Ritter, Sara McLaughlin Mitchell, and Andrew G. Long. 2002. "Alliance Treaty Obligations and Provisions, 1815-1944." *International Interactions* 28 (3): 237–60.

Leeds, Brett Ashley, and Burcu Savun. 2007. "Terminating Alliances: Why do States Abrogate Agreements?" *Journal of Politics* 69 (4): 1118–32.

Levy, Jack S. 1981. "Alliance Formation and War Behavior: An Analysis of the Great Powers, 1495-1975." *Journal of Conflict Resolution* 25 (4): 581–613.

Lipson, Charles. 1991. "Why Are Some International Agreements Informal"? *International Organization* 45 (4): 495–538.

Long, Andrew, Timothy Nordstrom, and Kyeonghi Baek. 2007. "Allying for Peace: Treaty Obligations and Conflict between Allies." *Journal of Politics* 69 (6) 1103–17.

Magone, José M. 2009. *Contemporary Spanish Politics*. 2nd ed. New York: Routledge.

Maoz, Zeev. 2005. *Dyadic MID Dataset* (version 2.0). http://psfaculty.ucdavis.edu/zmaoz/dyadmid.html (August 27, 2005).

Marquina, Antonio. 1999. "Spanish Foreign and Security Policy in the Mediterranean." In *Spain and the Mediterranean since 1898*, ed. Ranaan Rein. Portland, OR: F. Cass, 235–48.

Marshall, Monty G., and Keith Jaggers. 2002. *Polity IV Project: Data User's Manual*. http://www.cidcm.umd.edu/polity (September 13, 2005).

Mearsheimer, John J. 1994/1995. ''The False Promise of International Institutions.'' *International Security* 19 (3): 5–49.

Mitchell, Sara McLaughlin, and Paul R. Hensel. 2007. ''International Institutions and Compliance with Agreements.'' *American Journal of Political Science* 51 (4): 721–37.

Oneal, John R., and Bruce Russett. 1999. ''The Kantian Peace: The Pacific Effects of Democracy, Interdependence, and International Organizations, 1885-1992.'' *World Politics* 52 (1): 1–37.

Oneal, John R., Bruce Russett, and Michael L. Berbaum. 2003. ''Causes of Peace: Democracy, Interdependence, and International Organizations, 1885-1992.'' *International Studies Quarterly* 47 (3): 371–393.

Rosenbaum, Paul. 2002. *Observational Studies*. New York: Springer.

Rubin, Donald. 2006. *Matched Sampling for Causal Effects*. New York: Cambridge University Press.

Russett, Bruce, and John R. Oneal. 2001. *Triangulating Peace: Democracy, Interdependence, and International Organizations*. New York: Norton.

Sabrosky, Alan Ned. 1980. ''Interstate Alliances: Their Reliability and the Expansion of War.'' In *The Correlates of War II: Testing Some Realpolitik Models*, ed. J. David Singer. New York. NY: Free Press, 161–98.

Schroeder, Paul W. 1976. ''Alliances, 1815–1945: Weapons of Power and Tools of Management.'' In *Historical Dimensions of National Security Problems*. ed. Klaus Knorr. Lawrence, K.S.: University Press of Kansas, 227–62.

Sekhon, Jasjeet. 2008. ''Multivariate and Propensity Score Matching Software with Automated Balance Optimization: The Matching Package for R.'' *Journal of Statistical Software*. http://sekhon.berkeley.edu/papers/MatchingJSS.pdf (April 12, 2009).

Simmons, Beth A., and Daniel J. Hopkins. 2005. ''The Constraining Power of International Treaties: Theory and Methods.'' *American Political Science Review* 99 (4): 623–31.

Singer, J. David. 1987. ''Reconstructing the Correlates of War Dataset on Material Capabilities of States, 1816-1985.'' *International Interactions* 14 (2): 115–32.

Small, Melvin, and J. David Singer. 1982. *Resort to Arms: International and Civil Wars, 1816– 1980*. Beverly Hills, CA: Sage Publications.

Thompson, William R. 2001. ''Identifying Rivals and Rivalries in World Politics.'' *International Studies Quarterly* 45 (4): 557–86.

Tomz, Michael. 2008. ''Reputation and the Effect of International Law on Preferences and Beliefs.'' Typescript. http://www.stanford.edu/~tomz/working/Tomz-IntlLaw-2008-02-11a.pdf

Walt, Stephen M. 1987. *The Origins of Alliances*. Ithaca, NY: Cornell University Press.

Weitsman, Patricia A. 2004. *Dangerous Alliances: Proponents of Peace, Weapons of War*. Stanford, CA: Stanford University Press.

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