Democracy, Elections, and Alliance Treaty Depth

Joshua Alley*

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Abstract

Why do states make commitments of defense coordination and cooperation in military alliance treaties? I argue that democracies often use treaty depth to increase alliance credibility because depth is less vulnerable to electoral scrutiny than unconditional military support. Because the costs of treaty depth are hard to quantify and express succinctly, and leaders can claim that depth facilitates more efficient defense spending, democratic leaders use treaty depth to reassure. Unlike depth, the potential costs of unconditional military support are easy for voters to grasp, so opposition politicians can use it for political gain. Thus, alliances where the most capable member has competitive elections have greater treaty depth but are less likely to offer unconditional military support. I test this claim on offensive and defensive alliances from 1816 to 2007 and illustrate the theoretical mechanisms by examining NATO. I find that democratic institutions in the most capable alliance member increase treaty depth, but have a mixed impact on unconditional military support. The argument and findings challenge claims that democracies prefer limited alliance commitments.

*Postdoctoral Research Associate, University of Virginia.

1 Introduction

Why do states make deep alliance treaties? Around half of all alliances with active military support obligations also include commitments of peacetime defense cooperation and policy coordination (Leeds et al., 2002). Despite the prevalence of alliance treaty depth, we have little idea when states add depth to their alliances and why they might prefer depth to other means of establishing credible commitments. Understanding treaty depth is also worthwhile because depth changes alliance politics. Greater credibility encourages non-major power members of deep alliances to reduce military spending (Alley, 2020). Thus, treaty depth shapes credibility and the distribution of military spending among alliance members.

In this paper, I explain why states make deep alliance treaties. Deep alliances formalize extensive defense cooperation by requiring additional military policy coordination and cooperation beyond a promise of military intervention. While shallow alliances offer arms-length military support, deep treaties lead to closer ties between alliance members. Common sources of depth include an integrated military command, military aid, a common defense policy, basing rights, international organizations, specific capability contributions and companion military agreements.

I argue that states use treaty depth to increase the credibility of their alliance commitments while managing political scrutiny of alliance commitments. I start with the premise that treaty depth and unconditional promises of military support are two costly ways states can increase the credibility of their alliance commitments. I then argue that electoral institutions affect how states use these credibility sources. Because elected leaders face scrutiny from voters, they use policies that limit their exposure to attacks by opposition politicians. Treaty depth is not very transparent, as the costs and benefits are hard to articulate in ways that are accessible to voters. Unconditional promises of military support commit to military intervention regardless of circumstances. Such blanket commitments expose voters to the costs of war, which makes unconditional military support an easy target for opposition politicians.[1] Therefore, I expect that electoral politics encourages

[1]Mattes (2012*b*) Chiba, Johnson and Leeds (2015) and Fjelstul and Reiter (2019) argue that democracies often

democracies to design deep alliances with conditional promises of military support.

I test the argument with a statistical analysis of offensive and defensive alliances from 1816 to 2007 and then examine the theoretical mechanisms in the case of NATO. I estimate a series of statistical models to assess the association between democratic institutions in the most capable alliance member and treaty design, including bivariate models that adjust for correlated errors in treaty depth and unconditional military support equations (Braumoeller et al., 2018). In these analyses, I disaggregate democratic institutions into competitive elections, open political competition, and executive constraints. In general, there is consistent evidence that electoral institutions in the alliance leader lead to higher treaty depth, but decrease the probability of unconditional military support.

This paper contributes to knowledge of alliance treaty design and how domestic politics affects alliance choices. Scholars have long acknowledged a connection between democracy and alliances (Lai and Reiter, 2000; Gibler and Wolford, 2006; Mattes, 2012*b*; Warren, 2016; McManus and Yarhi-Milo, 2017). Connecting domestic electoral institutions and treaty depth addresses an important gap in the literature. The process of alliance treaty negotiation and design is understudied (Poast, 2019), and there is little research on treaty depth because the nascent alliance treaty design literature emphasizes conditions on military support. Existing research identifies entrapment concerns (Kim, 2011; Benson, 2012) and democratic alliance membership (Mattes, 2012*b*; Chiba, Johnson and Leeds, 2015) as two notable sources of conditional obligations.[2]

Two studies of alliance treaty design examine similar concepts to treaty depth, but both have important limitations. First, Mattes (2012*b*) finds that members of symmetric bilateral alliances where one partner has history of violation are more likely to use military institutionalization to increase treaty reliability. This paper makes an important contribution, but it does not differenti-

make conditional alliance commitments to avoid paying audience costs. I discuss the similarities and differences between this audience costs approach and my electoral scrutiny argument in the argument section.

[2]Fjelstul and Reiter (2019) supplement research on conditionality by arguing that democracies use incomplete alliance contracts to limit audience costs.

ate between the costs and benefits of issue linkages, military institutionalization and conditional obligations the argument, only analyzes bilateral alliances, and uses a military institutionalization measure (Leeds and Anac, 2005) that understates the amount of variation in treaty depth. Second, while checking the validity of a latent measure Benson and Clinton (2016) find that foreign policy agreement, major power involvement and treaty scope increase depth. Benson and Clinton define depth as how costly alliance obligations are in general, however, so their latent measure of depth includes secrecy and issue linkages and captures a broader concept than military cooperation. Neither study explains why states prefer different sources of alliance credibility.

Therefore, we still do not understand why alliance members add treaty depth when there are multiple ways to establish credible commitments. To explain deep alliances, I compare treaty depth and unconditional military support. Although treaty depth and unconditional military support increase alliance credibility, depth is less vulnerable to electoral criticism. Domestic political institutions shape who scrutinizes leaders foreign policy decisions and how that scrutiny takes place, so leaders can strategically employ different foreign policy tools to constrain critics.

My argument and findings have two implications. First, they add important nuance to existing claims that democracies prefer limited alliance commitments (Mattes, 2012*b*; Chiba, Johnson and Leeds, 2015; Fjelstul and Reiter, 2019). My argument suggests that even if democracies screen the breadth of their commitments, they form deeper alliances on other dimensions.[3] Furthermore, I add to the rich literature on domestic politics and international cooperation e.g. (Downs and Rocke, 1995; Fearon, 1998; Leeds, 1999; Mattes and Rodríguez, 2014). If democracies reassure partners with deep alliance commitments, audience costs may push democracies to undertake strong international commitments with less electoral salience.[4]

The paper proceeds as follows. In the next section, I lay out the argument and hypothesis.

[3]This paper examines a slightly different sample than earlier research, which sometimes includes consultation pacts. I focus on alliances with active military support.

[4]For example, in environmental agreements, democracies use soft law commitments to avoid audience costs of violation (Böhmelt and Butkutė, 2018), but there may be other agreements that are less salient and more binding.

Then I summarizes the data and research design. After this, I describe the results and detail the alliance treaty design process in NATO. In the final section I summarize the results and offer some concluding thoughts.

2 Argument

In this argument, I first situate treaty depth in a general alliance politics framework. After that, I offer a general explanation of how treaty depth and unconditional military support increase the credibility of alliance commitments. Based on the different costs and risks of treaty depth and unconditional military support, I then detail why I expect that democracies often add depth, but are less likely to offer unconditional support.

Alliances are self-enforcing contracts or institutions where states promise military intervention (Leeds et al., 2002; Morrow, 2000). When faced with external threats in an anarchic international system, states form alliances to aggregate military capability and secure their foreign policy interests (Altfield, 1984; Smith, 1995; Snyder, 1997; Fordham and Poast, 2014). Alliance participation has several costs and benefits. Beyond the benefit of possible military support, alliances also clarify international alignments (Snyder, 1990) and support economic ties (Gowa, 1995; Li, 2003; Long, 2003; Fordham, 2010; Wolford and Kim, 2017). The costs of alliance participation include opportunism and lost foreign policy autonomy (Altfield, 1984; Morrow, 2000; Johnson, 2015). Opportunism in alliances has three forms; abandonment (Leeds, 2003; Berkemeier and Fuhrmann, 2018), entrapment in unwanted conflicts (Snyder, 1984), and free-riding (Morrow, 2000).

To form an alliance, states must have similar foreign policy interests (Morrow, 1991; Smith, 1995; Fordham and Poast, 2014), especially in their proposed war plans (Poast, 2019). The treaties that formalize promises of military support take many forms (Leeds, Long and Mitchell, 2000; Leeds et al., 2002; Benson, 2012; Benson and Clinton, 2016). Treaty design shapes the costs and benefits of treaty participation and addresses potential opportunism. Alliance members use formal

commitments to increase the credibility of military intervention promises (Morrow, 2000). In the face of abandonment concerns, alliance members and other states use the costs of the alliance commitment to assess reliability. While alliance formation alone adds some credibility, treaty depth and unconditional promises of military support are further costly commitments that add credibility, albeit in different ways.

Unconditional alliances promise military intervention under any circumstance. These promises generate credibility in a way that increases the risk of entrapment in unwanted conflicts, however. If an ally invokes a treaty when a state would rather stay out, states must choose between fighting in an unwanted war, or paying the reputational (Gibler, 2008; Crescenzi et al., 2012) and audience (Fearon, 1997) costs of treaty violation. When alliance members fear divergent allied interests will create this entrapment or violation dilemma, they constrain military support to specific circumstances (Kim, 2011; Benson, 2012).[5] Conditional alliances limit promises of intervention to particular regions, conflicts, or instances of non-provocation (Leeds, Long and Mitchell, 2000). Conversely, offering unconditional military support indicates more shared foreign policy interests and less fear of entrapment. Under unconditional commitments alliance members hazard the costs of fighting, entrapment or treaty violation in more circumstances, which adds credibility.

Unconditional promises of military support reflect substantial foreign policy agreement. Alliances face a time-inconsistency problem, however (Leeds and Savun, 2007). Although treaties fix conditions on military support, foreign policy interests change. If a partner calls on a state to fight in an unwanted conflict after interests shift, states must bear either entrapment or audience and reputation costs. When audience costs are less costly than fighting, which is usually the case, states will violate the treaty and pay the audience costs.[6]

Treaty depth offers another way to establish credibility. In a deep alliance, states supplement promises of military support with commitments of peacetime cooperation. Depth adds to the per-

[5] Such deliberate alliance design means clear instances of entrapment are rare (Kim, 2011; Beckley, 2015).

[6] This may be another reason that entrapment, or fighting in unwanted conflict, is rare.

ceived reliability of an alliance by providing opportunities for states to fulfill treaty obligations in peacetime (Morrow, 1994). Implementing deep treaty obligations is a sunk cost signal of commitment. Observing that alliance members adhere to peacetime promises suggests that they will also honor promises of military support.

Therefore, when states want to increase the credibility of their alliance commitments, depth and unconditional military support are two common policy tools. Here, I identify when states prefer treaty depth to unconditional military support.[7] Domestic political institutions shape the foreign policy audiences that leaders depend on to continue in office (Weeks, 2008). In democracies, voters are leaders' key audience for foreign policy decisions. Because depth is less salient in electoral politics, but unconditional military support can be a salient tool for electoral criticism, I expect that alliances with democratic leaders will be more likely to have high depth and conditional military support.

2.1 Democratic Alliance Leadership and Treaty Design

There are three key actors in this argument: incumbent leaders, voters, and opposition politicians. In democracies, voters are the selectorate, or the set of actors from which a potential leader must assemble a coalition of supporters to hold office (Bueno de Mesquita et al., 2002). Leaders create these coalitions by providing goods to their supporters, which usually take the form of collective goods in democracies. This argument assumes that the voting public in democracies scrutinizes foreign policy decisions, but has limited foreign policy information. As such, few voters are sophisticated foreign policy analysts. Incumbent leaders, who are responsible for alliance treaty design, want to remain in office. Opposition politicians want to replace the incumbent, and to do so, must convince enough voters that they will provide more and better goods. One way opposition politicians can do this is by detailing the costs and consequences of incumbent policies.

[7] Prospective alliance members could also make an arms-length alliance commitment with neither depth nor unconditional military support, or use treaty depth to address time-inconsistency problems with unconditional military support.

Effective critiques allow voters with limited information to grasp the consequences of incumbent policies, and thus perhaps change their support.

Leaders pursue foreign policy goals such as making credible alliance commitments in ways that limit exposure to opposition scrutiny whenever possible. To realize this aim, democratic leaders may use less transparent policies to achieve their goals. One example of this phenomenon is democratic leaders' emphasis on non-tariff barriers in trade policy. Kono (2006) argues that democratic leaders use non-tariff barriers instead of tariffs to reduce electoral scrutiny on their policies. The costs of non-tariff barriers are complex and difficult to estimate, even for sophisticated observers, so it is difficult for opposition politicians to use them to criticize the incumbent. Tariffs, on the other hand, translate directly into consumer prices in ways that are easy to understand and use in short electoral attacks. The complexity of non-tariff barriers makes them less vulnerable to electoral scrutiny, so democracies engage in "optimal obfuscation" and substitute non-tariff barriers for tariffs.

Democracies use treaty depth in alliances for the same reasons that they employ on non-tariff barriers in trade policy. Like any source of alliance credibility, adding depth to alliances is costly, but the costs are hard to express in useful electoral critiques for two reasons. First, treaty depth is complex- it often includes multiple overlapping obligations like bases, joint planning and international organizations. Second, the costs of treaty depth occur in peacetime, which makes them less salient and harder to disentangle from other aspects of peacetime foreign policy. Depth increases a state's foreign obligations, but the exact burden of bases, international institutions and other sources of depth is hard to measure.

Experts regularly discuss the peacetime costs of alliances, but these debates are not especially accessible to voters. For example, foreign policy professionals in the United States have substantial and unresolved disagreements about the costs of US alliances e.g. (Brooks, Ikenberry and Wohlforth, 2013; Posen, 2014; Brands and Feaver, 2017). Cost estimates of US overseas bases alone range from 100$ billion (Vine, 2015) to 24$ billion, and depend on methodological and measure-

ment choices. These calculations are further complicated by cost offsets by US partners like South Korea, Japan and Germany, which are notoriously difficult to quantify (Lostumbo et al., 2013). Complex debates like the US discussion of the costs and benefits of alliances in peacetime show the complexity of assessing deep alliances. Such complexity makes treaty depth a less transparent source of alliance treaty credibility.

Furthermore, democratic leaders can "sell" deep alliances to voters by arguing that they lead to more efficient defense spending. Reduced military spending allows leaders to allocate more resources to other goods. Kimball (2010) argues that states with larger minimum winning coalitions may form alliances to "contract out" defense spending and provide more public goods. Leaders can argue that in deep alliances with policy coordination and cooperation, specialization and efficiency gains will limit increases in defense spending, thereby reducing the public goods burden on voters. The extent to which deep alliances encourage more efficient defense spending is uncertain, however, so it further muddles the cost-benefit calculation around deep alliances.

Due to the nebulous costs and benefits of treaty depth, it is not useful fodder for electoral criticism. To criticize a deep alliance, opposition politicians would have to devote substantial time and resources to explaining its consequences and costs. This higher cost of informing voters discourages opposition politicians from criticizing treaty depth. Thus, democratic leaders will often design deep alliances.

Unlike depth, the costs of unconditional military support are easy for voters to grasp, so opposition politicians can use it for electoral advantage. Promising military intervention without any limits increases the risk that voters will bear the costs of fighting on behalf of allies. Such automatic obligations of intervention are an easy target for opposition politicians, who can claim that the alliance gives allies too much freedom and risks entrapment in far-flung, irrelevant conflicts. This is a more memorable and useful critique than a nuanced discussion of the peacetime costs of deep alliances. Voters can easily grasp that an unconditional alliance opens up potential wars they may then have to fight in or pay for. Although the costs of unconditional military support are not

realized unless the alliance is invoked, they are easily understood. Unconditional military support is therefore a more transparent source of alliance credibility than treaty depth.

The public in democracies also pays more attention to military interventions and crises. Baum (2002) shows that even otherwise inattentive individuals often receive information about foreign policy crises through entertainment news. As such, alliance obligations that raise the specter of war are more likely to capture public attention.

Because voters can easily grasp the potential consequences of unconditional military support, and pay attention to the risk of war, opposition politicians have low costs of using it to criticize the incumbent. When incumbent leaders anticipate such criticism, they will avoid making such a transparent and salient alliance commitment. Democratic leaders are therefore less likely to offer unconditional military support.

Democracy has three key institutional features— open elections for leadership, open political competition and legal constraints on executive action. Elections are the key source of democratic decisions about treaty depth and unconditional military support. My argument implies that selecting leaders through elections is the main reason democracies use treaty depth instead of unconditional military support, as it makes leaders accountable to voters. Political competition allows opposition groups to hold leaders to account for foreign policy shortcomings (Potter and Baum, 2014), so it may have a similar effect.[8]

Of course, democracies may not get what they prefer in alliance negotiations. More capable states have greater influence on alliance negotiations (Mattes, 2012*b*), because their partners lose out on more foreign policy benefits if they are out of the alliance. The most capable state is often the alliance "leader," and their preferences carry more weight. Therefore, to understand how democracy shapes alliance treaty design, I conceptualize democratic influence in terms of the political institutions of the most capable alliance member. Alliance leaders with open electoral

[8]Executive constraints may have a different effect by encouraging leaders to design alliances in ways that precommit their successors to uphold the treaty or increasing elite scrutiny of foreign commitments.

competition will often form deep alliances with conditional obligations.

Because depth is a less transparent form of reassurance, democracies will often design deep alliance treaties. This relationship is the result of electoral considerations. Therefore, open elections in the most capable alliance member at the time of treaty formation will increase treaty depth.

> TREATY DEPTH HYPOTHESIS: OPEN ELECTIONS IN THE MOST CAPABLE ALLIANCE MEMBER AT THE TIME OF FORMATION WILL INCREASE ALLIANCE TREATY DEPTH.

I also expect that democratic alliance leadership will reduce the probability of unconditional military support, because this source of credibility is fairly transparent. This second claim complements existing arguments and findings. Mattes (2012*b*) and Chiba, Johnson and Leeds (2015) both show that democracies are more likely to design conditional alliances. Based on this logic, open election in the most capable member when the alliance formed should reduce the probability of unconditional military support.

> UNCONDITIONAL MILITARY SUPPORT HYPOTHESIS: OPEN ELECTIONS THE MOST CAPABLE ALLIANCE MEMBER AT THE TIME OF FORMATION WILL DECREASE THE PROBABILITY THAT THE ALLIANCE OFFERS UNCONDITIONAL MILITARY SUPPORT.

Mattes (2012*b*) and Chiba, Johnson and Leeds (2015) attribute the negative relationship between democracy and unconditional military support to higher audience costs from violating international commitments in democracies. In alliance politics, audience costs could occur when leaders violate treaty obligations, so long as the public is paying attention to the foreign policy issue (Slantchev, 2006; Potter and Baum, 2014) and prefers compliance (Chaudoin, 2014; Kertzer and Brutger, 2016). Violating international promises can create audience costs for democratic leaders. Democratic leaders fear that if they violate international commitments, voter disapproval could lead to their removal from office. Because democratic leaders face substantial audience

costs, they make limited commitments that are easier to fulfill. Limiting alliance commitments through conditional military support reduces audience costs because it is easier for democratic leaders to claim that the conditions for intervention were not met, or that new information eliminates intervention obligations (Levendusky and Horowitz, 2012).

My electoral politics argument and these audience costs arguments share an emphasis on domestic political actors, but also have important differences. In an audience costs argument, leaders reason backwards from the risk of future violations to design alliance treaties. Electoral politics emphasizes what alliance treaty designs leaders can implement in the present without provoking effective criticism by opposition politicians.

The two mechanisms- audience costs and electoral politics- may both operate in democracies. Electoral politics probably has more weight for two reasons, however. First, the audience costs argument relies on leaders having substantial foresight to anticipate the audience costs of treaty violation. Immediate electoral concerns are likely more pressing than a longer horizon of future violations. In a two-level game with international and domestic constraints (Putnam, 1988), leaders are focused on what agreement works for their domestic constituency in the present. To underline this point, imagine two hypothetical statements in internal political discussions of a democratic government. In one, a democratic leader says: "there's no way we can make that that sort of alliance commitment- the opposition will have a field day with these obligations." In another, the same leader says: "there's no way we can make that sort of alliance commitment- one day the public might vote against us for violating the treaty obligations." The first hypothetical statement seems to have more face validity.

Second, the audience costs argument does not consider leadership turnover, which is a key feature of democracies. The leaders who design an alliance may not be the ones who pay the future audience costs of violation, so leaders may discount these costs. Audience costs of violation might even fall to successors from competing political parties. As a result, democratic leaders could increase the audience costs of their alliance commitments in order to precommit their successors

to the alliance (Mattes, 2012*a*).

Although the electoral politics and audience costs arguments make the same prediction about unconditional military support, they make competing predictions about treaty depth. If voters punish any violation of international commitment and democratic leaders fear these audience costs, then democracies should prefer shallow alliances. Violating deep alliance treaty provisions would generate audience costs, and democratic leaders would try to avoid having to pay these costs. As Chiba, Johnson and Leeds (2015, pg. 980) write, "domestic costs can make democratic states wary of engaging in agreements requiring broad and/or deep cooperation." Though this statement was motivated by the negative relationship between democracy and conditional obligations, it captures how the audience costs logic might apply to treaty depth. An audience costs logic expect that democracies make shallow alliances with conditional obligations, while the electoral politics argument predicts deep democratic alliances with conditional obligations.

My argument uses electoral politics to explain why democracies often form deep alliances. What about autocracies? There is substantial variation in how autocracies select leaders. For example, in single-party states, leaders rely on support from domestic elites, which affects their foreign policy decisions (Weeks, 2014). Domestic elites in single party states are a smaller and better informed selectorate than the public in democracies, however. Party elites are more informed about foreign policy than the public in democracies, so they are more likely to scrutinize foreign entanglements and unconditional military support. In general, no autocratic selectorate has the same limited foreign policy information as a democratic electorate. Single-party and military regime leaders face an informed domestic elite, and personalist leaders rely on a small selectorate. Therefore, assuming that all autocracies are equivalent, relative to democracies is sufficient for testing the electoral politics argument.[9]

I expect that democratic alliance leadership will increase treaty depth, but reduce the likelihood

[9]Examining heterogeneity among autocracies in alliance treaty design is an interesting subject for future research, however.

of unconditional military support, both through electoral politics. This argument also provides crucial insight for research design. Because treaty depth and unconditional military support both increase treaty credibility, these two outcomes are likely correlated. Note that the argument is agnostic about the order in which states choose these credibility sources.[10] Rather, leaders must balance both sources of credibility in the course of alliance negotiations. As such, part of the research design includes bivariate models of depth and unconditional support. In the next section, I describe how I test this claim about the association between democratic alliance leadership and alliance treaty design with a series of statistical models. I first describe the key variables in the analysis, then provide more detail on the estimation strategy.

3 Research Design

To examine my prediction that democracies prefer deep and conditional alliances, I employ data from the Alliance Treaty Obligations and Provisions (ATOP) Dataset (Leeds et al., 2002). The sample includes 289 alliances with either offensive or defensive obligations, which is the set of treaties with active military support.[11] I use the ATOP variables to generate measures of treaty depth and unconditional military support.

I measure treaty depth with a semiparametric mixed factor analysis of eight ATOP variables (Murray et al., 2013). Unlike other measures, this approach captures the full spectrum of variation in defense cooperation across alliances, as it is more flexible than ordinal measures (Leeds and Anac, 2005) and more focused on defense cooperation than another latent measure (Benson and Clinton, 2016).[12] The estimator behind this measure relaxes problematic distributional assumptions about the correlation between the latent variable values, so it is more flexible and robust than other factor analytic models. Beyond the semiparametric aspect, this model is a standard mixed

[10] Agreement on depth before conditions on support or the opposite order are both possible.

[11] Results are robust to adjusting for non-random selection into alliances. See the appendix for details.

[12] See the appendix for results with measures by Leeds and Anac (2005) and Benson and Clinton (2016), which lead to similar inferences. I also discuss the relative advantages of my measure in more detail.

Bayesian factor analysis.

Theoretically, I expect that depth has one latent dimension. The results of the factor analysis corroborate this expectation. While the Bayesian models do not contain a matrix of eigenvalues to implement scree plots and other standard checks of the number of dimensions.

My depth measure is essentially a weighted combination of ATOP's defense policy coordination, military aid, integrated military command, formal organization, companion military agreement, specific contribution, and bases variables, where the weights are estimated by the measurement model. All eight variables increase alliance treaty depth, but defense policy coordination and an integrated command add the most to depth, as shown in the top panel of Figure 1.

The measurement model predicts each alliance's treaty depth using the factor loadings. The bottom panel of Figure 1 summarizes the posterior distributions of the latent treaty depth measure for every alliance in the data. There is substantial variation in alliance treaty depth. Around half of all formal alliance treaties have some depth, and depth varies widely across alliances. In the analysis, I measure treaty depth using the mean of the latent depth posterior for each alliance. The posterior mean captures the central tendency of latent treaty depth, and I show in the appendix that results are robust to accounting for uncertainty in the latent measure.

The other outcome variable is a dummy indicator of unconditional military support. Using ATOP's information on whether defensive or offensive promises are conditional on specific locations, adversaries, or non-provocation, I set this variable equal to one if the treaty placed no conditions on military support. 123 of 289 alliances offer unconditional military support.

The key independent variable is a dummy indicator of competitive elections in the most capable alliance member in the year of alliance formation. I use the Polity2 political institutions data for these measures of democratic institutions and code the alliance leader as the state with the largest CINC score (Singer, 1988).[13] For elections, I use the Polity's executive recruitment concept, and

[13]In some models, I start with an estimate of the most capable alliance members' aggregate Polity score before presenting results with elections, constraints and competition.

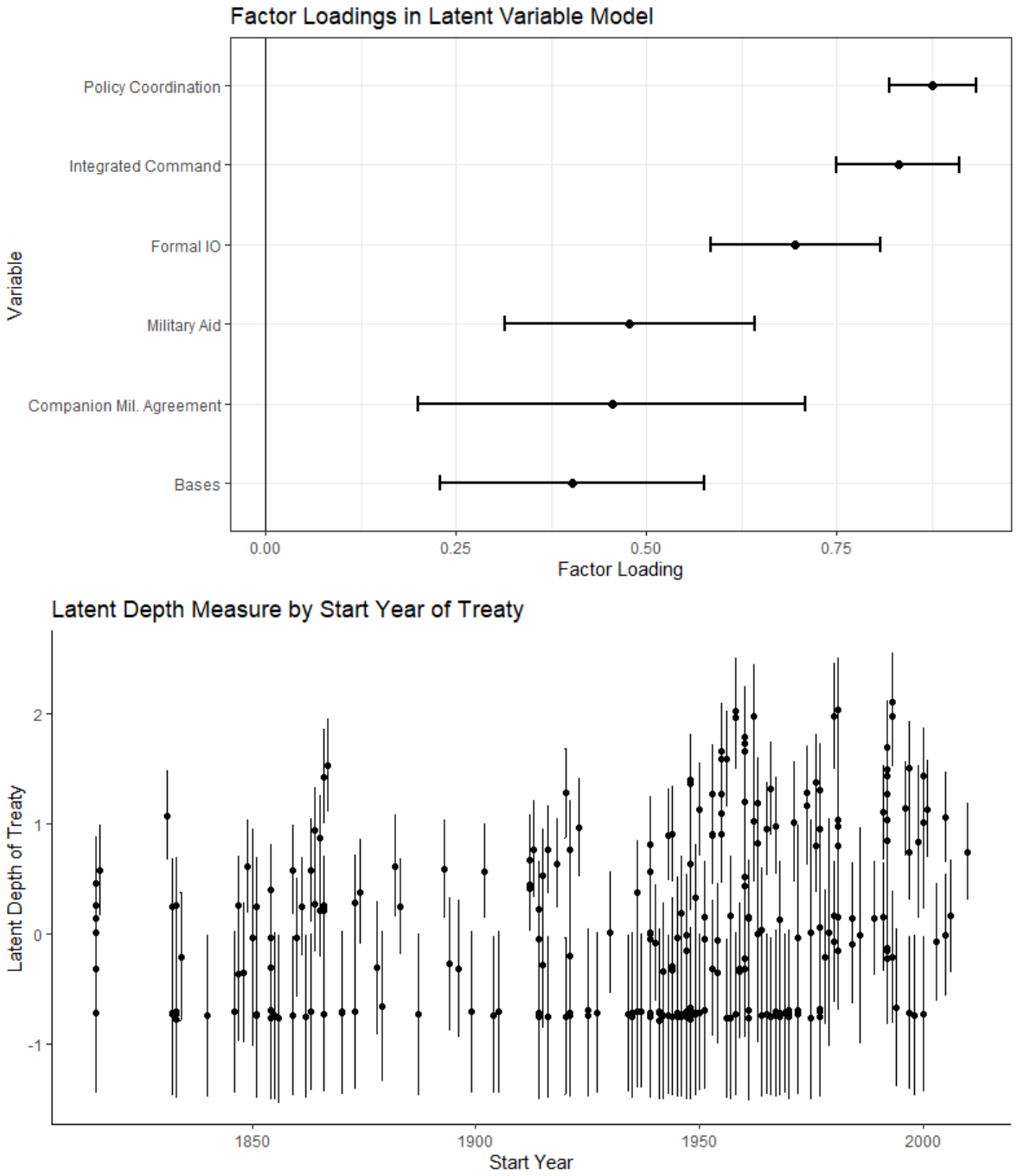

Figure 1: Factor Loadings and posterior distributions of latent alliance treaty depth measure. Estimates from a semiparametic mixed factor analysis of offensive and defensive ATOP alliances from 1816 to 2007.

set a dummy indicator equal to one if the most capable state has competitive elections, because my argument emphasizes full electoral competition for leadership with a viable opposition. This measure emphasizes the influence of the most capable alliance member and captures the domestic institutions and potential sensitivity of that state to audience costs and entrapment.[14] I also use the Polity data to create two other measures of key democratic institutions— executive constraints and open political competition. I code executive constraints as equal to one if the executive constraints concept codes a state as having executive parity or subordination to other branches of government and zero otherwise. Last, I include a dummy indicator of open competition if a state has institutionalized open electoral participation.

3.1 Estimation Strategy

I use a progression of statistical models to examine how domestic political institutions affect treaty depth. I start with univariate models of treaty depth and unconditional military support. Because common unobserved factors may affect depth and conditionality, I then combine the separate models into a bivariate model with correlated errors (Braumoeller et al., 2018). Without modeling the correlation between depth and unconditional military support, univariate models may produce biased estimates. My bivariate model is a generalization of the well-known bivariate probit model, but it is not fully recursive, because I do not include depth or unconditional military support as endogenous predictors.[15] Bivariate estimation emulates the seemingly-unrelated regression model of Fjelstul and Reiter (2019), who also note that different alliance treaty design decisions are correlated.

To predict unconditional military support, I fit a binomial model with probit link function. The alliance leader democracy measures are the key independent variables. Modeling depth is more

[14] I find similar results with a model that uses the proportion of states with these three institutions as the key independent variable, and report them in the appendix. The proportion of democracies measures the prevalence of democratic membership, and has a strong positive correlation with the democracy of the most capable member.

[15] A fully recursive model requires instruments for identification.

complicated because the latent measure is skewed. To facilitate model fitting, I transformed latent depth to range between zero and one and modeled it with a beta distribution.[16] The flexibility of the beta distribution helps predict mean latent depth.[17]

In the beta and probit models, I control for several likely correlates of alliance treaty design and leader democracy. Key controls include dummy indicators of asymmetric alliances between non-major and major powers and symmetric alliances between major powers (Mattes, 2012*b*)[18] as well as the average threat among alliance members at the time of treaty formation (Leeds and Savun, 2007). I also control for foreign policy similarity using the minimum value of Cohen's κ in the alliance (Häge, 2011). I draw on the ATOP data (Leeds et al., 2002), to adjust for for asymmetric treaty obligations, the number of alliance members, whether any alliance members were at war and the year of treaty formation.[19] To capture the role of issue linkages in facilitating alliance agreements (Poast, 2012), I include a dummy indicator of whether the alliance made any economic commitments.[20] Last, I include a count of foreign policy concessions in the treaty, because concessions can facilitate agreement in alliance negotiations (Johnson, 2015).

After estimating the depth and unconditional military support models separately, I use a generalized joint regression model (GJRM) (Braumoeller et al., 2018) to combine them in a bivariate model. This estimator uses the probit and beta models from the univariate specifications, but employs smoothed terms for threat and the start year of the alliance and estimates correlations in the error terms of the two processes. GJRM uses copulas to model correlated errors in multiple equation models, which makes it more flexible than parametric models and facilitates causal in-

[16] I make similar inferences with a robust regression estimator- see the appendix for details. I also considered log-logistic, Dagum and inverse Gaussian distributions for the outcome, but AIC and residuals showed that the beta model fit best.

[17] Using a beta distribution for the depth outcome also facilitates fitting models that account for uncertainty in the latent measure, which I include in the appendix.

[18] This leaves symmetric alliances between major powers as the base category for these two binary variables.

[19] The effect of the start year of the alliance enters the univariate models in a linear fashion, but I use a smooth term to capture possible non-linear relationships in the bivariate model.

[20] In the appendix, I implement a trivariate model of treaty depth, unconditional military support and issue linkages, because issue linkages also increase treaty credibility (Poast, 2013).

ference. Adjusting for unobserved correlations between depth and unconditional military support ensures accurate inferences about democracy and other covariates. Copulas are distributions over functions, and relax potentially problematic assumptions about the shape of the correlation in the error terms. I fit models with every possible copula, and selected the best-fitting model using AIC, conditional on that estimator having converged.[21] The T copula provides the best model fit.[22] The GRJM approach offers a general and flexible way to estimate the bivariate model while relaxing distributional assumptions about the shape of the error correlation.

In general, the research design employs a progression of empirical models. I start with descriptive statistics. Then I fit separate models of treaty depth and unconditional military support, followed by a bivariate model. Finally, I use a bivariate model to estimate how elections, open political competition and executive constraints affect alliance treaty design. The next section summarizes the results.

4 Results

My findings are consistent with the claim that competitive elections in the most capable alliance member lead to treaties with conditional support and greater depth. Competitive elections increase depth and decrease the probability of unconditional military support. Executive constraints increase the probability of unconditional military support and decrease treaty depth, however, which is consistent with a precommitment argument. The net effect of democracy on treaty depth is still positive, but it is more mixed for unconditional military support.

Descriptive statistics are consistent with the two hypotheses. The average alliance leader Polity

[21] GJRM uses maximum likelihood estimation, and diagnostics for the gradient as well as the information matrix suggest that the models converged.

[22] In the GJRM estimator, I use a third equation to model heterogeneity in the error term correlations, which I expect depends on the start year of the alliance. In particular, I suspect that correlations in unobservable factors between treaty depth and unconditional promises of military spending vary over time. Using the start year of the treaty to predict error correlations captures common unobserved shocks from the international context. For example, Kuo (2019) shows how European politics encouraged the proliferation of secret alliances before World War I.

score among alliances with unconditional military support is -2.55. The average leader Polity score in conditional alliances is -.24.[23] There is also a modest positive correlation between alliance leader Polity scores at the time of formation and treaty depth. Figure 2 shows how the average Polity score of the most capable member when the alliance formed differs across conditions on military support and treaty depth. In Figure 2, each quadrant corresponds to a combination of treaty depth and conditionality. To create two bins from the continuous latent depth measure for Figure 2, I classified deep alliances as treaties with a latent depth score above the median value for. The leading members of deep and conditional alliances have higher Polity scores, on average. Conversely, unconditional alliances with little depth have the lowest average alliance leader Polity score.

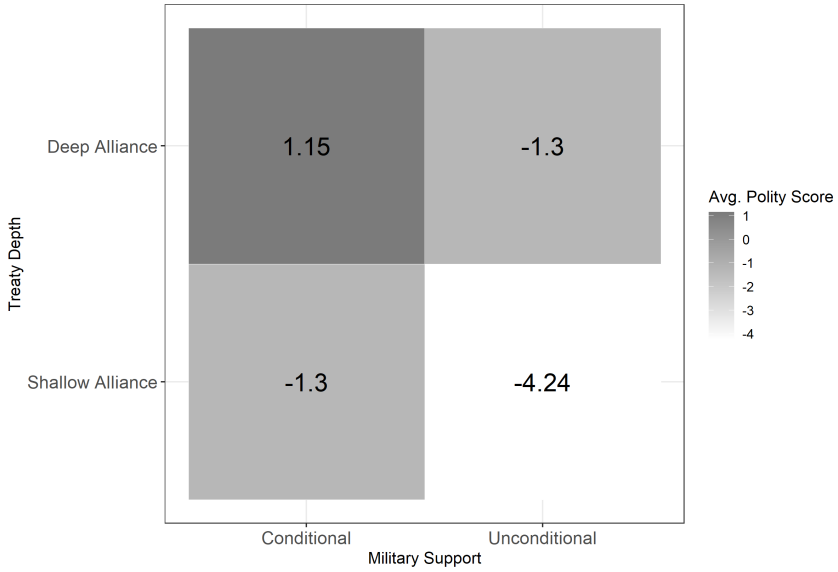

Figure 2: Average of the most capable alliance member's Polity score when the alliance formed in four groups of alliance from 1816 to 2007. Divisions between alliances based on unconditional military support and treaty depth. Darker quadrants mark a higher average democracy score for that group of alliances, and the text in each box gives the precise value.

These descriptive results do not adjust for potential confounding factors, however. Therefore,

[23] Based on a t-test, the difference between these values is statistically significant.

I describe results from statistical models of depth and unconditional military support, starting with separate models. Table 1 shows results from a beta model of treaty depth and a binomial model of unconditional military support with a probit link function. The results are partially consistent with the hypotheses. First, I find a positive association between the democracy of the most capable alliance member and treaty depth. For unconditional military support, the parameter estimate is negative, but the 95% confidence interval for alliance leader democracy includes zero and positive values.

I use the coefficient estimates in Table 1 to assess the substantive impact of alliance leader democracy in Figure 3. This figure plots the predicted value of both outcomes based on the alliance leader's Polity score. The left-hand plot of Figure 3 shows the association between the democracy of the most capable alliance member and the predicted probability of unconditional military support. This relationship is weaker than expected. These results diverge from previous findings that democratic alliance membership leads to limited obligations (Mattes, 2012*b*; Chiba, Johnson and Leeds, 2015), perhaps due to a different sample of alliances, different model specifications, and my emphasis on the alliance leader.

The right-hand plot in Figure 3 shows a positive relationship between alliance leader democracy and treaty depth. Alliances with a democratic leader have greater treaty depth, all else equal. In expectation, the predicted value of rescaled treaty depth in an alliance with a fully democratic leader is roughly .1 greater than an alliance with a fully autocratic leader. As rescaled depth ranges between 0 and 1, this is a substantively large relationship that matches the treaty depth hypothesis.

Although the results from separate models are informative, they do not account for correlations in the error terms of the depth and unconditional support models, which could affect inferences. I now report the results of a bivariate model of depth and unconditional military support in Table 2. This table contains results from both equations of the GJRM.[24] As in Table 1, I find a positive relationship between the democracy of the leading alliance member and treaty depth, but a weak

[24]I mark smoothed terms with the letter s.

Table 1: Independent Models of Alliance Treaty Depth and Unconditional Military Support in ATOP Offensive and Defensive Alliances from 1816 to 2007.

	Dependent variable:	
	Latent Depth (rescaled)	Unconditional Military Support
	beta	*probit*
	(1)	(2)
Alliance Leader Polity	0.023	−0.018
	(0.002, 0.043)	(−0.047, 0.011)
Foreign Policy Concessions	−0.057	0.021
	(−0.209, 0.096)	(−0.197, 0.239)
Number of Members	0.016	−0.030
	(−0.011, 0.043)	(−0.077, 0.018)
Wartime Alliance	−0.309	−0.954
	(−0.658, 0.040)	(−1.570, −0.338)
Asymmetric Obligations	0.189	0.035
	(−0.155, 0.532)	(−0.467, 0.537)
Asymmetric Capability	0.347	0.651
	(−0.120, 0.814)	(−0.218, 1.520)
Non-Major Only	0.275	1.146
	(−0.228, 0.779)	(0.266, 2.027)
Average Threat	1.248	1.630
	(0.376, 2.120)	(0.295, 2.965)
Foreign Policy Disagreement	0.197	0.394
	(−0.258, 0.653)	(−0.306, 1.094)
Start Year	0.004	0.015
	(0.0004, 0.007)	(0.010, 0.021)
Constant	−8.929	−31.655
	(−15.679, −2.179)	(−43.220, −20.091)
Observations	277	277
Log Likelihood	54.349	−132.467

Note: 95% Confidence Intervals in Parentheses.

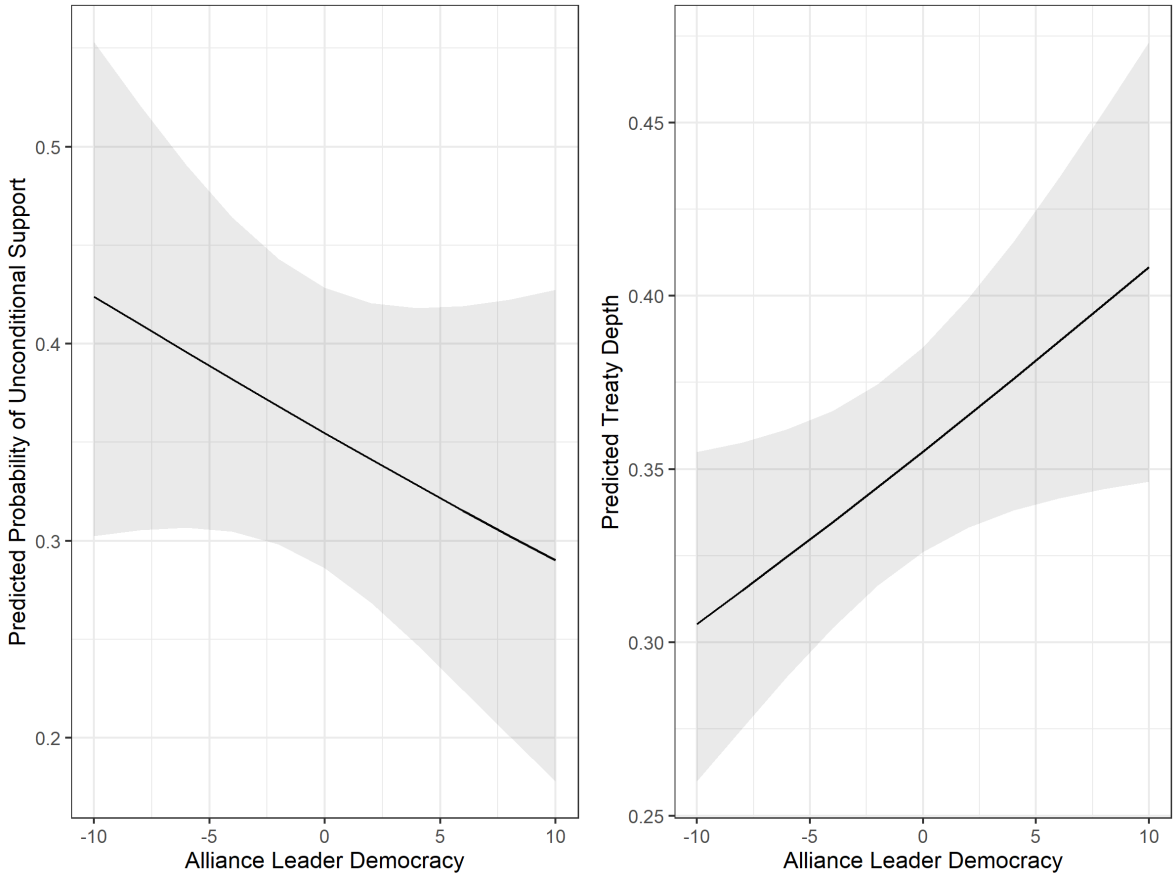

Figure 3: Predicted probability of unconditional military support and predicted treaty depth across the range of alliance leader Polity scores. The line marks predicted values, and the shaded areas encapsulate the standard errors. Predictions based on coefficient estimates from probit and beta regression models, holding all other variables at their mode or median.

negative relationship between democratic influence and treaty depth. The control variables in this model are also interesting and somewhat different from the univariate models. Asymmetric capability and the number of alliance members both increase depth. Asymmetric capability in an alliance and symmetric alliances between non-major powers are more likely to include unconditional military support than symmetric major power alliances. I also find that alliances with more members and wartime treaties have a lower probability of unconditional military support. Last, threat and the year of alliance formation increase unconditional military support and treaty depth.

	Uncond. Mil. Support		Latent Depth	
	Estimate	Std. Error	Estimate	Std. Error
Alliance Leader Polity	-0.0173979	0.0158094	0.0262429	0.0097732
Economic Issue Linkage	0.2232389	0.2006227	-0.0060972	0.1458203
FP Concessions	-0.1468542	0.1214414	-0.0339923	0.0845875
Number of Members	-0.0994788	0.0264666	0.0179032	0.0129499
Wartime Alliances	-0.6274650	0.3157751	-0.0744869	0.1787959
Asymmetric Obligations	-0.0181268	0.2622665	0.1686232	0.1632100
Asymmetric Capability	0.9586816	0.3864164	0.3436770	0.2192153
Non-Major Only	1.7040882	0.3975041	0.0828621	0.2310327
FP Disagreement	0.1253382	0.3352438	0.3284441	0.2204690
s(Mean Threat)	7.3253441	43.4564525	1.0000004	16.8780421
s(Start Year)	4.7057429	49.8605879	3.3275472	39.7155651
(Intercept)	-1.0980618	0.4635789	-1.0810691	0.2485382

Table 2: Results from joint generalized regression model of treaty depth and unconditional military support. Sample is offensive and defensive alliances from 1816 to 2007. All smoothed terms report the effective degrees of freedom and the chi-squared term. The unconditional military support model is a binomial GLM with a probit link function. The treaty depth model is a beta regression. I model the error correlation between the two processes with a T copula.

Univariate and bivariate models generate similar inferences about democractic alliance leadership and treaty design. The Polity score of the most capable alliance member is positively correlated with treaty depth, but has at most a slight negative association with unconditional military support. Inferences about the control variables vary somewhat across the two models, however, which suggests that accounting for correlated errors is worthwhile.

4.1 Elections, Political Competition and Executive Constraints

Having analyzed aggregate democracy scores, I now distinguish between the three components of the Polity index. The key independent variables in this model are binary indicators of competitive elections, open political competition, and executive constraint through parity or subordination to other actors. All three factors could expose leaders to scrutiny of their foreign policy decisions and audience costs. I use a bivariate GJRM to estimate these effects.[25]

	Uncond. Mil. Support		Latent Depth	
	Estimate	Std. Error	Estimate	Std. Error
Competitive Elections	-1.3862036	0.5969913	1.0334447	0.3441959
Political Competition	0.1267747	0.4456283	-0.3968825	0.2894709
Executive Constraints	0.7810824	0.2758115	-0.3806161	0.2006471
Economic Issue Linkage	0.0786646	0.1830420	0.1099506	0.1466334
FP Concessions	-0.1284395	0.1256934	-0.1052689	0.0817796
Number of Members	-0.1004983	0.0271633	0.0268154	0.0139085
Wartime Alliances	-0.7495699	0.2448796	0.0599420	0.1700357
Asymmetric Obligations	-0.0230173	0.2251492	0.1766837	0.1620580
Asymmetric Capability	1.0281801	0.5255088	0.4985258	0.2426731
Non-Major Only	1.6291469	0.5180102	0.1175974	0.2551236
FP Disagreement	0.1726706	0.2975962	0.3405041	0.2124881
s(Mean Threat)	7.5870610	44.8092434	1.0000005	25.8169433
s(Start Year)	5.9742148	50.0279652	8.3362695	57.7689902
(Intercept)	-0.8925660	0.6081549	-1.3310577	0.2833844

Table 3: Results from joint generalized regression model of treaty depth and unconditional military support as a function of competitive elections, political competition and executive constraints in the most capable alliance member. Sample is offensive and defensive alliances from 1816 to 2007. All smoothed terms report the effective degrees of freedom and the chi-squared term. The unconditional military support model is a binomial GLM with a probit link function. The treaty depth model is a beta regression. I model the error correlation between the two processes with a T copula.

The three components of democracy have different consequences for alliance treaty design. First, elections decrease the probability of unconditional military support and increase treaty depth. This matches the argument— if leaders can be removed from office by competitive elections, they

[25] A T copula has the best model fit and AIC.

prefer treaty depth to unconditional military support because depth is less salient for voters. Second, the political competition coefficient for treaty depth is negative, albeit with substantial uncertainty. This implies that scrutiny of the executive from open political competition may restrain deep alliance commitments, but the effect is unclear. Political competition has no clear association with the probability of unconditional military support.

Last, executive constraints has the opposite effect of electoral competition on both credibility sources, which is interesting and unexpected, so I offer brief ex post explanations. First, I find that executive constraints reduce treaty depth. Constraints might reduce treaty depth by exposing the executive to scrutiny from other political elites who have ample foreign policy information and want to avoid foreign entanglements. Second, domestic institutions with executive parity or subordination increase the probability of unconditional military support. One explanation for the positive relationship between constraints and unconditional support is that democratic leaders attempt to commit successors with different foreign policy preferences to the alliance Mattes (2012*a*). Leadership turnover in democracies threatens international cooperation, because new leaders may have different supporters and preferences (Lobell, 2004; Narizny, 2007; Leeds, Mattes and Vogel, 2009). By making an unconditional promise of military support, leaders force successor governments to pay higher audience costs to break the alliance.

Taken together, the results from dividing democratic institutions may explain the aggregate democracy findings. The large effect of competitive elections drives the overall positive association between democracy and treaty depth, as it overwhelms the slight negative effect of executive constraints. Competitive elections and executive constraints have offsetting effects on the probability of unconditional military support. Therefore, I find a weak association between the democracy of the alliance leader and the probability of unconditional military support. Keeping these patterns in mind, I now examine the North Atlantic Treaty Organization (NATO) to illustrate the theoretical process.

4.2 NATO Treaty Design

I use NATO to show the theoretical mechanisms for two reasons. First, the process behind NATO applies to multiple alliances, as other US alliance treaties have similar designs. Second, NATO is the most important alliance in international politics, as it has played a crucial role in the structure of international relations since 1949. Because NATO is an exceptionally durable and consequential alliance, understanding how the treaty formed is worthwhile.

After World War II, the United States sought a way to protect Europe from the USSR. Despite acute security concerns, fear of entrapment in unwanted conflicts led the United States to place limits on military support. As Poast (2019) details, NATO members disagreed over how to define the North Atlantic area, especially with reference to France's Algerian colony and Italy, as the North Atlantic area was a key condition on military support. Furthermore, active military support from NATO members depends on domestic political processes.[26] Isolationists in the US Senate feared that an alliance would force America to intervene automatically if partners were attacked, bypassing the power of Congress to declare war and engaging the US in unwanted conflicts (Acheson, 1969, pg. 280-1). Therefore, Article V of the NATO treaty states that if one member is attacked the others "will assist the Party or Parties so attacked by taking forthwith, individually and in concert with the other Parties, *such action as it deems necessary* (emphasis mine)." Military support was and is not guaranteed by Article V. Secretary of State Dean Acheson stated as much in a March 1949 press release defending NATO to the US public, where he said that Article V "does not mean that the United States would automatically be at war if one of the nations covered by the Pact is subject to armed attack" (Acheson, 1949). This claim and the emphases of the press release shows that promises of military support were salient to the US public and that entrapment concerns of US leaders led to limited promises of military support.

Military support from Article V did not assuage European fears that if the Soviets invaded, the United States would not fight. To increase the credibility of NATO, the United States took other

[26] Benson (2012) calls this commitment a "probablistic" obligation.

measures. A 1951 presentation by Dean Acheson to Dwight Eisenhower argued that European allies "fear the inconstancy of United States purpose in Europe. ... These European fears and apprehensions can only be overcome if we move forward with determination and if we make the necessary full and active contribution in terms of both military forces and economic aid" (Acheson, 1951, pg. 3). To start, the US supported the Atlantic Council, an international organization and the main source of depth in the NATO treaty. The United States used the Atlantic Council to coordinate collective defense and increase the perceived reliability of the alliance. By investing in the Atlantic Council and related joint military planning, the US addressed European fears of abandonment. For example, US officials thought that the British Foreign Minister viewed US provision of a supreme commander in Europe as "a stimulus to European action" in NATO (Acheson, 1950).

Many Senators also opposed military aid to Europe (Acheson, 1969, pg 285), which constrained further treaty depth. Thus, legislative constraints on the executive branch reduced the formal depth of NATO relative to what many ambassadors preferred (Acheson, 1969, pg 277), which matches the statistical inference about executive constraints and treaty depth. Bilateral agreements on troop deployments thus became another instrument of reassurance. In 1950 the Germans formally requested clarification on whether an attack on US forces in Germany would be treated as an armed attack on the United States- and US policymakers said that it would (Acheson, 1969, pg. 395). These bilateral arrangements and basing rights are not covered in the NATO treaty, but they added substantial depth.[27]

In NATO, fear of entrapment led the United States to offer conditional military support, but did not inhibit deep military cooperation, which helped reassure European allies. Limits on the promises of military support were a salient part of public discussions in the NATO treaty, while the Atlantic Council had a smaller role in public discourse. The Atlantic Council and associated bureaucratic machinery are the formal core of substantial defense cooperation. NATO negotiations show how a democratic alliance leader used treaty depth to reassure their allies, rather than

[27]This reveals a potential limitation of the statistical models.

unconditional military support. In the next section, I summarize some implications of the results and offer concluding thoughts.

5 Discussion and Conclusion

In summary, the findings from the statistical models generate mixed evidence for the hypotheses, and the NATO illustration suggests that the theoretical mechanisms are plausible. I find consistent evidence that democracies design deep alliances, and that this relationship may be driven by electoral politics. Because democratic leaders are concerned with audience costs and foreign entanglement from treaty depth has little electoral salience, democracies often use depth to increase the credibility of their alliances. There is inconsistent support for the claim that allied democracy decreases the probability of unconditional military support, however, because competitive elections and executive constraints have contradictory effects. Elections encourage conditional obligations to address audience cost concerns, but executive constraints may encourage attempts to lock successors into the alliance with unconditional support. Inasmuch electoral politics are a key source of audience costs, the results are largely consistent with my claim that states form deep alliances to increase the credibility of their alliance commitments while managing entrapment risk and audience costs.

My argument and evidence has two limitations. First, I only examine variation in formal treaty design. This omits treaty implementation, which can diverge from the formal commitment. Formal treaty depth often reflects practical depth, but it may miss some differences between alliances. Changes in realized alliance depth are a useful subject for future inquiry, but will require extensive data collection. Second, I examine 280 alliances, which is a small sample. Inferences from small samples can be more sensitive to model and data changes, which could explain why my inferences differ from previous studies. For example, I use a more recent version of the ATOP data than Chiba, Johnson and Leeds (2015), which could explain our divergent findings about democracy

and conditionality in alliances with active military support.

Despite its limitations, this paper has three main implications for scholarship. First, treaty depth shapes alliance politics. Alliance members can use treaty depth to avoid trading credibility for entrapment risk, albeit at the cost of greater foreign entanglement. When depth substitutes for unconditional military support, alliances with conditional obligations may lose little credibility.

Second, democracies do not make limited alliance commitments. A fully limited alliance has conditional obligations and no depth. Even if democracies impose conditions on military support, deep alliances add substantial foreign entanglement, so many democratic alliances are not completely limited. Third, some of the lessons from this work add to the extensive literature on the design on international institutions (Downs and Rocke, 1995; Martin and Simmons, 1998; Koremenos, Lipson and Snidal, 2001; Thompson, 2010). In the same way that democracies use depth to support allies while managing electoral politics, democracies may undertake deep international commitments in ways that limit public scrutiny.

The findings raise at least two questions for future research. For one, they speak to debates about whether democracies make more credible commitments. Even if conditional military support reduces the credibility of democratic alliances, treaty depth provides further credibility. Thus, depth reassures the allies of democracies, who might otherwise have reliability concerns from conditional military support. The net effect of democracy on alliance credibility includes conditions on military support, treaty depth, and the direct effect of institutions and domestic politics. These three mechanisms may have competing or conditional effects, which could explain mixed findings about the credibility of democratic commitments (Schultz, 1999; Leeds, 1999; Thyne, 2012; Downes and Sechser, 2012; Potter and Baum, 2014). Treaty design also reinforces strategic selection problems in testing audience costs (Schultz, 2001). Future research should combine the components of democracy and democratic alliances to asses the net effect of democracy on credible commitment in international relations.

Scholars should also consider how alliance treaty design varies across different types of auto-

cracies. As I noted in the argument, some autocratic states have high audience costs for backing down in military interventions. Differences in the salience of audience costs, which actors impose audience costs on leaders and what information those actors have about foreign policy (Weeks, 2008) may help explain alliance treaty design. For example, personalist leaders with few public or elite constraints on their foreign policy may design alliances with depth and unconditional military support.

In conclusion, states use deep alliances to reassure their partners while limiting entrapment risk and exposure to audience costs. By shaping leaders' foreign policy audiences and audience cost concerns, domestic political institutions influence how states build credibility into alliance treaties. Due to high audience costs and limited public scrutiny of foreign entanglements, democracies use treaty depth to increase the credibility of their alliances.

References

Acheson, Dean. 1949. "State Department Press Release, March 18, 1949.".

Acheson, Dean. 1950. "Telegram, Dean Acheson to Harry S. Truman, September 14, 1950.".

Acheson, Dean. 1951. "Dean Acheson to Harry S. Truman, with attachment, January 5, 1951." Memo.

Acheson, Dean. 1969. *Present at the Creation*. New York: W.W. Norton.

Alley, Joshua. 2020. Alliance Participation and Military Spending phdthesis Texas A&M University.

Altfield, Michael F. 1984. "The Decision to Ally: A Theory and Test." *Western Political Quarterly* 37(4):523–44.

Baum, Matthew A. 2002. "Sex, Lies, and War: How Soft News Brings Foreign Policy to the Inattentive Public." *American Political Science Review* 96(1):91–109.

Beckley, Michael. 2015. "The Myth of Entangling Alliances: Reassessing the Security Risks of U.S. Defense Pacts." *International Security* 39(4):7–48.

Benson, Brett V. 2012. *Constructing International Security: Alliances, Deterrence, and Moral Hazard*. Cambridge University Press.

Benson, Brett V and Joshua D Clinton. 2016. "Assessing the Variation of Formal Military Alliances." *Journal of Conflict Resolution* 60(5):866–898.

Berkemeier, Molly and Matthew Fuhrmann. 2018. "Reassessing the fulfillment of alliance commitments in war." *Research & Politics* April-June:1–5.

Böhmelt, Tobias and Edita Butkutė. 2018. "The self-selection of democracies into treaty design: insights from international environmental agreements." *International Environmental Agreements: Politics, Law and Economics* 18(3):351–367.

Brands, Hal and Peter D. Feaver. 2017. "What are America's Alliances Good for?" *Parameters* 47(2):15–30.

Braumoeller, Bear F, Giampiero Marra, Rosalba Radice and Aisha E Bradshaw. 2018. "Flexible causal inference for political science." *Political Analysis* 26(1):54–71.

Brooks, Stephen G, G John Ikenberry and William C Wohlforth. 2013. "Don't come home, America: the case against retrenchment." *International Security* 37(3):7–51.

Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson and James D. Morrow. 2002. *The Logic of Political Survival*. Cambridge: Mass: The MIT Press.

Chaudoin, Stephen. 2014. "Promises or Policies? An Experimental Analysis of International Agreements and Audience Reactions." *International Organization* 68(1):235–256.

Chiba, Daina, Jesse C Johnson and Brett Ashley Leeds. 2015. "Careful Commitments: Democratic States and Alliance Design." *The Journal of Politics* 77(4):968–982.

Crescenzi, Mark JC, Jacob D Kathman, Katja B Kleinberg and Reed M Wood. 2012. "Reliability, Reputation, and Alliance Formation." *International Studies Quarterly* 56(2):259–274.

Downes, Alexander B and Todd S Sechser. 2012. "The Illusion of Democratic Credibility." *International Organization* 66(3):457–489.

Downs, George W. and David M. Rocke. 1995. *Optimal Imperfection?: Domestic Uncertainty and Institutions in International Relations*. Princeton, New Jersey: Princeton University Press.

Fearon, James D. 1997. "Signaling Foreign Policy Interests: Tying Hands versus Sinking Costs." *Journal of Conflict Resolution* 41(1):68–90.

Fearon, James D. 1998. "Domestic Politics, Foreign Policy, and Theories of International Relations." *Annual Review of Political Science* 1:289–313.

Fjelstul, Joshua C and Dan Reiter. 2019. "Explaining incompleteness and conditionality in alliance agreements." *International Interactions* 45(6):976–1002.

Fordham, Benjamin O. 2010. "Trade and asymmetric alliances." *Journal of Peace Research* 47(6):685–696.

Fordham, Benjamin and Paul Poast. 2014. "All Alliances Are Multilateral Rethinking Alliance Formation." *Journal of Conflict Resolution* 58(27):1–26.

Gibler, Douglas M. 2008. "The Costs of Reneging: Reputation and Alliance Formation." *Journal of Conflict Resolution* 52(3):426–454.

Gibler, Douglas M and Scott Wolford. 2006. "Alliances, Then Democracy: An Examination of the Relationship Between Regime Type and Alliance Formation." *Journal of Conflict Resolution* 50(1):129–153.

Gowa, Joanne. 1995. *Allies, Adversaries, and International Trade*. Princeton University Press.

Häge, Frank M. 2011. "Choice or circumstance? Adjusting measures of foreign policy similarity for chance agreement." *Political Analysis* 19(3):287–305.

Johnson, Jesse C. 2015. "The cost of security: Foreign policy concessions and military alliances." *Journal of Peace Research* 52(5):665–679.

Kertzer, Joshua D and Ryan Brutger. 2016. "Decomposing Audience Costs: Bringing the Audience Back into Audience Cost Theory." *American Journal of Political Science* 60(1):234–249.

Kim, Tongfi. 2011. "Why Alliances Entangle But Seldom Entrap States." *Security Studies* 20(3):350–377.

Kimball, Anessa L. 2010. "Political Survival, Policy Distribution, and Alliance Formation." *Journal of Peace Research* 47(4):407–419.

Kono, Daniel Y. 2006. "Optimal Obfuscation: Democracy and Trade Policy Transparency." *American Political Science Review* 100(03):369–384.

Koremenos, Barbara, Charles Lipson and Duncan Snidal. 2001. "The Rational Design of International Institutions." *International Organization* 55(04):761–799.

Kuo, Raymond. 2019. "Secrecy among Friends: Covert Military Alliances and Portfolio Consistency." *Journal of Conflict Resolution* pp. 1–27.

Lai, Brian and Dan Reiter. 2000. "Democracy, Political Similarity, and International Alliances, 1816—1992." *Journal of Conflict Resolution* 44(2):203–27.

Leeds, Brett Ashley. 1999. "Democratic Political Institutions, Credible Commitments, and International Cooperation." *American Journal of Political Science* 43(4):979–1002.

Leeds, Brett Ashley. 2003. "Alliance Reliability in Times of War: Explaining State Decisions to Violate Treaties." *International Organization* 57(4):801–827.

Leeds, Brett Ashley, Andrew G Long and Sara McLaughlin Mitchell. 2000. "Reevaluating Alliance Reliability: Specific Threats, Specific Promises." *Journal of Conflict Resolution* 44(5):686–699.

Leeds, Brett Ashley and Burcu Savun. 2007. "Terminating Alliances: Why Do States Abrogate Agreements?" *The Journal of Politics* 69(4):1118–1132.

Leeds, Brett Ashley, Michaela Mattes and Jeremy S Vogel. 2009. "Interests, institutions, and the reliability of international commitments." *American Journal of Political Science* 53(2):461–476.

Leeds, Brett Ashley and Sezi Anac. 2005. "Alliance Institutionalization and Alliance Performance." *International Interactions* 31(3):183–202.

Leeds, Brett, Jeffrey Ritter, Sara Mitchell and Andrew Long. 2002. "Alliance Treaty Obligations and Provisions, 1815-1944." *International Interactions* 28(3):237–260.

Levendusky, Matthew S and Michael C Horowitz. 2012. "When Backing Down is the Right Decision: Partisanship, New Information, and Audience Costs." *The Journal of Politics* 74(2):323–338.

Li, Quan. 2003. "The effect of security alliances on exchange-rate regime choices." *International Interactions* 29(2):159–193.

Lobell, Steven E. 2004. "Politics and national security: The battles for Britain." *Conflict Management and Peace Science* 21(4):269–286.

Long, Andrew G. 2003. "Defense Pacts and International Trade." *Journal of Peace Research* 40(5):537–552.

Lostumbo, Michael J, Michael J McNerney, Eric Peltz, Derek Eaton and David R Frelinger. 2013. *Overseas basing of US military forces: An assessment of relative costs and strategic benefits*. Rand Corporation.

Martin, Lisa L and Beth A Simmons. 1998. "Theories and Empirical Studies of International Institutions." *International Organization* 52(4):729–757.

Mattes, Michaela. 2012*a*. "Democratic reliability, precommitment of successor governments, and the choice of alliance commitment." *International Organization* 66(1):153–172.

Mattes, Michaela. 2012*b*. "Reputation, Symmetry, and Alliance Design." *International Organization* 66(4):679–707.

Mattes, Michaela and Mariana Rodríguez. 2014. "Autocracies and international cooperation." *International Studies Quarterly* 58(3):527–538.

McManus, Roseanne W and Keren Yarhi-Milo. 2017. "The Logic of "Offstage" Signaling: Domestic Politics, Regime Type, and Major Power-Protégé Relations." *International Organization* 71(4):701–733.

Morrow, James D. 1991. "Alliances and Asymmetry: An Alternative to the Capability Aggregation Model of Alliances." *American Journal of Political Science* 35(4):904–933.

Morrow, James D. 1994. "Alliances, Credibility, and Peacetime Costs." *Journal of Conflict Resolution* 38(2):270–297.

Morrow, James D. 2000. "Alliances: Why Write Them Down?" *Annual Review of Political Science* 3:63–83.

Murray, Jared S, David B Dunson, Lawrence Carin and Joseph E Lucas. 2013. "Bayesian Gaussian Copula Factor Models for Mixed Data." *Journal of the American Statistical Association* 108(502):656–665.

Narizny, Kevin. 2007. *The Political Economy of Grand Strategy*. Ithaca: Cornell University Press.

Poast, P. 2012. "Does Issue Linkage Work? Evidence from European Alliance Negotiations, 1860 to 1945." *International Organization* 66(1):277–310.

Poast, Paul. 2013. "Can Issue Linkage Improve Treaty Credibility? Buffer State Alliances as a "Hard Case"." *Journal of Conflict Resolution* 57(5):739–764.

Poast, Paul. 2019. *Arguing about Alliances: The Art of Agreement in Military-Pact Negotiations*. Cornell University Press.

Posen, Barry R. 2014. *Restraint: A New Foundation for U.S. Grand Strategy*. Cornell University Press.

Potter, Philip B.K. and Matthew A. Baum. 2014. "Looking for Audience Costs in all the Wrong Places: Electoral Institutions, Media Access, and Democratic Constraint." *The Journal of Politics* 76(1):167–181.

Putnam, Robert D. 1988. "Diplomacy and Domestic Politics: The Logic of Two-Level Games." *International Organization* 42(3):427–460.

Schultz, Kenneth A. 1999. "Do Democratic Institutions Constrain or Inform? Contrasting Two Institutional Perspectives on Democracy and War." *International Organization* 53(2):233–266.

Schultz, Kenneth A. 2001. "Looking for audience costs." *Journal of Conflict Resolution* 45(1):32–60.

Singer, J David. 1988. "Reconstructing the correlates of war dataset on material capabilities of states, 1816–1985." *International Interactions* 14(2):115–132.

Slantchev, Branislav L. 2006. "Politicians, the media, and domestic audience costs." *International Studies Quarterly* 50(2):445–477.

Smith, Alastair. 1995. "Alliance Formation and War." *International Studies Quarterly* 39(4):405–425.

Snyder, Glenn H. 1984. "The Security Dilemma in Alliance Politics." *World Politics* 36(04):461–495.

Snyder, Glenn H. 1990. "Alliance theory: A neorealist first cut." *Journal of International Affairs* 44(1):103–123.

Snyder, Glenn H. 1997. *Alliance Politics*. Ithaca: Cornell University Press.

Thompson, Alexander. 2010. "Rational design in motion: Uncertainty and flexibility in the global climate regime." *European Journal of International Relations* 16(2):269–296.

Thyne, Clayton L. 2012. "Information, Commitment, and Intra-War Bargaining: The Effect of Governmental Constraints on Civil War Duration." *International Studies Quarterly* 56(2):307–321.

Vine, David. 2015. *Base Nation: How U.S. Military Bases Abroad Harm America and the World*. New York: Metropolitan Books.

Warren, T Camber. 2016. "Modeling the coevolution of international and domestic institutions: Alliances, democracy, and the complex path to peace." *Journal of Peace Research* 53(3):424–441.

Weeks, Jessica L. 2008. "Autocratic audience costs: Regime type and signaling resolve." *International Organization* 62(1):35–64.

Weeks, Jessica LP. 2014. *Dictators at War and Peace*. Cornell University Press.

Wolford, Scott and Moonhawk Kim. 2017. "Alliances and the High Politics of International Trade." *Political Science Research and Methods* 5(4):587–611.