

ALLIANCE TREATY OBLIGATIONS AND PROVISIONS, 1815-1944¹

Brett Ashley Leeds
Department of Political Science
Rice University

Jeffrey M. Ritter
Department of Political Science
Rutgers University

Sara McLaughlin Mitchell
Department of Political Science
Florida State University

Andrew G. Long
Department of Political Science
Florida State University

Please address correspondence to: Brett Ashley Leeds
Department of Political Science—MS 24
Rice University
P.O. Box 1892
Houston, Texas 77251-1892
leeds@rice.edu
phone: 713-348-3037
fax: 713-348-5273

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ABSTRACT

This article introduces the Alliance Treaty Obligations and Provisions (ATOP) dataset. We begin by describing the rationale for collecting the ATOP data, its scope, and some general coding rules for the project. Then we offer some descriptive statistics for phase one of the dataset, which covers the years 1815-1944, and reveal some interesting trends in alliance politics. Finally, we replicate a study of alliance formation originally conducted by Lai and Reiter (2000) to demonstrate the effect the use of ATOP data may have on past inferences about alliance politics.

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The Alliance Treaty Obligations and Provisions (ATOP) project is designed to collect and disseminate data on the provisions of formal military alliance treaties in order to help scholars investigate the causes and effects of variance in the design of cooperative security arrangements.² We hope these data will prove useful to scholars interested in a wide range of questions about international cooperation, coalition formation, institutional design, foreign policy, military security, and deterrence. In addition to detailed information about the contents of individual alliances, ATOP provides a more complete list of international alliances than has been available previously.³

Readers of this journal are familiar with other datasets on international alliances, the most prominent of which is the Correlates of War (COW) Annual Alliance Membership dataset (Singer and Small, 1966; Small and Singer, 1969). The COW dataset was originally designed to facilitate empirical investigation of hypotheses about the relationship between alliances and interstate war (Singer and Small, 1966). The primary aim of the COW researchers was to identify every formal alliance in the interstate system by date and membership and to provide a characterization of the nature of the alliance obligation. This information has proven valuable to researchers, and several scholars have been inspired to offer their own modifications of the original COW data in an effort to extend its usefulness.⁴

In contrast, the ATOP dataset is designed to help researchers explore research questions arising from “institutionalist” theory and from increasingly sophisticated game-theoretic models of deterrence and cooperation, bodies of theory that had not been articulated when the COW alliance dataset was designed. ATOP provides very detailed

information on the content of formal alliance agreements, allowing researchers to explore the causes and effects of variation in the design of alliance contracts. If the COW alliance data focus upon *who* and *when*, the ATOP data focus attention on *what* and *how*. Inspired in part by the earlier efforts of Russett (1968; 1971) and of Holsti, Hopmann, and Sullivan (1973), ATOP should help to render a host of new questions vulnerable to empirical analysis.

In the pages that follow, we summarize some of the underlying principles guiding the collection of the ATOP data, and we describe the data collected for the first phase of the project, which covers the years 1815-1944. We document the potential significance of the new case list by replicating a recent study of regime type and alliance behavior (Lai and Reiter, 2000), and we identify some of the kinds of research questions that the variables included in the ATOP dataset may help to answer.

DEFINING ALLIANCES:

The ATOP project has adopted the following definition. Alliances are written agreements, signed by official representatives of at least two independent states, that include promises to aid a partner in the event of military conflict, to remain neutral in the event of conflict, to refrain from military conflict with one another, or to consult/cooperate in the event of international crises that create a potential for military conflict. Several aspects of this definition warrant special attention.

First, according to our definition, alliances are formal written agreements. These agreements commonly take the form of treaties that are ratified by the appropriate

political authorities in each signatory state. Formal alliances may also be established by written executive agreements, official exchanges of diplomatic notes, and similar diplomatic instruments that do not require ratification in order to be considered legally binding.⁵ Verbal agreements, speeches, official statements, or perceived common interests are not sufficient to establish the existence of an alliance under this definition; alliances are always written contracts.

This definition stands in stark contrast to Stephen Walt's (1987) definition of an alliance as "a formal or informal relationship of security cooperation between two or more sovereign states."⁶ Because the ATOP data are designed to help scholars study how formalizing relations in a treaty affects the ways states behave towards one another, we adopt Glenn Snyder's (1997: 6) distinction between formal alliances and tacit alignments. States that appear likely to cooperate due to common interests may be said to be *aligned*, but only those that formalize their commitments in writing are *allied*.

Because our definition identifies alliances with written agreements rather than with the overall relationships among two or more states, it is possible for two states to have more than one alliance at the same time. It is also possible for the formation of an alliance to occur well after states have begun to act in concert. Because we believe there may be benefit to understanding the conditions under which state leaders choose to formalize security relationships in contracts, how they design these contracts, and the independent influence of these agreements on behavior, we identify alliances strictly as formal contracts specifying particular types of behavior.

Second, our definition specifies that an alliance is an agreement between at least two independent states.⁷ This excludes unilateral guarantees that take the form of policy statements, but it does not exclude asymmetric written agreements. If two states sign a treaty specifying that one will defend the other in the event of conflict, the agreement is likely to meet our definition of an alliance, even if the partner does not have reciprocal responsibilities. But if one state simply declares its intention to maintain the status quo in a region, this does not necessarily create an alliance between the self-declared guarantor and the regional powers. The Monroe Doctrine, for example, does not qualify as an alliance because it was a unilateral policy statement rather than a treaty between the interested parties.

Third, our definition of alliances includes a number of different kinds of promises beyond simple pledges of mutual defense. Alliance partners may promise to cooperate in offensive action, to refrain from attacking one another, to remain neutral in the event the other is attacked or finds itself otherwise involved in war, or to consult regarding the use of military force.⁸ Some analysts have employed a more restrictive definition of alliances. Snyder, for instance, reserves the name alliance only for pacts that are specifically directed outwards against non-members (Snyder, 1997: 4, 6). Kann (1976: 611) regards alliances as distinct from “ententes, non-aggression pacts, or consultation pacts” (c.f. Dingman, 1979; Berridge, 1989). We regard offense pacts, defense pacts, neutrality pacts, non-aggression pacts, and consultation pacts as types of alliances.⁹ Yet, while the ATOP definition of alliance encompasses a wide variety of military obligations, alliances remain a distinct category of cooperative security agreements. Examples of

agreements that do not meet our criteria for alliances include arms control agreements, conventions on the laws of war, arbitration conventions, general statements of shared principles, agreements for the sale or donation of military materials and/or technical support, land leases for military bases, and memberships in or resolutions of global or regional intergovernmental organizations.

Despite some minor differences, the ATOP definition of alliances shares much with the definition used by Singer and Small (1966). The ATOP data, however, have been collected with a very different purpose in mind than the COW data. The ATOP dataset differs from the COW dataset in its inclusion of detailed information about the content of formal alliance agreements. In particular, the ATOP data capture more precise information regarding the obligations undertaken by alliance members, the conditions invoking those obligations, and the organization and management of alliance relationships.

CODING THE CONTENT OF ALLIANCE AGREEMENTS:

In establishing the list of cases to be included in the ATOP data, we have relied heavily upon secondary sources to help us understand the pertinent diplomatic history and, on occasion, to help us interpret specific provisions of individual agreements. We have also found it necessary to rely upon secondary sources to identify the dates upon which alliances end and the reasons for their termination. When coding the contents of the agreements, however, we have relied almost exclusively upon the texts of the

agreements themselves. Securing copies of all these alliance agreements was no small task, but doing so was essential to ensure the accuracy of the data.¹⁰

Obligations:

Our primary aim has been to collect information about the obligations included in alliance agreements. What, exactly, have alliance members promised to do, and under what conditions are they obliged to honor their promises? The COW coding scheme differentiates three types of alliances based on the “highest level” of support promised by the signatories: defense pacts, nonaggression/neutrality pacts, and ententes. This categorical identification is the only information available in the COW dataset regarding the content of alliance treaties. While useful for exploring some research questions, this single typology constrains our ability to explore other potentially interesting research questions. The ATOP coding scheme differs from the COW obligation typology in four primary ways.

First, ATOP recognizes additional obligation categories. Making distinctions between defense pacts and offense pacts and between non-aggression pacts and neutrality pacts may be useful for answering particular research questions. We recognize that the line between defensive and offensive alliances can sometimes be blurry. Holsti, Hopmann, and Sullivan (1973: 3), for example, argue that “it is...distinctly unfashionable for signatories to a treaty of alliance to proclaim aggressive purposes” no matter how aggressive their purposes really are. Nevertheless, we have encountered a surprising number of alliance treaties that contain bluntly offensive obligations, and we feel that it is

necessary to distinguish these pacts from pacts containing defensive language if our aim is to study the relationship between written agreements and actual behavior.

We distinguish offense and defense pacts as follows. Obligations of defensive aid are promises to assist a partner actively in the event of attack on the partner's sovereignty or territorial integrity. Promises of active military cooperation in instances other than the defense of one's own sovereignty and territorial integrity are offense pacts. It is important to note that these definitions have no necessary relation to the intentions of the signatories; allies may see themselves as attempting to preserve the status quo, but their pledge qualifies as offensive by our rules if they agree to engage in hostilities outside the home territory of the alliance members. Some alliances, particularly those signed during an ongoing war, include both offensive and defensive provisions. Alliances with purely offensive provisions are more rare, but they do exist. An example is the 1866 Prusso-Italian alliance, signed on the eve of the Seven Weeks' War, which provided that if Prussia attacked Austria within three months, Italy would immediately follow suit (e.g. Schroeder, 1976: 241; Sybel, 1891: IV, 340-355). Other examples include the 1832 alliance between France and Britain to expel Dutch troops from Belgium, the alliance among Austria, Britain, Russia, and Prussia for the pacification of the Levant in 1840, and the Austro-Prussian alliance to wrest the duchies of Schleswig and Holstein from Denmark.

We also find meaningful distinctions between non-aggression and neutrality pacts. Non-aggression pacts pledge states to refrain from attacking one another. Neutrality pacts oblige states to stay out of conflicts involving their partners altogether,

requiring signatories to refrain from aiding one another's adversaries. In the nineteenth century, great powers often used neutrality pacts to give each other permission to attack third parties (Moul, 1988); no similar assurance need follow from non-aggression pacts. Promises of neutrality may incorporate a commitment of non-aggression under certain circumstances, but they often involve other cooperative components as well.

A second innovation in the ATOP coding of alliance obligations is the ability to retain information about multiple obligations in a single treaty. Many alliance agreements specify more than one type of obligation. The same agreement might include promises of active defensive support if an alliance member is attacked and of neutrality in any offensive war an alliance partner initiates. In the COW dataset, each alliance is classified by its most serious commitment; no information about additional commitments is included. Small and Singer (1969: 280, fn 10) state "The designations class 1, 2, and 3 suggest a hierarchy based upon levels of political commitment, with the defense pact a more serious commitment than the neutrality pact and the neutrality pact a more serious commitment than the entente."¹¹ In contrast, in the ATOP dataset, obligations are coded in a categorical typology, not on an ordinal scale. ATOP obligation categories are not mutually exclusive; a single treaty may be both a defense pact and a neutrality pact. We do not subsume "lower" types of obligations into "higher" types. Researchers who wish to make the assumption that consultation obligations, for instance, should be subsumed in defense pacts, are free to collapse the ATOP categories to create a scale similar to the COW hierarchy, but those for whom information about multiple obligations is desirable will find it available.

Third, the character of any given alliance depends critically upon the *casus foederis*, the specification of the conditions that invoke its military obligations (Grenville, 1974: 11; Schroeder, 1994: 7). Alliances are rarely “blank checks.” A promise to defend a partner against attack by a specific enemy is very different than a promise to come to a partner’s aid if it should find itself involved in military conflict of any kind. Often, leaders specify that their alliance is only applicable to conflicts in particular regions or with particular outside powers, and states sometimes sign treaties in which they undertake different types of obligations under different sets of circumstances. For example, under the terms of the Anglo-Japanese alliance of 1902, Britain was obliged to maintain benevolent neutrality if Japan were to find itself engaged in war against any one power and to come to Japan’s defense if it were to find itself engaged in war against two other powers (Hurst, 1972). A researcher who views this agreement as an unconditional defense pact might mistakenly interpret Britain’s lack of involvement in the Russo-Japanese War as a violation of British obligations, and a researcher who considers the same agreement a neutrality pact might miss the potential deterrent properties of Britain’s promise of intervention should other powers become involved in the war. The ATOP data capture this sort of variation in the contingencies that invoke alliance obligations.

For a given alliance, we code whether each of the general obligations (such as defense, neutrality, or consultation) is limited (1) to conflicts against a specified adversary or adversaries; (2) to conflicts in a particular geographic location; (3) to a specific ongoing conflict; (4) to bilateral conflicts or to multilateral conflicts; (5) to situations in which an adversary refuses to comply with a specific demand; (6) to

situations in which the partners have first reached a mutual agreement as to the action they will take; (7) to situations in which one of the partners is attacked; or (8) to situations in which one of the partners is attacked without provocation. These eight restrictions, individually or in combination, provide a remarkably thorough characterization of the restrictions we have found included in actual alliance treaties.¹²

Fourth, alliance commitments are not always symmetrical. Sometimes major states pledge to defend minor powers without requiring reciprocal promises from their junior partners. Britain, for instance, signed treaties with Portugal, Turkey, Egypt, and Iraq that required Britain to defend those states. The minor powers did not pledge to defend Britain, but instead undertook different obligations. Even in alliances between major powers, it is not unheard of for one state to promise to defend its partner in one circumstance in return for a promise of the partner's benevolent neutrality in another circumstance. ATOP therefore provides distinct codes for the obligations of each alliance member to distinguish cases in which all partners do not share common obligations.

Design:

In addition to providing more detailed information on the military obligations contained in alliance pacts, ATOP also tracks the arrangements the partners make to organize collaboration. The degree of institutionalization of alliances and the specificity of the means of cooperation vary greatly among agreements, and recent research suggests that capturing these differences for investigation is worthwhile (see, for instance, Lake, 1999; Haftendorn, Keohane, and Wallander, 1999; Weber, 2000).¹³

First, we consider the means by which the alliance is established. We indicate whether or not the agreement required formal ratification, and we code whether the agreement included any promises to conceal the existence of the alliance or aspects of its content.¹⁴ We also code variables indicating the intended duration of the alliance and detailing any procedures by which it may be renewed or renounced.

Second, we record the extent to which military collaboration is institutionalized by the alliance agreement. ATOP codes provisions requiring official military contacts in peacetime and/or wartime, provisions for integrated military command or for subordination of one member's forces to another, and agreements for joint troop placements or for one partner to station troops on the territory of another. If the treaties establish new organizations, we note the purposes of the organizations. When allies specify provisions setting forth means of settling potential military disputes among themselves, agree to specific levels of military or financial contributions, or coordinate arms production or reduction, we register this information. Finally, if alliance agreements include discussions of the division of gains from conflict or plans for demobilization and withdrawal at the conclusion of fighting, we describe these provisions.

This portion of the ATOP data should prove helpful in evaluating the "economic theory of alliances," with its emphasis on the patterns of burden-sharing generated by the public good properties of security within alliances (e.g., Olson and Zeckhauser, 1966; Palmer, 1990; Sandler, 1993). The data will also be useful for evaluating arguments about the causes and effects of higher levels of alliance institutionalization. Finally, the

ATOP data should allow researchers to explore questions about the evolution of alliances, most recently sparked by the expansion of NATO, over a larger spatial-temporal domain (e.g., Wallander and Keohane, 1999).

Context:

Finally, we consider the context of military cooperation. We recognize that alliance agreements are created in the context of a larger relationship. ATOP includes variables indicating whether an alliance agreement makes reference to international organizations or to other alliances, or if it includes provisions for non-military cooperation. When alliance agreements discuss companion accords or the resolution of conflicts among the members, we code information about these provisions as well. These data will make it possible for scholars to evaluate arguments about issue linkage and the special relationships that exist among allies.

DESCRIBING THE ATOP ALLIANCES, 1815-1944:

In the period from 1815-1944, we have identified 212 alliances.¹⁵ Of those, ninety-seven (46%) were signed before 1914, and 115 were signed between 1914 and 1944. Seventy-five percent (159) of the alliances are bilateral, while the remaining fifty-three alliances have more than two members. Forty-five alliances (21%) were signed when one or more of the members was already at war.¹⁶ The average alliance lasts just over eight and one half years.

The overwhelming majority of alliances in this period were signed among European states: 162 (76%) have only European members, with only twenty-three (11%)

including no European powers.¹⁷ Only twenty-eight percent (60) are alliances among major powers, while twenty-five percent (53) are alliances among minor powers. The remaining forty-seven percent (99) include both major power and minor power members.¹⁸

No single type of obligation is dominant during this time period. Of the 212 alliances, 103 (49%) include obligations of defensive assistance, and fifty-five (26%) include obligations of offensive assistance. Leaders promise neutrality in thirty percent of the alliances, non-aggression in twenty-four percent, and consultation in fifty-six percent.¹⁹ Most alliances are compound contracts that incorporate multiple obligations: seventy-nine alliances (37%) include only one type of obligation, while the remaining sixty-three percent include two or more different obligations.

Perhaps even more striking is the fact that a full seventy percent of the alliances formed during this time period provide that the obligations come into effect only under certain specified conditions. Only thirty percent (64) of the treaties are unconditional; in the vast majority of cases, the allies' obligations to one another are limited. Leaders are most likely to condition their promises of offensive support, with eighty-seven percent of offensive obligations contingent upon particular circumstances. Sixty-nine percent of defensive promises are conditional.

The coding of distinct obligations for each alliance member allows us to determine which alliances include asymmetric obligations. We refer to an alliance as asymmetric when the obligations of the members are not reciprocal. Obligations are not reciprocal, for instance, when one state promises defense, and the other promises only

consultation in return. Alliances in which the partners adopt different obligations make up nineteen percent of the ATOP data, or forty-one of 212 cases. Morrow (1991) has argued that alliances may serve different purposes for different members, and particularly that weaker states might gain security from alliances in exchange for making political or economic concessions to their stronger patrons. The ATOP data will allow for a more direct test of this theory.

Finally, we consider the data concerning the structure of alliance agreements. 158 (75%) of the alliances were formed through treaties that required ratification, and 139 (66%) had no requirements for secrecy. Twenty-one percent (45) of the agreements include provisions for nonmilitary cooperation, and fifty-nine alliances (28%) include some institutionalization of military cooperation, in the form of official military contact, integrated command, subordination of forces, or troop placements.

COMPARISON TO THE COW ALLIANCE DATA:

Although ATOP is aimed at meeting different research needs than the COW alliance data, many scholars may wonder how the two datasets compare. The COW alliance dataset is currently under revision, with a new version scheduled for release in the near future.²⁰ In the absence of this update, we have compared our data to the most recent publicly available version (version 2.1, June 1996).²¹ Between 1815 and 1944, there are 146 alliances recorded in this version of the COW alliance dataset and 212 in the ATOP dataset. The COW dataset is not a simple subset of ATOP; there are eighty-

one alliances in the ATOP dataset that do not appear in the COW dataset, and there are fifteen alliances in the COW data that we do not include in ATOP.²²

ATOP includes a larger proportion of non-European alliances, alliances among minor powers, and alliances signed prior to 1914 than does COW. Forty-one percent of the COW alliances were signed prior to 1914, and fifty-nine percent were signed between 1914 and 1944. The ATOP proportions are forty-six and fifty-four percent respectively. Eighty percent of the COW alliances include only European powers, and only seven percent include no European members. In the ATOP dataset, seventy-six percent include only European states and eleven percent include no European states. Thirteen of the eighty-one alliances that are included in ATOP and not in COW are non-European alliances; they include only Latin American or only Asian states. While twenty-eight percent of the ATOP alliances include only major powers and twenty-five percent include only minor powers, thirty-four percent of COW alliances during this period are major power alliances, and only twenty percent include only minor powers. The remainder include both major and minor power members. The percentage of bilateral alliances vs. multilateral alliances and the average duration of an alliance are similar in the two datasets. While twenty-one percent of the ATOP alliances were signed when one of the signatories was already at war, slightly fewer (nineteen percent) of the COW alliances were signed during wartime.

To facilitate further comparison with the COW alliance dataset, we classify ATOP alliances into three categories following COW rules. Any alliance that includes either defensive or offensive commitments, regardless of its other content, is an “active

assistance” pact, which we regard as roughly equivalent to a COW defense pact.²³ Any alliance that includes neutrality and/or non-aggression provisions, but not defensive or offensive provisions, is a neutrality/non-aggression pact, and any alliance that includes only provisions for consultation is a consultation pact, similar to the COW entente. In the ATOP data, fifty-five percent of the cases (117) are active assistance pacts, thirty-one percent (66) are neutrality/nonaggression pacts, and fourteen percent (29) are consultation pacts. Defense pacts make up forty-seven percent (69 out of 146) of the alliances in the COW data, while non-aggression/neutrality pacts account for thirty-two percent (46) of the COW cases, and ententes are twenty-one percent (31). Interestingly, the larger ATOP dataset does not include more cases at “low” levels of commitment. Rather, a larger proportion of the cases in the ATOP dataset require active assistance, and a smaller proportion are limited only to consultation.

A REPLICATION OF LAI AND REITER (2000):

A more interesting question regarding the differences between the ATOP and COW alliance datasets is whether such differences will lead to a change in our inferences from statistical models. Elsewhere, we have used the ATOP data to demonstrate that alliances are much more reliable than previous research had led us to believe (Leeds, Long and Mitchell, 2000). In that study, we used information about the conditions under which alliance obligations were invoked that was not previously available. Even without using the detailed information about alliance provisions included in the ATOP data, however, scholars may find that the different ATOP case list, which includes more minor

power, more non-European, and more nineteenth century alliances, leads them to draw different conclusions about the role of alliances in international politics. Here we investigate the impact of the ATOP data on past inferences about the relationship between regime type and alliance membership by replicating a recent alliance study by Lai and Reiter (2000).²⁴

Lai and Reiter (2000) are interested in determining whether or not democracies are more likely to be allied with each other than other types of states, and more broadly, whether or not states with similar regime types are more likely to be allied than states with different regime types. They present three alternative arguments, which they refer to as “credible commitments,” “constructivism,” and “economic interdependence” (Lai and Reiter, 2000: 206-210). All three of these arguments predict that democracies are more likely to ally with each other, but only two of them (“credible commitments” and “constructivism”) expect states of similar regime type to ally. While the authors focus on the relationship between regime type and alliance behavior, they also control for several other factors that could influence the propensity for two nations to be allied, including common culture (religion, language, and ethnicity), threat, distance, major power status, and learning.²⁵

To evaluate these three arguments, Lai and Reiter collect data on all pairs of states (or dyads) from 1816-1992; their study includes 516,450 dyad years. The dependent variable, taken from the COW alliance data, is coded one if the members of a dyad are allied, regardless of whether the alliance takes the form of a defense pact, a neutrality/non-aggression pact or an entente.²⁶ They also create a separate alliance

variable, coded one if members of a dyad have signed a defense pact and zero otherwise. Lai and Reiter estimate a variety of probit and event history models for various time periods.²⁷ Their primary finding is that democracies are more likely to ally with each other only in the post-1945 period, and even then this propensity is limited to alliances in Europe and the Americas. For the entire period (1816-1992), the relationship between joint democracy and alliance is negative but statistically insignificant. In the earlier 1816-1945 period, the relationship between joint democracy and alliance is negative and statistically significant at the .05 level, implying that democratic dyads were less likely to be allied than other pairs of states.

Lai and Reiter also code the difference between the polity scores of the two dyad members to test their secondary hypothesis that states with similar regime types of all sorts are more likely to be allied.²⁸ The larger the difference between the polity scores of the dyad members, the less likely the two states are to be allied. The parameter estimates are negative and significant across most of their probit and event history models (with the exception of the 1816-1945 time period), showing that nations are less likely to be allied as the differences in their regime types increase. This evidence supports theoretical arguments predicting an affinity for states with similar regime types to ally, although it also makes the authors' finding that democracies aren't more likely to ally with each other a little more surprising.

Several of Lai and Reiter's control variables also have a significant impact on the probability of two states being allied. Joint language (sharing a similar language) has a positive and statistically significant effect in all of the empirical models; the other two

cultural variables (religion and ethnicity) are positive and significant in some of the models. In most models, states that share a history of conflict with one another are less likely to be allied, while states that have drawn favorable lessons about previous alliances and states that are geographically closer together are more likely to ally, supporting the authors' conjectures about the importance of learning and proximity in alliance formation.

(Table I about here)

We begin our replication by estimating Lai and Reiter's (2000) probit model for the 1816-1944 period, using the Correlates of War alliance data. This model is presented in the first column of Table I, labeled Model 1. Our replication results are similar to the results reported in their published study. Joint religion, joint language, joint enemy, distance, major power, learning, and the alliance lag variable are statistically significant and in the predicted direction. The effect of polity difference is statistically significant, but positive, contradicting the hypothesis that states with similar regimes will ally. The effect of joint democracy is negative and statistically insignificant.²⁹

Model 2 replaces the COW alliance dependent variable with the ATOP alliance dependent variable (coded one for any ATOP alliance).³⁰ The major difference in the results of estimating models 1 and 2 is that joint democracy is now positive and statistically significant. Polity difference remains positive and significant in both models, contrary to Lai and Reiter's expectations. Using the COW data, Lai and Reiter conclude that democracies were not more likely to ally in the pre-1946 time period. Our replication with the ATOP data reaches the opposite conclusion, namely that democracies

were more likely to ally in this time period. While the signs of the remaining parameters are unchanged, the statistical significance of joint religion, joint ethnicity, amount of threat, and learning varies depending on whether one uses the COW or ATOP alliance variable.

Model 3 presents Lai and Reiter's model where the dependent variable is coded one for COW defense pacts only and zero otherwise; Model 4 presents the same model using the ATOP defense pact coding.³¹ We see a similar result for defense pacts. Using the COW alliance data, joint democracy is negative and insignificant, whereas using the ATOP data, joint democracy is positive and statistically significant. Two democracies are more likely to have defense pacts with each other compared to mixed or autocratic dyads. Polity difference is positive and significant (contrary to Lai and Reiter's expectations) using either the COW or ATOP defense pact variable. Joint religion is positive in both models 3 and 4, but statistically significant only in the latter model (ATOP defense pacts). It is also interesting to note that the learning variable is positive and significant in Lai and Reiter's original model (1), while it is insignificant in the ATOP models (2 & 4). It is clear that the conclusions one might draw about the causes of alliance formation depend on the alliance data employed.

The dependent variable in Lai and Reiter's study indicates whether two states have an alliance or not. We have shown that the inferences drawn in their analysis change when one adopts an alliance measured coded from our ATOP data set. In particular, their finding that democracies were less likely to ally prior to the Cold War cannot be sustained with the ATOP alliance data. We find that democratic states were

more likely to be allied from 1816-1944 in comparison with mixed and autocratic dyads. These findings suggest that scholars using an alliance variable (dependent or independent) would be wise to check their results for robustness by adopting more than one alliance measure. The differences in the case lists of the COW and ATOP datasets are serious enough that in this instance, they lead to different inferences about the probability that states sharing certain characteristics will ally.

THE POTENTIAL UTILITY OF THE ATOP DATA

In this paper, we describe data collected by the Alliance Treaty Obligations and Provisions (ATOP) project on international military alliances, 1815-1944. Our alliance data provide much greater information about the content of alliance treaties than has been available previously. For every alliance in the dataset, ATOP provides detailed information on the obligations accruing to each alliance member and on the specific conditions under which these obligations come into force, in addition to a wealth of other information on the terms of the agreement. The ATOP dataset allows researchers to identify asymmetric alliances, to keep track of multiple types of obligations arising from a single alliance agreement, and to explore the extent to which the signatories institutionalize their agreement through the creation of formal organizations, links to other sorts of agreements, and the like.

We believe the ATOP data will be of interest to scholars pursuing a wide variety of research questions. Neoliberals should welcome the opportunity to explore variation across a large set of comparable institutions systematically. Researchers interested in

domestic politics and international relations may find it useful to distinguish between agreements that require formal ratification by domestic authorities from those that do not. Scholars interested in issue-linkage or in the synergies of economic and military cooperation will be interested to learn of the explicit references to other types of companion agreements included in many military alliances. Game theorists may find that ATOP makes it easier to identify the means that allies use to render their promises credible to one another and to third parties. Studies of deterrence are likely to profit from more detailed information about the character of the alliances that play such a central role in that enterprise. Realists can appreciate the merits of having a more complete list of international alliances in order to study balancing behavior and the politics of coercion. Finally, because the ATOP data have been collected independently of the parallel research done by the Correlates of War team and based upon slightly different coding rules, quantitative researchers of all stripes may now check the robustness of their results across different standardized alliance datasets. Our replication of the Lai and Reiter (2000) study suggests that this is warranted.

The ATOP dataset will grow significantly over time. The initial release of the ATOP data includes only a subset of the variables that we have collected; we plan to release additional variables incrementally as we finish checking them for accuracy and consistency. We have also begun to collect the data for the second phase of the ATOP project, which will cover the alliances formed throughout the world since 1944. We expect the new information contained in the ATOP dataset to allow researchers to subject a number of previously untested hypotheses and conjectures to empirical evaluation,

which in turn should allow for progress in our understanding of international conflict and cooperation.

ENDNOTES

² Portions of phase one of the data collection, which covers a subset of the variables described here for the years 1815-1944, are publicly available and can be downloaded from www.ruf.rice.edu/~leeds/atop.html. Updates, additional variables, and more complete documentation will be made available through this web site over time. We are currently collecting data for the post 1944 years; these data will be publicly available when they are complete.

³ Our claim to provide a superior inventory of international alliances is not exclusive. Meredith Reid Sarkees and Douglas Gibler have spearheaded the most recent revision of the Correlates of War alliance data, which corrects errors and omissions in that dataset and extends its temporal range. We have periodically compared notes with the COW team, to our mutual benefit. As of this writing, there are minor discrepancies between the ATOP and updated COW alliance lists, in part because the projects employ slightly different coding rules for identifying alliances. The updated COW alliance data has not yet been released to the public.

⁴ Levy (1981) uses slightly different coding rules, but he codes essentially the same variables as COW. Gibler (1999) extends the COW data backward in time. Lai and Reiter (2000) update the COW alliance data through 1994. Oren (1990) and Bennett (1997) also propose some modifications of the COW alliance data.

⁵ By an “exchange of notes” we mean formal exchanges of the sort identified by Toscano (1966: 22) as giving “substance to a legal agreement in a somewhat less formal and solemn way than a treaty.”

⁶ Explaining his reluctance to identify alliances too closely with formal agreements, Walt asserts that “the presence of a formal treaty says relatively little about the level of commitment or the extent of cooperation” (1993: 20). We consider this to be an empirical question, and one that we hope the ATOP data will allow us to explore.

⁷ In order to maximize compatibility with other datasets, we have used both the Correlates of War project system membership data (Small and Singer, 1982) and the system membership data collected by Gleditsch and Ward (1999) to establish which political entities qualify as independent states. Some ATOP alliances may qualify according to one of these datasets but not according to the other. Researchers are free to exclude these alliances from their own analyses as they deem appropriate.

⁸ Our definition of a consultation pact requires that the signatories express the intention of consulting for the purpose of coordinating policy. A promise to share information or to study military options together does not in itself qualify as a promise to consult. A consultation pact includes a promise to include one another in formulating decisions about actions. It does not require that the signatories come to agreement on actions to be taken or that they do not act independently, but it does obligate them to more than simply providing information about decisions that have been made.

⁹ Historians commonly use the word “entente” to describe a state of friendly relations between two states that gives rise to a tacit expectation of diplomatic and/or military cooperation. The Correlates of War project uses the word “entente” to describe formal treaties requiring the signatories to consult each other prior to using military force. We adopt the term “consultation pact” to describe the latter sort of agreement.

¹⁰ Sources for each treaty are listed in appendix 2.

¹¹ Small and Singer do express reservations about the appropriateness of the ordinal scale, suggesting that while defense pacts are clearly the most serious commitment, and that neutrality pacts are more serious commitments than ententes, nonaggression pacts (combined with neutrality pacts in their coding scheme) may not involve more serious commitments than ententes (1969: 280, fn 10).

¹² For empirical examples and for further discussion of these contingencies, see Leeds, Long, and Mitchell (2000).

¹³ Two previous data collection efforts did examine these issues, but their data are either quite temporally limited (Russett, 1971) or no longer available (Holsti, Hopmann, and Sullivan, 1973).

¹⁴ While the ATOP dataset includes a variable that specifies whether the alliance included language requiring the parties to conceal the alliance or aspects of its terms, the ATOP dataset does not include information about whether these alliances remained secret, what other leaders knew, or when they knew it. Those interested in the latter issues are referred to Ritter (n.d.).

¹⁵ We have adopted 1815 as the start date for our dataset, and thus we include only alliances formed after 1815. We have not investigated alliances that were formed before 1815, even if they may have remained in effect after 1815. Those interested in a list of pre-1815 alliances may consult Gibler (1999).

¹⁶ We rely on the COW list of interstate wars (version 3.0) to determine what states were involved in war (Sarkees, 2000).

¹⁷ We include the Ottoman Empire/Turkey as a European state.

¹⁸ We follow the major power designations of Small and Singer (1982).

¹⁹ Because a single treaty can include multiple obligations, these percentages sum to more than 100%.

²⁰ In light of our communications with the COW team, we expect a closer (but still imperfect) correspondence between the ATOP alliance list and the forthcoming revision of the COW list.

²¹ We thank Meredith Reid Sarkees and Scott Bennett for making these data available to us.

²² There are five alliances included in the ATOP dataset based on the Gleditsch and Ward (1999) system membership criteria that are not included in the COW dataset because one or more of the members is not considered an independent state by COW.

²³ While the COW project does not include an offense pact category, many of the alliances that we code as offense pacts are coded in the COW data as defense pacts. Thus, we feel this categorization provides the most faithful basis for comparison.

²⁴ We are grateful to Brian Lai and Dan Reiter for sharing their data with us.

²⁵ See Appendix 1 for a description of the measurement and expected direction of effect for each of Lai and Reiter's independent variables.

²⁶ The version of the COW alliance data used by Lai and Reiter ends in 1984. They updated the data to 1992 on the basis of secondary sources.

²⁷ Lai and Reiter (2000) present eight probit models in Table 1 (pages 218-219) varying the model specification, time period, and dependent variable (all alliances versus defense

pacts only). Table 2 (page 221) contains four event history models varied by time period and type of hazard model (Cox versus Weibull). Lai and Reiter account for temporal dynamics by including a lagged dependent variable in the probit models, and estimating the event history models. We replicate only the probit models, given that Lai and Reiter's results for their event history models were similar to the results for their probit models.

²⁸ Lai and Reiter compute polity scores from the Polity III dataset (Jagers and Gurr, 1995) by subtracting a state's autocracy score from its democracy score.

²⁹ Given that the ATOP data is currently limited to the pre-1945 era, we restrict our comparison to this time period. As a result, it was necessary to drop the last year (1945) from Lai and Reiter's model covering the years 1816-1945 (reported in their article in Table 1, Model 3). This decreases the number of total dyadic cases from 97,027 to 95,656, and also produces different results for a few of the variables. Joint democracy, conflict relations, and amount of threat are statistically significant only when the cases from 1945 are included. On the other hand, the major power variable becomes statistically significant when the 1945 cases are dropped.

³⁰ When we merged Lai and Reiter's data with the ATOP alliance data, there were 17 dyad years that were allied according to the ATOP data and not in Lai and Reiter's dataset, and 4484 dyad years that were allied in Lai and Reiter's dataset, but not in the ATOP dataset. The 17 cases coded as allied in ATOP only are the U.S. and Haiti (1942-1944), Ecuador and Peru (1860-61, 1866-1871), and Ecuador and Bolivia (1866-1871). The 4484 cases allied in Lai and Reiter's data and not in ATOP stem from several COW

alliances dropped by ATOP (such as the Pan American Peace Pact), and differences in alliance formation and termination dates.

³¹ We code alliances that include defensive obligations, regardless of their other content, as defense pacts.

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APPENDIX 1: DESCRIPTION OF LAI AND REITER'S (2000) DATA

| <u>Variable</u> | <u>Description</u> | <u>Expected Direction</u> |
|--------------------|---|---------------------------|
| Joint democracy | Coded 1 if both dyad members have Polity III (democracy – autocracy) scores of 5 or higher | + |
| Polity difference | Difference between each dyad member's Polity III (democracy – autocracy) score | - |
| Joint religion | Coded 1 if dyad members have similar religions | + |
| Joint language | Coded 1 if dyad members have the same spoken language | + |
| Joint ethnicity | Coded 1 if dyad members have similar ethnic groups | + |
| Conflict relations | Coded 1 if dyad members were on opposite sides of a MID in previous 10 years | - |
| Joint enemy | Coded 1 if dyad members fought a MID against the same third state in previous 10 years | + |
| Amount of threat | Total number of MIDs in which each state has participated in previous 10 years | + |
| Distance | COW measure of distance between capitals; 0 for contiguous states | - |
| Major Power Status | Coded 1 if one or both dyad members are COW major powers | + |
| Learning | Sum of each member's lesson of past alliance; 1 favoring alliance, -1 favoring neutrality, 0 no lesson; ranges from -2 to 2 | + |
| Allylag | Coded 1 if dyad members had an alliance in the previous year | + |

APPENDIX 2: ATOP CASES AND TREATY SOURCES, 1815-1944

| ATOP ID# | SIGNATORIES ¹ | SIGNATURE DATE ² | TREATY SOURCE ³ |
|----------|---|-----------------------------|--------------------------------|
| 1005 | Austria, France, United Kingdom, Bavaria, Hanover, Netherlands | Jan. 3, 1815 | BFSP 2 : 1001 |
| 1010 | Austria, Hesse Darmstadt | Jan. 14, 1815 | CTS 63 : 449 |
| 1015 | Austria, Two Sicilies | Apr. 29, 1815 | CTS 64 : 121 |
| 1020 | Austria, Baden, Bavaria, Prussia, Hesse Electoral, Hesse Darmstadt, Saxony, Wuerttemberg, Hanover, Mecklenburg Schwerin | Jun. 8, 1815 | Hurst(1972) 1 : 34 |
| 1025 | Austria, Two Sicilies | Jun. 12, 1815 | CTS 65 : 13 |
| 1030 | Austria, Tuscany | Jun. 12, 1815 | CTS 65 : 9 |
| 1035 | Austria, Prussia, Russia, United Kingdom | Nov. 20, 1815 | Hurst(1972) 1 : 121 |
| 1040 | Netherlands, Spain | Aug. 10, 1816 | CTS 66 : 289 |
| 1045 | France, Russia, United Kingdom | Jul. 6, 1827 | Hurst(1972) 1 : 180 |
| 1050 | Austria, Sardinia | Jul. 23, 1831 | Nada(1972), S.2 1 : 312 |
| 1055 | France, United Kingdom | Oct. 22, 1832 | Hurst(1972) 1 : 221 |
| 1060 | Belgium, France | Nov. 10, 1832 | Hurst(1972) 1 : 224 |
| 1065 | Austria, Prussia, Russia | Mar. 9, 1833 | CTS 83 : 195 |
| 1070 | Sardinia, Two Sicilies | Mar. 28, 1833 | BFSP 22 : 1081 |
| 1075 | Ottoman Empire, Russia | Jul. 8, 1833 | Hurst(1972) 1 : 225 |
| 1080 | Austria, Russia | Sept. 18, 1833 | CTS 84 : 21 |
| 1085 | Austria, Russia | Sept. 19, 1833 | CTS 84 : 27 |
| 1090 | Prussia, Russia | Oct. 16, 1833 | CTS 84 : 69 |
| 1095 | Austria, Prussia, Russia | Oct. 15, 1833 | CTS 84 : 65 |
| 1100 | France, Portugal, Spain, United Kingdom | Apr. 22, 1834 | Hurst(1972) 1 : 232 |
| 1110 | Austria, Ottoman Empire, Prussia, Russia, United Kingdom | Jul. 15, 1840 | Hurst(1972) 1 : 252 |
| 1115 | Russia, United Kingdom | Jun. 1844 | BFSP 33 : 1387 |
| 1120 | France, Portugal, Spain, United Kingdom | May 21, 1847 | Hurst(1972) 1 : 276 |
| 1125 | Austria, Modena | Dec. 24, 1847 | BFSP 36 : 1169 |
| 1130 | Austria, Parma | Feb. 4, 1848 | BFSP 36 : 1171 |
| 1135 | Hanover, Prussia, Saxony | May 26, 1849 | Martens(1856) S.1 14 : 410 |
| 1140 | Austria, Bavaria, Wuerttemberg | Oct. 11, 1850 | no treaty located ⁴ |
| 1145 | Austria, Prussia | May 16, 1851 | BFSP 44 : 84 |
| 1150 | Brazil, Uruguay | May 29, 1851 | BFSP 40 : 1135 |
| 1155 | Brazil, Uruguay | Oct. 12, 1851 | BFSP 40 : 1141 |
| 1160 | France, Ottoman Empire, United Kingdom, Sardinia | Mar. 12, 1854 | Hurst(1972) 1 : 299 |
| 1165 | France, United Kingdom, Sardinia | Apr. 10, 1854 | Hurst(1972) 1 : 303 |
| 1170 | Austria, Prussia | Apr. 20, 1854 | Hurst(1972) 1 : 305 |
| 1175 | Austria, Ottoman Empire | Jun. 14, 1854 | Hurst(1972) 1 : 308 |
| 1180 | Austria, France, United Kingdom | Dec. 2, 1854 | Hurst(1972) 1 : 310 |
| 1185 | Austria, France | Dec. 22, 1854 | Beer(1883) 821 |
| 1190 | France, Sweden, United Kingdom | Nov. 21, 1855 | Hurst(1972) 1 : 315 |
| 1195 | Austria, France, United Kingdom | Apr. 15, 1856 | Hurst(1972) 1 : 336 |
| 1200 | Argentina, Paraguay | Jul. 29, 1856 | BFSP 46 : 1304 |
| 1205 | Argentina, Brazil, Uruguay | Jan. 2, 1859 | BFSP 49 : 1234 |
| 1210 | France, Sardinia | Jan. 19, 1859 | Blumberg(1990) 164 |

| | | | |
|------|--|----------------|-------------------------------|
| 1215 | France, Russia | Mar. 3, 1859 | Blumberg(1990) 168 |
| 1220 | Ecuador, Peru | Jan. 25, 1860 | CTS 121 : 309 |
| 1225 | France, Spain, United Kingdom | Oct. 31, 1861 | BFSP 51 : 63 |
| 1230 | Prussia, Russia | Feb. 8, 1863 | Dmytryshyn(1990) 289 |
| 1235 | Bolivia, Peru | Nov. 5, 1863 | BFSP 55 : 837 |
| 1240 | Colombia, Ecuador | Jan. 1, 1864 | CTS 129 : 31 |
| 1245 | Austria, Prussia | Jan. 16, 1864 | Fleischer(1903) S. 28 4 : 2 |
| 1250 | France, Italy | Sept. 15, 1864 | CTS 129 : 407 |
| 1255 | Argentina, Brazil, Uruguay | May 1, 1865 | CTS 131 : 119 |
| 1260 | Chile, Peru, Ecuador, Bolivia | Dec. 5, 1865 | BFSP 56 : 707 |
| 1265 | Italy, Prussia | Apr. 8, 1866 | Sybel(1891) 4 : 354 |
| 1270 | Austria, France | Jun. 12, 1866 | Weill(1972) 181 |
| 1275 | Baden, Prussia | Aug. 17, 1866 | CTS 133 : 37 |
| 1280 | Bavaria, Prussia | Aug. 22, 1866 | CTS 133 : 53 |
| 1285 | Prussia, Wuerttemberg | Aug. 13, 1866 | CTS 133 : 27 |
| 1290 | Hesse Darmstadt, Prussia | Apr. 11, 1867 | BFSP 57 : 738 |
| 1295 | Prussia, United Kingdom | Aug. 9, 1870 | Hurst(1972) 1 : 455 |
| 1300 | France, United Kingdom | Aug. 11, 1870 | Hurst(1972) 1 : 457 |
| 1305 | Bolivia, Peru | Feb. 6, 1873 | CTS 145 : 475 |
| 1310 | Germany, Russia | May 6, 1873 | Dmytryshyn(1990) 289 |
| 1315 | Austria-Hungary, Germany, Russia | May 25, 1873 | Hurst(1972) 2 : 508 |
| 1320 | Annam, France | Mar. 15, 1874 | CTS 147 : 339 |
| 1325 | Austria-Hungary, Russia | Jan. 15, 1877 | Hurst(1972) 2 : 511 |
| 1330 | Ottoman Empire, United Kingdom | Jun. 4, 1878 | Hurst(1972) 2 : 546 |
| 1335 | Austria-Hungary, Germany | Oct. 7, 1879 | Hurst(1972) 2 : 589 |
| 1340 | Austria-Hungary, Germany, Russia | Jun. 18, 1881 | Hurst(1972) 2 : 603 |
| 1345 | Austria-Hungary, Serbia | Jun. 16, 1881 | Hurst(1972) 2 : 601 |
| 1350 | Austria-Hungary, Germany, Italy | May 20, 1882 | Hurst(1972) 2 : 611, 639, 854 |
| 1355 | Austria-Hungary, Germany, Rumania, Italy | Oct. 30, 1883 | Hurst(1972) 2 : 630, 631, 632 |
| 1360 | Austria-Hungary, Italy, United Kingdom | Feb. 12, 1887 | Hurst(1972) 2 : 635 |
| 1365 | Austria-Hungary, Italy, Germany, Spain | May 4, 1887 | Hurst(1972) 2 : 643, 645 |
| 1370 | Germany, Russia | Jun. 18, 1887 | Hurst(1972) 2 : 645 |
| 1375 | Austria-Hungary, Italy, United Kingdom | Dec. 16, 1887 | Hurst(1972) 2 : 648 |
| 1380 | France, Russia | Aug. 27, 1891 | Hurst(1972) 2 : 662 |
| 1385 | France, Russia | Dec. 27, 1893 | Hurst(1972) 2 : 668 |
| 1390 | Japan, Korea | Aug. 26, 1894 | Hurst(1972) 2 : 670 |
| 1395 | China, Russia | Jun. 3, 1896 | CTS 182 : 425 |
| 1400 | Portugal, United Kingdom | Oct. 14, 1899 | Hurst(1972) 2 : 693 |
| 1405 | France, Italy | Jan. 1901 | Hurst(1972) 2 : 733 |
| 1410 | Austria-Hungary, Italy | Feb. 9, 1901 | Hurst(1972) 2 : 714 |
| 1415 | Japan, United Kingdom | Jan. 30, 1902 | BFSP 95 : 83; BFSP 98 : 136 |
| 1420 | France, Italy | Jun. 30, 1902 | Hurst(1972) 2 : 735 |
| 1425 | Bulgaria, Serbia | Mar. 30, 1904 | Hurst(1972) 2 : 752 |
| 1430 | France, Spain | Oct. 3, 1904 | Hurst(1972) 2 : 766 |
| 1435 | Austria-Hungary, Russia | Oct. 15, 1904 | Hurst(1972) 2 : 765 |

| | | | |
|------|--|----------------|-----------------------------------|
| 1440 | Germany, Russia | Jul. 24, 1905 | Cooke and Stickney(1931) 105 |
| 1445 | France, Spain, United Kingdom | May 16, 1907 | BFSP 100 : 570, 933 |
| 1450 | Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua | Dec. 20, 1907 | CTS 206 : 72 |
| 1455 | Japan, United States | Nov. 30, 1908 | Tokutumi(1922) 167 |
| 1460 | Italy, Russia | Oct. 24, 1909 | Cooke and Stickney(1931) 153 |
| 1465 | Japan, Russia | Jul. 4, 1910 | Dmytryshyn(1990) 434 |
| 1470 | Bulgaria, Serbia | Feb. 29, 1912 | Hurst(1972) 2 : 819 |
| 1475 | Bulgaria, Greece | May 16, 1912 | Hurst(1972) 2 : 825 |
| 1480 | Montenegro, Serbia | Sept. 12, 1912 | Hurst(1972) 2 : 828 |
| 1485 | France, United Kingdom | Nov. 23, 1912 | Baltzly and Salomone(1950) 37 |
| 1490 | Greece, Serbia | May 19, 1913 | Hurst(1972) 2 : 846 |
| 2005 | Germany, Ottoman Empire | Aug. 2, 1914 | Hurewitz(1956) 1 |
| 2010 | Bulgaria, Ottoman Empire | Aug. 19, 1914 | BFSP 152 : 253 |
| 2015 | France, Russia, United Kingdom, Japan, Italy | Sept. 5, 1914 | BFSP 108 : 365; BFSP 109 : 850 |
| 2020 | Russia, Rumania | Oct. 1, 1914 | CTS 220 : 333 |
| 2025 | France, Italy, Russia, United Kingdom | Apr. 26, 1915 | CTS 221 : 56 |
| 2030 | Austria-Hungary, Bulgaria, Germany | Sept. 6, 1915 | CTS 221 : 135 |
| 2035 | Japan, Russia | Jul. 3, 1916 | CTS 221 : 367 |
| 2040 | France, Italy, Rumania, Russia, United Kingdom | Aug. 17, 1916 | CTS 221 : 412 |
| 2045 | China, Japan | May 16, 1918 | CTS 223 : 367 |
| 2050 | Czechoslovakia, Yugoslavia | Aug. 14, 1920 | LNTS 6 : 211; LNTS 8 : 233 |
| 2055 | Belgium, France | Sept. 7, 1920 | DDB 1 : 405 |
| 2060 | France, Poland | Feb. 19, 1921 | Wandycz(1962) 393 |
| 2065 | Persia, USSR | Feb. 26, 1921 | LNTS 9 : 401 |
| 2070 | Poland, Rumania | Mar. 3, 1921 | LNTS 7 : 79; LNTS 60 : 163 |
| 2075 | Afghanistan, Turkey | Mar. 1, 1921 | BFSP 118 : 10 |
| 2080 | Czechoslovakia, Rumania | Apr. 23, 1921 | LNTS 6 : 217 |
| 2085 | Rumania, Yugoslavia | Jun. 7, 1921 | LNTS 54 : 259 |
| 2090 | Afghanistan, Persia | Jun. 22, 1921 | LNTS 33 : 295 |
| 2095 | France, Japan, United Kingdom, United States | Dec. 13, 1921 | LNTS 25 : 185 |
| 2100 | Austria, Czechoslovakia | Dec. 16, 1921 | LNTS 9 : 249 |
| 2105 | Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua | Feb. 7, 1923 | BFSP 130 : 517 |
| 2110 | Estonia, Latvia | Nov. 1, 1923 | LNTS 23 : 83; LNTS 150 : 105 |
| 2115 | Italy, Yugoslavia | Jan. 27, 1924 | LNTS 24 : 33 |
| 2120 | Czechoslovakia, France | Jan. 25, 1924 | LNTS 23 : 165 |
| 2125 | Czechoslovakia, Italy | Jul. 5, 1924 | LNTS 26 : 23 |
| 2130 | Belgium, France, Germany, Italy, United Kingdom | Oct. 16, 1925 | LNTS 54 : 291; BFSP 140 : 276 |
| 2135 | France, Poland | Oct. 16, 1925 | LNTS 54 : 355 |
| 2140 | Czechoslovakia, France | Oct. 16, 1925 | LNTS 54 : 361 |
| 2145 | Turkey, USSR | Dec. 17, 1925 | LNTS 157 : 355, 361, 365 |

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| 2150 | Germany, USSR | Apr. 24, 1926 | BFSP 125 : 738 |
| 2155 | Persia, Turkey | Apr. 22, 1926 | LNTS 106 : 261, 265 |
| 2160 | France, Rumania | Jun. 10, 1926 | LNTS 58 : 227 |
| 2165 | Italy, Spain | Aug. 7, 1926 | BFSP 125 : 867 |
| 2170 | Afghanistan, USSR | Aug. 31, 1926 | BFSP 125 :2 |
| 2175 | Italy, Rumania | Sept. 16, 1926 | LNTS 67 : 395 |
| 2180 | Poland, Yugoslavia | Sept. 18, 1926 | LNTS 78 : 415 |
| 2185 | Lithuania, USSR | Sept. 28, 1926 | LNTS 60 : 152 |
| 2190 | Albania, Italy | Nov. 27, 1926 | LNTS 60 : 19 |
| 2195 | Persia, USSR | Oct. 1, 1927 | LNTS 112 : 292 |
| 2200 | France, Yugoslavia | Nov. 11, 1927 | LNTS 68 : 375 |
| 2205 | Albania, Italy | Nov. 22, 1927 | LNTS 69 : 349 |
| 2210 | Afghanistan, Persia | Nov. 27, 1927 | LNTS 107 : 445, 451 |
| 2215 | Greece, Rumania | Mar. 21, 1928 | LNTS 108 : 189 |
| 2220 | Italy, Turkey | May 30, 1928 | LNTS 95 : 185 |
| 2225 | Ethiopia, Italy | Aug. 2, 1928 | BFSP 129 : 1 |
| 2230 | Greece, Italy | Sept. 23, 1928 | LNTS 108 : 221 |
| 2235 | Hungary, Turkey | Jan. 5, 1929 | LNTS 100 : 139 |
| 2240 | Estonia, Latvia, Poland, Rumania, USSR | Feb. 9, 1929 | LNTS 89 : 371 |
| 2245 | Bulgaria, Turkey | Mar. 6, 1929 | LNTS 114 : 401 |
| 2250 | Greece, Yugoslavia | Mar. 27, 1929 | LNTS 108 : 203 |
| 2255 | Greece, Czechoslovakia | Jun. 8, 1929 | LNTS 108 : 257 |
| 2260 | France, Turkey | Feb. 3, 1930 | BFSP 132 : 777 |
| 2265 | Czechoslovakia, Rumania, Yugoslavia | Jun. 27, 1930 | LNTS 107 : 217; LNTS 139 : 235 |
| 2270 | Iraq, United Kingdom | Jun. 30, 1930 | BFSP 132 : 280 |
| 2275 | Greece, Turkey | Oct. 30, 1930 | LNTS 125 : 11; LNTS 193 : 177 |
| 2280 | Finland, USSR | Jan. 21, 1932 | LNTS 155 : 395 |
| 2285 | Latvia, USSR | Feb. 5, 1932 | LNTS 148 : 123 |
| 2290 | Estonia, USSR | May 4, 1932 | LNTS 131 : 305 |
| 2295 | Poland, USSR | Jul. 25, 1932 | LNTS 136 : 49 |
| 2300 | France, USSR | Nov. 29, 1932 | LNTS 157 : 418 |
| 2305 | Italy, USSR | Sept. 2, 1933 | LNTS 148 : 327 |
| 2310 | Greece, Turkey | Sept. 14, 1933 | LNTS 156 : 167 |
| 2315 | Rumania, Turkey | Oct. 17, 1933 | LNTS 165 : 275 |
| 2320 | Turkey, Yugoslavia | Nov. 27, 1933 | LNTS 161 : 231 |
| 2325 | Germany, Poland | Jan. 26, 1934 | Gantenbein(1948) 999 |
| 2330 | Greece, Rumania, Turkey, Yugoslavia | Feb. 9, 1934 | LNTS 153 : 155 |
| 2335 | Austria, Hungary, Italy | Mar. 17, 1934 | LNTS 154 : 285; BFSP 140 : 333 |
| 2340 | Saudi Arabia, Yemen Arab Republic | May 20, 1934 | BFSP 137 : 670 |
| 2345 | Estonia, Latvia, Lithuania | Sept. 12, 1934 | LNTS 154 : 95 |
| 2350 | France, Italy | Jan. 7, 1935 | DDF S.1 8 : 603 |
| 2355 | France, Italy, United Kingdom | Apr. 14, 1935 | Gantenbein(1948) 1001 |
| 2360 | France, USSR | May 2, 1935 | LNTS 167 : 404 |
| 2365 | Czechoslovakia, USSR | May 16, 1935 | LNTS 159 : 357 |
| 2370 | Mongolia, USSR | Mar. 12, 1936 | BFSP 140 : 666 |

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| 2375 | Iraq, Saudi Arabia, Yemen Arab Republic | Apr. 2, 1936 | BFSP 140 : 620; BFSP 141 : 1272 |
| 2380 | Germany, Austria | Jul. 11, 1936 | DGFP S.C 5 : 755 |
| 2385 | Egypt, United Kingdom | Aug. 26, 1936 | BFSP 140 : 178 |
| 2390 | Germany, Italy | Oct. 24, 1936 | DGFP S.C 5 : 1136 |
| 2395 | Germany, Japan, Italy, Spain, Hungary | Nov. 25, 1936 | Gantenbein(1948) 988 |
| 2400 | Bulgaria, Yugoslavia | Jan. 24, 1937 | LNTS 176 : 227 |
| 2405 | Italy, Yugoslavia | Mar. 25, 1937 | BFSP 141 : 1119 |
| 2410 | Afghanistan, Iran, Iraq, Turkey | Jul. 8, 1937 | LNTS 190 : 23 |
| 2415 | China, USSR | Aug. 21, 1937 | LNTS 181 : 102 |
| 2420 | Bulgaria, Egypt, France, Greece, Rumania, Turkey, United Kingdom, USSR, Yugoslavia | Sept. 14, 1937 | LNTS 181 : 137 |
| 2425 | Bulgaria, Greece, Rumania, Turkey, Yugoslavia | Jul. 31, 1938 | LNTS 196 : 372 |
| 2430 | France, Germany | Dec. 6, 1938 | BFSP 142 : 573 |
| 2435 | Portugal, Spain | Mar. 17, 1939 | BFSP 143 : 673; BFSP 144 : 520 |
| 2440 | Poland, United Kingdom | Apr. 6, 1939 | Gantenbein(1948) 1025; BFSP 143 : 301 |
| 2445 | Germany, Italy | May 22, 1939 | BFSP 143 : 499 |
| 2450 | Denmark, Germany | May 31, 1939 | LNTS 197 : 40 |
| 2455 | Estonia, Germany | Jun. 7, 1939 | LNTS 198 : 52 |
| 2460 | Germany, Latvia | Jun. 7, 1949 | LNTS 198 : 108 |
| 2465 | France, Turkey | Jun. 23, 1939 | BFSP 143 : 476 |
| 2470 | Germany, USSR | Aug. 23, 1939 | Grenville(1987) 195 |
| 2475 | Estonia, USSR | Sept. 28, 1939 | LNTS 198 : 227 |
| 2480 | Latvia, USSR | Oct. 5, 1939 | LNTS 198 : 385 |
| 2485 | Lithuania, USSR | Oct. 1939 | no treaty located ⁵ |
| 2490 | France, Turkey, United Kingdom | Oct. 19, 1939 | BFSP 151 : 213 |
| 2495 | Colombia, Venezuela | Dec. 17, 1939 | BFSP 143 : 412 |
| 2500 | Finland, USSR | Mar. 12, 1940 | BFSP 144 : 383 |
| 2505 | Thailand, United Kingdom | Jun. 12, 1940 | LNTS 203 : 422 |
| 2510 | Japan, Thailand | Jun. 12, 1940 | BFSP 144 : 435 |
| 2515 | Germany, Italy, Japan, Hungary, Rumania, Bulgaria | Sept. 27, 1940 | LNTS 204 : 386 |
| 2520 | USSR, Yugoslavia | Apr. 5, 1941 | BFSP 144 : 878 |
| 2525 | Japan, USSR | Apr. 13, 1941 | BFSP 144 : 839 |
| 2530 | Germany, Turkey | Jun. 18, 1941 | BFSP 144 : 816 |
| 2535 | United Kingdom, USSR | Jul. 12, 1941 | LNTS 204 : 278; BFSP 144 : 1038 |
| 2540 | Germany, Italy, Japan | Dec. 11, 1941 | Grenville(1987) 203 |
| 2545 | Japan, Thailand | Dec. 21, 1941 | BFSP 144 : 838 |
| 2550 | Australia, Canada, China, Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, New Zealand, Nicaragua, Panama, South Africa, United Kingdom, USSR, United States | Jan. 1, 1942 | Gantenbein(1948) 1035 |
| 2555 | Iran, United Kingdom, USSR | Jan. 29, 1942 | BFSP 144 : 1017 |
| 2560 | Portugal, United Kingdom | Aug. 17, 1943 | BFSP 146 : 447 |
| 2565 | Australia, New Zealand | Jan. 21, 1944 | DAFR 6 : 627 |
| 2570 | Portugal, United Kingdom, United States | Nov. 28, 1944 | BFSP 146 : 452 |
| 2575 | France, USSR | Dec. 10, 1944 | BFSP 149 : 632 |

¹All states that were signatories to the agreement. This list includes original members, states that acceded to the agreement at a later date, and states that renounced their membership before the termination of the agreement.

²The original signature date of the agreement. Some signatories may have acceded at a later date.

³Our source for the agreement. Full bibliographic information can be located in the reference list. The document series abbreviations are: CTS: Consolidated Treaty Series (Parry); BFSP: British and Foreign State Papers; DAFR: Documents on American Foreign Relations; DDB: Documents Diplomatiques Belges; DDF: Documents Diplomatiques Francais; DGFP: Documents on German Foreign Policy; LNTS: League of Nations Treaty Series. For these sources, we list the document series abbreviation followed by series number (indicated by S. where applicable), volume number, and page number. Multiple sources may be listed if additional states acceded to an alliance after its formation or if terms of the alliance were renegotiated in an additional agreement. Additional protocols and renewals are not included in this list.

⁴We have been unable to locate a copy of this treaty. We have coded it based on secondary sources. See, for instance, Carr (1987), Langer (1969), Mosse (1958), Sheehan (1989), Sybel (1891).

⁵We have been unable to locate a copy of this treaty, but secondary sources consistently report that an agreement was signed between Lithuania and the USSR that was similar to the agreements signed between Latvia and the USSR and Estonia and the USSR (2475 and 2480) (e.g., Langer, 1972: 1135).

Table I: Replication of Lai and Reiter (2000), 1816-1944

| | <i>Model 1: COW</i> | <i>Model 2: ATOP</i> | <i>Model 3: COW</i> | <i>Model 4: ATOP</i> |
|-----------------------|---------------------|----------------------|---------------------|----------------------|
| Dependent Variable | All alliances | All alliances | Defense Pacts | Defense Pacts |
| <u>Regime Type</u> | | | | |
| Joint Democracy | -.095 (.063) | .152 (.067) ** | -.031 (.079) | .204 (.076) ** |
| Polity Difference | .007 (.003) ϕ | .012 (.004) ϕ | .008 (.004) ϕ | .016 (.004) ϕ |
| <u>Culture</u> | | | | |
| Joint religion | .187 (.029) *** | .029 (.038) | .018 (.038) | .073 (.041) * |
| Joint language | .241 (.044) *** | .144 (.060) ** | .230 (.056) *** | .197 (.064) ** |
| Joint ethnicity | .016 (.056) | .187 (.062) ** | .213 (.064) *** | .236 (.066) *** |
| <u>Threat</u> | | | | |
| Conflict relations | .023 (.063) | .036 (.072) | -.165 (.091) | -.063 (.095) |
| Joint enemy | .338 (.048) *** | .428 (.053) *** | .830 (.046) *** | .536 (.058) *** |
| Amount of threat | .0007 (.004) | .010 (.005) ** | .0007(.004) | -.004 (.005) |
| <u>Other Controls</u> | | | | |
| Distance | -.005 (.0005) *** | -.009 (.001) *** | -.001 (.0007)* | -.006 (.001) *** |
| Major Power | .110 (.034) *** | .202 (.041) *** | .087 (.042) * | .250 (.046) *** |
| Learning | .052 (.024) *** | .019 (.030) | .052 (.030) | -.002 (.033) |
| Ally lag variable | 3.77 (.037) *** | 3.89 (.047) *** | 4.08 (.061) *** | 4.11 (.059) *** |
| Constant | -2.49 (.043) *** | -2.63 (.055) *** | -2.90 (.062) *** | -2.89 (.067) *** |
| N | 95656 | 93321 | 93321 | 93321 |
| Wald $\chi^2(12)$ | 12128.78 | 8964.97 | 6004.79 | 6650.32 |
| Pseudo R ² | .7607 | .8075 | .7435 | .8087 |

Note: Robust standard errors are reported in parentheses.

*p < .05 **p < .01 ***p < .001 ϕ significant at p < .05, but not in the predicted direction.