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## Regime Change and Conflict Recidivism within Rivalry: Interludes in Disputes<sup>1</sup>

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Abstract: How does regime change affect the risk of militarized disputes? Within the democratic peace literature, there is disagreement over whether it is democratization, autocratization, political dissimilarity or political instability that is particularly perilous. I distinguish four perspectives from this literature and test their attendant hypotheses on a dataset of conflict episodes within enduring rivalry from 1816 to 2001 using survival analysis. I find that both democratization and autocratization reduce the hazard of dispute recurrence in enduring rivalries. After controlling for selection bias, the effect of democratization was robust whereas the effect of autocratization was not. Democratization also has the additional property of terminating rivalries; autocratization does not. Together, the results imply that democratization is better at promoting a transition from rivalry to peaceful relations than is the autocratization of a rivalry dyad.

KEYWORDS: Regime Change, Democratization, Survival Analysis, Conflict Recidivism

#### Introduction

The promotion of democracy is a cornerstone of the foreign policies of Western democracies. For example, a commitment to democracy, human rights and the rule of law lies at the heart of the Treaty on European Union. In its European neighborhood, democracy promotion is part of the EU's enlargement strategy and shapes its foreign policy towards aspirant states (Kelley 2006). Similarly, NATO membership requires aspiring states to be democratic and to respect civil and political rights. While a belief in the intrinsic value of democracy underpins this policy of democracy promotion, it is also buttressed by a rationale that democracy is an effective means to other valuable policy ends. This rationale is not only grounded in normative beliefs, but also in extensive theoretical and empirical research on the beneficial effects of democratization (Acemoglu and Robinson 2006; Bueno de Mesquita et al 2003). For instance, the democratic peace literature (Kant 1795; Babst 1972; Doyle 1983; Dorussen and Ward 2008) emphasizes the stable, pacific nature of relations between democratic states and speculates that this pacifying effect would be enhanced if more governments democratized.

The enthusiasm for democracy promotion, however, has been tempered by the argument that the democratization process itself may increase the chance of interstate war (Mansfield and Snyder 1995). What is more, Mansfield and Snyder (2005: chp 6) have extended their cautionary note to the context of ongoing rivalry. In such an environ-

<sup>&</sup>lt;sup>1</sup>I thank Bruce Bueno de Mesquita for his advice and the Ralph Bunche Institute for International Studies for its financial support. Any errors that remain are my sole responsibility.

ment, where tensions are already high, the transition to democracy by one of the rivals may foster a perceived opportunity that leads to renewed conflict and perhaps even regional instability. If so, policy-makers may have to consider a tradeoff between the benefits of spreading democracy and the short-term threat it might represent to international stability. Sound policy inferences require not only good theory behind them but also rigorous evidence as to the conditions under which this or that theory finds support in the record of history. In short, we need to establish what precisely the record shows with regard to the transition to democracy and the mitigation or increased risk of violent conflict.

It is on the clarification of the empirical record that I focus here. Although theory building is an important and valuable undertaking, we currently have several carefully crafted theories of the democratic peace and of enduring rivalry but, thus far, little has been done to link them empirically in a way that helps us explore the alternative, subtle implications of these theories. Testing the nuanced implications of alternative explanations is essential to resolving which arguments are most consistent with actual behavior. This paper is intended to contribute to that empirical resolution by re-examining the relationship between regime change and interstate conflict in the important context of enduring rivalries (Diehl and Goertz 2000).

As we know, the democratic peace literature identifies a pacifying influence of democratic governance but the literature on democratization raises questions about when that pacifying influence kicks in. Daxecker (2007: 534) observed that the argument that democratization causes war assumes that an "opportunity for the external use of force exists." Of course, broadly speaking, such an opportunity can always exist between states but clearly that opportunity is heightened if the democratizing state is already engaged in an ongoing rivalry. With that fact in mind, this article supplements Daxecker (2007) by adding rivalry as a domain for testing the marginal impact of democratization on subsequent conflict. By focusing on regime change within rivalry, this article expands on earlier research on the democratic peace (Mansfield and Snyder, 1995, 2002a, 2005; Gleditsch and Ward, 2000; Kurizaki, 2004; Daxecker, 2007), placing it within the rivalry context (Bennett 1996, 1997, 1998; Prins and Daxecker 2007). The article proceeds as follows. First, the pertinent literatures are reviewed. Next, I extrapolate from the literature multiple perspectives on democratization and identify their hypotheses. I then test these alternative perspectives with data on conflict episodes between enduring rivals from 1816 to 2001 using survival analysis. In the concluding section, I discuss the implications of the findings.

#### The Democratization-Conflict Linkage in the Democratic Peace

The democratic peace is such a robust finding that it is considered to be "as close as anything we have to an empirical law in international relations" (Levy 1989: 88). Some policymakers, notably within the United States, have interpreted this as an imperative to promote democracy (Clinton 1994; Rice 2005). Mansfield and Snyder challenged this prescription with their finding that democratization itself increases the prospects for war (Mansfield and Snyder 1995). Democratization, they argue, opens a previously closed political system to increased political demands by the populace. Elites, who desire office, react by adopting nationalism as a mass mobilization strategy. The wars that democratizing states engage in are by-products of a belligerent foreign policy that nationalism engenders. Mansfield and Snyder's (1995) provocative findings attracted critical attention

(Thompson and Tucker, 1997; Enterline, 1996; Gleditsch and Ward, 1998; Oneal and Russett, 1998). One critique notes that they used a monadic research design that leaves the dyadic effects of democratization unaddressed (Oneal and Russett, 1998; Maoz 1998). Mansfield and Snyder addressed this objection in subsequent works (Mansfield and Snyder 2002a and b). They modified their argument to claim that incomplete democratization, or transitions from autocratic to partially democratic regimes (anocracy), increase conflict propensities (that is, the onset of war and of militarized disputes). Their modified argument distinguishes between mature democracies, which have the institutional capacity to cope with demands for political participation without resorting to nationalism as a mobilization strategy, and anocracies, which do not. The tenor of their argument is clear, democratization is posited to increase conflict propensity. This constitutes the first distinct perspective on the democratization-conflict linkage.

The other three perspectives evolved out of reactions to Mansfield and Snyder's (1995) dangerous democratization thesis. If belligerent conflict behavior provides benefits to elites during democratization, Gleditsch and Ward reasoned, the same dynamic should also apply to elites in mature democracies (Gleditsch and Ward 1998: 53). This implies that the democratic peace and dangerous democratization are contradictory phenomena. The group of scholarship that tends towards this view finds a *negative* relationship between democratization and the propensity for conflict (Gleditsch and Ward, 1998, 2000; Enterline, 1996; Enterline 1998a and b, Bennett and Stam 2004). The notion of pacific democratization; that the extension of the democratic peace logic to democratization implies a peaceful transition, constitutes the second perspective on the democratization-conflict linkage. I will elaborate on the theoretical arguments for this perspective in a later section when I discuss the impact of democracy on enduring rivalry.

Instead of democratization as the cause of increased conflict, a subset of advocates of pacific democratization suggests autocratization as the cause (Enterline 1996: 191; Enterline 1998a: 404; Thompson and Tucker, 1997: 445; Daxecker, 2007:544). This dangerous autocratization thesis is not well-developed theoretically due to its origins as an empirical afterthought in the debate between dangerous versus pacific democratization. It was not till Daxecker's re-examination of the democratization-conflict linkage that a tangential account of how autocratization might affect conflict propensity is developed (Daxecker 2007). Her account is based on an informational approach to crises bargaining (Fearon 1994; Schultz 2001). Under the informational approach, clear signals prevent conflict and regime-types affect the credibility of signals sent. Unlike autocratic leaders, democratic leaders face high domestic audience costs for foreign policy failures which they cope with by sending credible signals that make it easier for opponent states to determine the resolve of democracies compared to autocracies. Applying the informational logic to transitioning states, Daxecker reasoned that autocratization reduces the credibility of signals and thus increases conflict propensity (Daxecker 2007: 536-7). This dangerous autocratization constitutes the third perspective on the democratization-conflict linkage.

The last perspective is an implication from the autocratic peace literature (Peceny, Beer and Sanchez-Terry 2002; Werner 2000). Given that the management of domestic affairs is a potential source of interstate conflict, dyads where states manage their domestic affairs in similar fashion or politically similar dyads should have lower conflict propensities compared to politically dissimilar dyads. The democratic peace and the autocratic peace are seen as subsets of a general peace between politically similar regimes (Weart 1998). Applying this logic to regime transitions implies that transitions into politically

similar dyads (joint democracy or joint autocracy) should reduce conflict.<sup>2</sup> However, transition into mixed dyads, between two politically dissimilar regimes, is anticipated to be more conflictual. The transitions that result in political dissimilarity are especially interesting since this prediction is distinguishable from the transitions covered in prior perspectives.

In sum, there are multiple perspectives. The dangerous democratization thesis argues that democratization increases conflict propensity while the pacific democratization thesis argues for the opposite. The dangerous autocratization thesis argues that autocratization increases conflict propensity while the political dissimilarity thesis that transition to a mixed dyad increases conflict propensity.

#### Placing the democratization-conflict perspectives in the rivalry context

Some studies of the democratization-conflict linkage emphasize the importance of the *context* in which regime transitions occur. This context may be viewed in terms of dyads, in which case the opponent's regime-type is the issue (Kurizaki, 2004). This context may be view in terms of political geography, in which case how a neighborhood of a transitional state develops over time is the issue (Enterline, 1998b; Crescenzi and Enterline 1999; Gleditsch and Ward, 1998). Finally, the context could be based on conflict itself, in which case the rivalry between states is the issue (Bennett 1996). Rivalries are also significant for empirical and theoretical reasons. Empirically, it was found that a disproportionate amount of interstate conflict, both militarized interstate disputes and wars, occur between rivals (Goertz and Diehl 1992). Furthermore, it is within rivalry where one would expect nationalistic feelings, posited by Mansfield and Snyder (2005) to be the cause of dangerous democratization, to be most prevalent. Thus examining the effects of democratization in the context of rivalry is a hard test of the democratic peace since it is within rivalry where the chances of conflict are posited to be highest.

Earlier research on the effects of democratization on conflict behavior in rivalry tends toward two views. We know that democracies tend not to become rivals and that transitions to democracy tend to terminate rivalry (Bennett, 1998; Hensel, Goertz and Diehl, 2000). Together, this has the effect of making democratic rivalry relatively rare. Indeed, democratic rivalries are rare but that does not tell us much about the competing views of democratic transitions nor does it help us ascertain whether such transitions are pacifying or not.<sup>5</sup> Here I am concerned with the pattern of conflict in rivalries and how, if at all, it

<sup>&</sup>lt;sup>2</sup> I follow the convention of classifying pairs of state according to regime type. Applied to rivalry research, this distinction generates the following typology, democratic rivalries (two democratic rivals), mixed rivalries (one democratic and one autocratic rival), and autocratic rivalries (two autocratic rivals).

<sup>&</sup>lt;sup>3</sup> The conflict-begets-conflict literature, which predates the democratic peace, presents an alternative way of thinking about conflict contexts. There, conflict can spread across time and/or across space. The former notion is explored in the protracted conflict literature (Azar, Jureidini, McLaurin 1978) while the later is explored in the war diffusion literature (Siverson and Starr, 1991). In that sense, rivalry captures both the temporal and spatial aspects of conflict diffusion.

<sup>&</sup>lt;sup>4</sup> I thank Michael Colaresi for this observation.

<sup>&</sup>lt;sup>5</sup> A possible point of confusion is the relationship between democratization, rivalry termination and the nature of the termination. In theory, a rivalry can end violently or peacefully. A violent termination occurs when one rival decisively defeats its opponent and essentially imposes its terms, thereby ending the rivalry. Due to the possibility of violent as well as of peaceful rivalry termination, it is possible for democratization to encourage rivalry termination without knowing whether the process of rivalry termination is peaceful or violent. This is, of course, an issue which the article explores.

differs depending on whether the rivalry has experienced a significant change in the regime-type of one or both adversaries. Such a regime transition provides a natural experiment in which to test the competing views of democratization.

This issue, as I have noted, is poorly understood.

One approach has been to settle closely related questions almost by definition. For instance, in a study that in part expresses concerns about the meaning of democratic rivalries, Goertz et al (2005) contend that, "if a rivalry has occurred in a democratic dyad, this means that the democratic peace has in some sense already failed" (Goertz, Jones, Diehl 2005: 755). Perhaps so, but the very phrase, "in some sense" suggests that this inference should be tested. It is not established. Rather than inferring that the democratic peace has failed, we would benefit from exploring conflict behavior within rivalry, comparing cases of regime transition to cases where that has not occurred. It is certainly possible that the frequency of disputes within the rivalry may be dramatically influenced by the regime transition. Does democratization, in the absence of rivalry termination, exacerbate an ongoing rivalry? Is it a replay of the dangerous democratization argument all over again? To help answer these questions, I look specifically at conflict behavior within rivalries, focusing on changes in the frequency of dispute recurrence as a function of changes in regime types.

Two other views, focused on rivalry termination nevertheless, provide a complement to the questions I wish to explore. Bennett (1997) and Prins and Daxecker (2007) offer theories of rivalry termination that can be nicely extended to address, as well, the variation in dispute patterns following regime change within a rivalry. With regards to conflict behavior of democratizing states, Bennett argues:

...democratization should increase the probability of long-term rivalry settlement. However, this is not necessarily inconsistent with Mansfield and Snyder's finding that democratization and autocratization lead to war. Rivalry termination often follows relatively soon after a dispute or war between rivals, as such conflicts may settle disputed issues decisively or lead rivals to negotiate seriously over those issues. It is possible for democratization (or autocratization) to lead to a war or dispute that then results in rivalry settlement (Bennett, 1997: 379).

In his formulation, the same increase in conflict propensity could promote rivalry termination. Bennett finds that democratizing dyads terminate quickly. I build on this idea to ascertain whether the change to joint democracy alters the risk of subsequent fighting and hypothesize, as explained later, that it alters rivalry behavior in favor of pacification even before rivalry termination.

Prins and Daxecker present another theoretical alterative based on the informational approach to crises bargaining (Prins and Daxecker 2007). They treat the persistence of rivalry as a kind of bargaining failure. Both information asymmetry and non-credible commitments cause bargaining failures. In the case of rivalry, they argue, information asymmetry is not the issue; the absence of credible commitment is. Rivals, by definition, have already had repeated militarized confrontations with each other and so their information about each other's resolve and capability is likely to be updated and hence accurate. Democracy, they argue, ameliorates rivalry by increasing trust (due to the transparency of its decision-making process) and increases the cost of defection (through domestic audience costs).

Although both the issue-resolution and informational dynamics perspectives seek to explain rivalry termination, their logics can be extended to conflict behavior within rivalry. In the case of Bennett, democratization could *increase* the chance of conflict, at least in the short-term (Bennett, 1997: 379). In the case of Prins and Daxecker, democratization could

decrease the chance of conflict (Prins and Daxecker 2007: 25-27). The former dovetails more closely with the dangerous democratization thesis while the latter dovetails with the pacific democratization thesis.

One issue to be addressed is the appropriate conceptualization of the absence of conflict within rivalry. If the resolution of the issues underlying the rivalry constitutes rivalry termination, the outbreaks of militarized interstate disputes (or MIDs) within rivalry represents symptoms or manifestations of an underlying conflictual relationship. While the absence of outbreaks of violence need not necessarily indicate peaceful relations between rivals, the interlude between conflict outbreaks occupies a conceptual middle-ground between all-out hostilities and a positive peace (Klein, Diehl, Goertz 2008). As such, longer interludes compared with shorter interludes, are more suggestive of conflict amelioration within rivalry. The question is how a disruptive change such as a regime change in rivals, affects the risk of a rivalry experiencing the next outbreak of conflict. The extant literature, which has four perspectives on how that risk of conflict outbreak is posited to vary, implies the following hypotheses:

**Hypothesis 1a**: Transitions into democratic rivalry increase the risk of an outbreak of the next militarized interstate dispute (that is, it increases the hazard of MID occurrence).

**Hypothesis 1b:** Transitions into democratic rivalry decrease the risk of an outbreak of the next militarized interstate dispute.

**Hypothesis 2:** Transitions into autocratic rivalry increase the risk of an outbreak of the next militarized interstate dispute.

**Hypothesis 3**: Transitions into mixed rivalry increase the risk of an outbreak of the next militarized interstate dispute.

Lengthy interludes may be a precursor to rivalry termination or just a spell during which regime change is consolidated. Regime change, as argued by Mansfield and Snyder and also by Gleditsch and Ward, may make the new regime leadership interested in seeking a diversionary dispute or it may encourage the other member of the rivalry pair to see an opportunity for gain through dispute initiation (Mansfield and Snyder, 2005; Gleditsch and Ward, 1998). Regardless of which account explains behavior, if regime change provokes disputes then we should anticipate that both democratization and autocratization reduce the odds that the rivalry will terminate. However, if the democratic peace perspective is borne out, then autocratization may reduce the odds of termination – the democratic peace literature is largely agnostic on this question – but democratization should significantly increase the odds of rivalry termination.

**Hypothesis 4a:** Dyadic regime transitions decrease the probability of rivalry termination.

**Hypothesis 4b:** Democratization increases the probability of rivalry termination whereas autocratization does not.

If the dangerous transitions argument is correct then hypotheses 4a should be supported. If the democratic peace contention is correct, then hypotheses 4b should be backed by the empirical record.

Since rivalry by definition must entail states engaged in conflict, the possibility that such participation affects subsequent regime change becomes an issue. In one strand of litera-

ture that focuses on democratization, Horowitz (2003) argued that participation in war can retard democratization in post-communist transitions. In another related strand, it is the absence of conflict, whether operationalized as settled borders (Gibler and Tir 2010) or as a peaceful environment (Thompson 1996), that facilitates subsequent democratization. Since reverse causation is a legitimate theoretical concern, the analysis that follows should be understood as applicable only to the context of regime change within enduring rivalry.

Given my focus on the effects of regime change on conflict behavior, I have no theoretical stake in the reverse causation narrative. Rather, my concern is to control for the potential selection bias reverse causation may create. I address this issue methodologically in subsequent sections. The aim is to assess the effects of the regime transitions on subsequent conflict behavior after controlling for the impact of prior conflict behavior has on subsequent regime change.

#### **Data and Methods**

The hypotheses focus on the conflict behavior of transitioning dyads. For the domain of rivalry, I adopt the rivalry conception by Klein, Goertz and Diehl, widely used in the rivalry literature (Klein, Goertz and Diehl 2006). They operationalize a rivalry as a pair of states that has fought a minimum of three militarized interstate disputes (MIDs) over the whole 1816-2001 period. To build dyadic information for MIDs within rivalry, I use the MID 3.1 dataset (Bremer, Jones, and Singer, 1996) for the period between 1993 and 2001 and Moaz's dyadic dataset (Maoz 2005) for period prior to 1993. To estimate regime characteristics, I use the Polity IV data (Marshall and Jaggers 2006). Finally, I add data on the relative power of states drawn from the National Material Capabilities dataset (Singer 1987) and information on geographic contiguity from the Direct Contiguity Dataset (Stinnett, et al., 2002).

Since the focus is on what is happening within rivalries, taking into account the possibility of regime transitions, the data need to reflect the within-rivalry patterns of behavior, comparing rivalries of different regime types before and after transitions. That means that the unit of analysis must be centered on dispute episodes; that is, individual MIDs within the rivalry. The data set includes 1083 militarized interstate disputes spread across 248 enduring rivalries from 1816 to 2001. Each "row" in the dataset represents a single militarized interstate dispute episode between two rival states. Therefore, the unit of analysis is a conflict episode. Since an enduring rivalry is composed of several MIDs, each MID in the data set is, by definition, "nested" within a rivalry. Following Bueno de Mesquita, Koch and Siverson (2004: 259), I treat disputes involving more than two initial participant states separately.

Even if a given regime change does not end a rivalry, it still affect conflict recidivism within it. Of special concern is the length of time between dispute episodes since a longer time intervals between outbreaks of organized violence suggests conflict amelioration. Couched in this manner, the appropriate method is survival analysis (Cleves et al., 2010).

<sup>&</sup>lt;sup>6</sup> The strategic rivalry conception (Thompson and Dreyer 2011) was not used because it had no cases of democratic transitions. As a result, no estimates of the effects of democratization were possible under strategic rivalry.

<sup>&</sup>lt;sup>7</sup> Those dyads with only 1 to 2 MIDs are treated as isolated conflicts. These are dropped from analysis because they do not represent the long term persistent conflict relationships that are of interest.

<sup>&</sup>lt;sup>8</sup> There is as yet, no consensus on the notation used in survival analysis (also known as duration, event history or hazard analysis). For this article, I rely on the notation used in Cleves (et al., 2010).

This is because survival models *directly estimate* both the duration of peace as well as the independent variables (the covariates), in this case regime change, which vary over time. Survival models are less frequently used in democratic peace research but are the norm in rivalry research.

In survival analysis, the dependent variable is the hazard rate, or the instantaneous rate at which a failure event will occur in a given interval (the analysis time) given that the subject has already survived until time t (Bennett, 1997: 380; Cleves, et al. 2010:7-8). Applied to the data, the subject is the rivalry dyad and the failure event is an occurrence of a militarized interstate dispute. Given that a rivalry is not at risk of experiencing the next militarized interstate dispute while it is already in a current dispute, the analysis time, therefore, is the time *in between* militarized interstate disputes (Box-Steffensmeier and Jones, 2004: 99). It may help to think of the survival analysis here as modeling the instantaneous rate at which a given rivalry dyad transitions from non-violence to violence as a function of different types of regime change.

One advantage of survival analysis is in the way it models censored data. In the dataset, the issue is right censoring, which occurs when a rivalry has not terminated by the year 2001, the year the available data ends. Such cases could have experienced militarized interstate disputes after the time of observation. Survival analysis accounts for this by treating such cases as having duration at least as long as the analysis time (Cleves et al., 2010: 30-1).

#### Dependent Variable: Interlude between militarized interstate disputes

My main dependent variable is the conflict behavior of states during their rivalry. In particular, I focus on the duration of peace in between outbreaks of fighting within rivalry. To measure this peace-spell, I generate a continuous variable *interlude*, which captures within a rivalry, the time difference in years between outbreaks of MIDs. Rivalry termination is the limiting case for interlude; that is, all terminations are associated with the spell of peace prior to the rivalry being redefined as over. Given my focus on within rivalry conflict behavior, the peace-spells after rivalry termination are not an issue even though a dyad may experience MIDs after rivalry termination. Additionally, I recode *interlude* with values of 0 as missing data because the covariates of interest is by design, yearly data. <sup>10</sup>

A secondary dependent variable is rivalry termination. Due to the fact that MIDs are used to indicate the existence of a rivalry, we know a rivalry has ended only when no new MID emerges after the last MID in a given rivalry sequence. I create a variable to measure if the MID in a given rivalry is indeed the last in its sequence. This variable is called *terminate*. It has a value of 1 if it is the last in the sequence (except for the treatment of censoring discussed below) and a value of 0 otherwise. Thus all rivalries have a last MID and thus a dispute episode in which *terminate* has a value of 1. This does not preclude a given

<sup>&</sup>lt;sup>9</sup> Left-censoring is not an issue in the data because starting point for observations is the year 1816, which is also the starting year for the MID dataset.

<sup>&</sup>lt;sup>10</sup> While measures of regime transitions in Polity IV exists in both a date and a year format, the veracity of the date format is more contested than is the case for the year format. Therefore, I took the conservative approach of using the more general year format to measure my covariate of interest, regime change. To allay concerns about potential overlaps between the timing of regime change and dispute initiation, I include specific dates in Appendix 1. They show that thirty-one of the thirty-three regime transitions have a MID initiation date after a regime change is considered complete. Since the remaining two transitions suggest that it is conflict that influence subsequent regime change, I also control for this by using a survival model with selection.

rivalry from having a *terminate* value of 0 in other disputes which are not the last in a given rivalry sequence.

#### Independent Variables: Regime Transitions

The independent variables focus on different measures of regime type from which the regime transitions are derived. I rely on the Polity IV for information on regime characteristics (Marshall and Jaggers, 2006).

For monadic measures of regime type, I transform Polity IV aggregate regime score, *polity2*, which is a state's democracy characteristics minus its autocracy characteristics and which ranges from -10 to +10, to generate the variable *regime*, that ranges from 0 to 100. First, I add 10 to *polity2*, in order to remove negative values. Then I multiply the results by 5 to generate the variable, *regime* that ranges from 0 to 100. Following the convention suggested by Gurr and Jaggers, a state is considered a democracy if its *polity2* score is at least six and an autocracy if its *polity2* score is below negative six (Jaggers and Gurr 1995). This translates into a *regime* score of at least 80 for democracies and a score of 20 and below for autocracies. States with values in between the two cutoff points are considered anocracies or mixed regimes.

To measure democratic dyads, I generate the variable *democraticdyad*, which has a value of 1 if both states in the dyad are democratic, and a value of 0 otherwise. To measure mixed dyads, I generate the variable *mixeddyad*, which has a value of 1 if one state in a dyad is a democracy and the other is not a democracy; otherwise it has a value of 0. To measure autocratic dyads, I generate the variable *autocraticdyad*, which has a value of 1 if both states in a dyad are autocratic; otherwise it has a value of 0.

I code regime changes by comparing the dyadic regime type at the time of dispute onset (not necessarily rivalry onset) with its dyadic regime type at the time of the previous dispute's onset within the enduring rivalry. Given three types of dyadic rivalry, democratic, mixed and autocratic, six directions of regime change are possible. They are a transition from an autocratic to mixed rivalry; a transition from a mixed to democratic rivalry; a transition from a democratic to mixed rivalry; a transition from a mixed to autocratic rivalry; and a transition from a democratic to autocratic rivalry. All six directional transitions are dummy variables and have a value of 1 when the specific regime change occurs and a value of 0 otherwise. I also generate a dyadic measure of regime change regimechange, which has a value of 1 if any of the six directional transitions occurred and a value of 0 otherwise.

Of the 33 regime transitions in the data, 13 were transitions from mixed to democratic rivalry, 12 were transitions from mixed to autocratic rivalry, 5 were transitions from democratic to mixed rivalry and 3 were transitions from autocratic to mixed rivalry. There were zero cases of transitions from autocratic to democratic rivalry and from democratic to autocratic rivalry. The cases are summarized in Table 1.

In additional to specific transitions, I also interested in broader transitions towards and away from democracy. To capture information on transitions towards democracy, I generate the variable *democratize*, that has a value of 1 when a transition from autocratic to

<sup>&</sup>lt;sup>11</sup> Some may be concerned about the small number of transitions. Rarity by itself does not preclude importance. Rare phenomena such as interstate wars or economic depressions have consequences that attract policy and scholarly attention. What is more, in the context of the Arab Spring, a rare event, policy-makers are understandably interested in the implications of regime change on international stability.

| Type of regime change                    | Absolute number |
|--|-----------------|
| From an autocratic to mixed rivalry      | 3               |
| From a mixed to democratic rivalry       | 13              |
| From an autocratic to democratic rivalry | 0               |
| From a democratic to mixed rivalry       | 5               |
| From a mixed to autocratic rivalry       | 12              |
| From a democratic to autocratic rivalry  | 0               |
| Towards democracy                        | 16              |
| Towards autocracy                        | 17              |
| Any regime change                        | 33              |
| Total observations in the data           | 1083            |

Table 1: Summary of different types of regime transitions, 1816–2001

mixed rivalry or from a mixed to democratic rivalry occurs and a value of 0 otherwise. To capture information on transitions towards autocracy, I generate the variable *autocratize*, that has a value of 1 when a transition from democratic to mixed rivalry or from a mixed to autocratic rivalry occurs and a value of 0 otherwise.

To give a sense of the cases, I list the specific transitions in appendix 1 and provide two illustrations. The US-Ecuador rivalry illustrates the impact of a transition from a mixed to a democratic rivalry. The rivalry revolved around the fishing rights of US vessels off the Ecuadorian coast. The "tuna wars" intensified under the military government of Velasco (1967-72) when US vessels were seized and the US in turn, withdrew military and economic aid to Ecuador. It was after the democratization of Ecuador in 1979, when the Ecuadorian President Febres Cordero aligned its policies with the US under President Ronald Reagan that the rivalry started to deescalate.

The Peru-Ecuador rivalry illustrates the impact of a transition in the opposite direction, from a democratic to a mixed rivalry. In that rivalry, the issue is a long running border dispute in the upper Amazon. Tensions over the contested border outposts were contained in the 1991 Pachacútec Incident when both rivals were democratic. After the 1992 autogople (a self coup), Peru under President Alberto Fujimori became autocratic. The same border tensions that were previously contained escalated into the 1995 Cenepa war, during a period of mixed rivalry. This was the most severe conflict between the two rivals since their 1941 war. While it is true that the rivals managed to conclude a comprehensive peace treaty (the Brasilia Accords) in 1998, it should be noted this was *after* the 1995 conflict.

#### Control variables: contiguity, relative power and conflict history

When addressing the issue of controls variables, I follow the injunctions of Ray (2002) and of Achen (2002) to limit the number of controls variables with a view to the substantive interpretation of results while avoiding omitted variable bias. Including more controls merely to improve the fit of the model can hurt the interpretation of the results and is not germane to a test of the hypotheses. I focus on relative power and on geographical proximity, both of which have been established in the conflict literature as stable predictors of the probability of conflict (Bremer 1992).

Realist theories place a premium on relative power as a determinant of interstate conflict. Traditional balance of power theory, such as that articulated by Morgenthau (1956),

argues that states need a preponderance of power before they initiate a particular round of conflict. Thus, an interpretation is that power parity between rivals discourages the initiation of militarized interstate disputes in the rivalry (Cornwell and Colaresi 2002: 335). For measures of relative power, I use the Composite Indicator of National Capabilities (CINC) index from the COW project which measures the weighted average of a state's share of the total system population, urban population, energy consumption, iron and steel production, military personnel and military expenditures (Singer 1987). I apply Ray and Singer's measure of the concentration of power to the dyadic context (Ray and Singer 1979). I take the ratio of the capability of a state over the summed capabilities of the pair, subtract .5 from it, and take its absolute value. This generates a continuous variable that ranges from 0 to .5 where higher values indicate greater power disparity.

Geographically proximate states have more opportunities for militarized interstate disputes. Vasquez (1993) notes that contiguity helps to predict rivalry and Bueno de Mesquita, Koch and Siverson (2004: 261) note that democracies tend to be proximate to each other. To capture information on physical contiguity, I generate the variable *contiguous* which has a value of 1 when the two rival states share a land border or are separated by no more than 150 miles of water, and a value of 0 otherwise (Stinnett et al., 2002).

While regime change is treated as a time-varying covariate in my setup, I treat both relative power (Klein, Goertz, and Diehl, 2006: 340-1) and contiguity (Box-Steffensmeier and Jones, 2004: 99) as time-independent covariates. Going beyond precedence, it is worth thinking about the theoretical relevance of the conditions under which the control variables are time-variant. Decolonization by the European powers could change both the geographical proximity and the relative power between rivals. However, the focus here is on hostile relationships (rivalry) and not on colonial ties.

Within the conflict-begets-conflict literature, there is an argument that a prior history of conflict influences the likelihood of subsequent conflict (Azar et al. 1978). Applied to the data, rivalries with a disputatious history have a greater likelihood of experiencing a subsequent dispute independent of the condition of rivalry. Thus the Ecuador-US rivalry, which had low disputatiousness rate, has a lower likelihood of future conflict compared to the Israeli-Syria rivalry, with a high disputatiousness rate, even if both rivalries were to undergo dyadic regime change at the same time. To capture this notion of a prior history of conflict, I generate the variable, *prior conflict history*, also referred to as H to save space, to indicate the serial sequence of militarized interstate disputes within a rivalry. To address the interaction of regime change with the disputatious rate, I multiply H with democratize and separately with autocratize, creating D\*H and A\*H respectively.

#### Survival Models

I use *both* Weibull and Cox regression models to investigate the relationship between regime change and conflict behavior. The Weibull model is used when there are theoretical expectations about the distribution of the baseline hazard. By contrast, the Cox model is used when the researcher wish to be agnostic with regards to the distribution of the baseline hazard. As there are arguments for the use of either model, the use of both models doubles as a check of robustness. Ideally, the regime change of interest, democratization, should exhibit the same relationship with conflict behavior under both models.

<sup>&</sup>lt;sup>12</sup> This identifying variable is called *eventseq* in the replication file.

The case for the use of the Weibull model is theoretical. Bennett's account suggests that the interlude between militarized interstate disputes could shorten after democratization, thereby implying an increasing hazard (Bennett, 1997). Conversely in Prins and Daxecker, democratizing states gain signaling credibility which increases the interlude between militarized interstate disputes, thereby implying a decreasing hazard (Prins and Daxecker, 2007). Since the Weibull model allows the distribution of the baseline hazard to be monotonically increasing, monotonically decreasing or flat with respect to time, both theoretical accounts can be represented by the same model.

The case for the use of the Cox model is methodological. Most theories in political science do not specify the distribution of the hazard rate ((Box-Steffensmeier, and Zorn, 2001; Box-Steffensmeier, Reiter and Zorn, 2003). Since the Cox model does not require a specification of the baseline hazard, its use has been consequently widespread. Applied to my data, it is worth considering the risk process (by which the failure event is generated) itself. We know that democracy exhibits a strong selection effect on rivalry and that one way by which this is achieved is that transitions to democracy end rivalry. What is unclear, and this is a contribution of this study, is how such rivalry termination is achieved. After regime-change, two rivals can fight with greater frequency resulting in the settlement of the rivalry on the victor's terms. Alternatively, the same two rivals could reduce their disputatiousness, allowing the rivalry to peter out. In the former process, the interlude between militarized interstate disputes is shortened. In the latter, the interlude is lengthened. Because rivalry termination is an equifinal outcome which can occur as the result of two distinct risk processes and we do not know which of the two baseline hazards is correct, the use of the Cox model is appropriate.

To test for the effects of directional regime change, I estimate a basic model compromised of the covariates of interest, the controls for relative power, contiguity and prior conflict history. To account for the possibility that each rivalry has its own unique baseline hazard, as opposed to a single baseline hazard for all rivalries, I re-run each model twice by using the cluster routine in Stata 12. The results for all models in Table 1 to 4 were obtained using robust standard errors and reported as hazard ratios.

To correct for a possible selection bias due to the effects of prior participation in conflict on subsequent regime change, I use a survival model with selection. This estimator, termed *dursel* for duration with selection, by its creators (Boehmke, Morey and Shannon 2006), can be thought of as the survival equivalent to Heckman models used in regression analysis. Applied to this context, the selection equation is accounting for the prospects of dyadic regime change whereas the survival equation is accounting for the effects of specific regime transitions on the interlude between MIDs.<sup>13</sup> The estimator requires an omitted category. I choose the transitions from autocratic to mixed rivalry as the omitted category as it has the fewest cases.

To model the prospect of a dyadic regime change within rivalry, I use information on per capita income and the prior conflict history in the rivalry. Economic development is generally posited by modernization theory to be a condition for regime change. In one formulation, high income levels helps democracies stay democratic but does not otherwise promote democratization (Przeworski et al. 2000). This means the impact of economic

<sup>&</sup>lt;sup>13</sup> Since the estimator in question *dursel* can only estimate the selection effects for one country and I am using rivalry dyads in my data, I identified the country with the lower *polity2* score in the rivalry as the country more likely to undergo regime transitions. This follows the weakest-link approach used in the democractic peace literature (Dixon and Senese 2002). I thank an anonymous reviewer for suggesting its use.

development on dyadic regime change could work in either direction but in the long run, wealth is correlated with democracy since wealthy democracies tend to stay democratic. I use Gross Domestic Product (GDP) information from Maddison (Bolt and van Zanden 2013). <sup>14</sup> To capture information on the economic development of the country with the lower *polity2* score, I use per capita GDP to control for population size and estimate the natural logarithm of the information to generate the variable, *logged Income Per Capita*.

The reverse causation argument is that participation in conflict itself affects the likelihood of subsequent regime change. Such participation can reduce the chance of democratization (Horowitz 2003) and the absence of such conflict can be conducive for democratization (Gibler and Tir 2010). In the diversionary conflict literature (Mitchell and Prins 2004), a rivalry provides an opportunity-rich environment for leaders to engage in foreign diversions, which in turn implies a lower likelihood of regime change. The literature suggests that the longer a state participates in conflict, the lower the likelihood of subsequent regime change. Since the act of being in a rivalry already implies participation, I make use of an existing variable, *prior conflict history* or H to capture the participation in conflict. Since the aforementioned literature also differentiates between democratization from other types of regime transitions, it may be the case that it is the interaction of a specific regime transition with its conflict history that affects the subsequent interlude. Therefore, I also generate the relevant interaction terms by multiplying each of the specific regime transition in question (for example, from *mixed to democratic* rivalry) with prior conflict history (H).

Armed with a selection equation, I estimate two Weibull models with selection. The first model utilizes all the covariates previously used in the Weibull without selection. The second model adds to the first the interaction terms between the specific regime transition and their prior conflict history. Adding the interaction terms captures the notion that different specific regime transitions behave differently the deeper they are in a given rivalry. I also conduct post-survival analysis on the total effects of specific regime change on conflict behavior. The aim is to determine if the transitions of interests still have significant relationships with interlude after selection is accounted for.

#### **Findings**

Since there no cases of transitions from democratic to autocratic rivalry and vice versa, no estimation of their effects was possible. This is why there are only four types of regime change in tables 2 and 3.

Table 2 reports the results for specific regime transitions using Weibull regression. Model 1 uses a generic baseline hazard for all rivalry while model 2 uses a unique baseline hazard for each rivalry. Although the general results are robust across other model specifications, the results for transitions from democratic to mixed rivalry are not robust across alternative specifications. The remaining three directional regime transitions have statistically described by the results of the remaining three directional regime transitions have statistically described by the results of the remaining three directional regime transitions have statistically described by the results of the remaining three directional regime transitions have statistically described by the results of the remaining three directional regime transitions have statistically described by the results of the remaining three directional regime transitions have statistically described by the results of the remaining three directional regime transitions have statistically described by the results of the remaining three directional regime transitions have statistically described by the remaining three directions.

<sup>&</sup>lt;sup>14</sup> I use Maddison's data (Bolt and van Zanden 2013) rather than Gleditsch's data (2002) because the former can cover the years of interest (1816-2001). Since there are missing economic information in Maddison's data, the result after the dataset merge is a smaller set of observations.

<sup>&</sup>lt;sup>15</sup> The estimator *dursel* is not able to utilize Cox models.

<sup>&</sup>lt;sup>16</sup> I also run a model that contains only the covariates for regime change and a model that adds the controls for relative power and contiguity. As the results are not substantively different, these are not reported here to conserve space.

cally significant relationships with the risk of conflict outbreaks in both models. In each model, transitions from mixed to autocratic rivalry, transitions from an autocratic to mixed rivalry, and transitions from mixed to democratic rivalry reduce the risk of outbreaks of conflict by 55.3%, 47.4% and by 61.5% respectively, holding all other variables constant. These effects are not significantly different from each other. All three directions of regime change favor diminished conflict.

The fact that the hazard ratios reported in model 1 and 2 were identical suggests that the relationships of interests are not dependent on the specification of the baseline hazard. The control variables in the models have a hazard ratio above 1, which means they increase the risk of outbreaks of conflict. Relative power did not have a statistically significant effect on the risks in either model. Once the states decide to become rivals, relative power does not appear to be a driver of subsequent rounds of conflict. The substantive impact of the remaining controls that are statistically significant is much smaller. Under both models, being contiguous and having a prior history of conflict increase the risk of outbreaks of conflict by 22.4% and 4.3% respectively.

A similar pattern of results emerges when Cox regression is used.<sup>17</sup> As before, model 1 uses a generic baseline hazard while model 2 uses a unique baseline hazard for each rivalry. The results in Table 3 show that only three types of transitions have statistically significant relationships with the risk of conflict outbreaks in both models. In each model, transitions from democratic to mixed rivalry, transitions from autocratic to mixed rivalry, and transitions from mixed to democratic rivalry reduce the risk of outbreaks of conflict by 46.6%, 39.4% and by 53% respectively, holding all other variables constant. The effects of transitions from democratic to mixed rivalry vary across the specifications and are not robust. The fact that the substantive impact of these transitions is identical in both models implies that the relationships of interests are not dependent upon the specification of the baseline hazard. Of the control variables, only a prior history of conflict (eventseq) was consistently significant.<sup>18</sup> Its substantive impact however is weak. In both models, each militarized interstate dispute in a rivalry increases the risk of a subsequent militarized dispute by a mere 2.9%.

Except for transitions from democratic to mixed rivalry, the other three transitions types reduce the risk of outbreaks of conflict in each Weibull and Cox regression models. The finding that transitions from mixed to autocratic rivalry reduce the risk of conflict outbreaks contradicts the dangerous autocratization hypothesis (H2). The finding that transitions from autocratic to mixed rivalry reduce the risk of conflict outbreaks contradicts the political dissimilarity thesis (H3). By contrast, the finding that transitions from mixed to democratic rivalry reduce the risk of outbreaks of conflict supports the pacific democratization thesis (H1b).

These findings suggest at least two possible explanations for the growing time between disputes following regime change: the rivals are winding down their dispute and moving to the end of the rivalry or the rivals are taking some time while they sort out their new institutional situation before resuming their rivalry. I can test which, if either, of these accounts dominates and whether that account varies with the type of regime change. To do so, I switch from a hazard analysis to a logit analysis and switch from interlude as the dependent

<sup>&</sup>lt;sup>17</sup> I tested for violations of the proportional hazard assumptions (PHA) using Schoenfeld residuals. The results, recorded in the replication file, show that the PHA is not violated.

<sup>&</sup>lt;sup>18</sup> The results did not change substantively when relative power is treated as a time-invariant or time-independent covariate.

Table 2: Specific regime change and the risk of militarized disputes using Weibull regression

|                         | Model 1 w    | rithout cluste    | ering   | Model 2      | with clusters      | ing     |
|-------------------------|--------------|-------------------|---------|--------------|--------------------|---------|
| Weibull                 | Hazard Ratio | Standard<br>Error | p-value | Hazard Ratio | Standard<br>Error* | p-value |
| Regime transition from: | :            |                   |         |              |                    |         |
| mixed to democratic     | .385         | .133              | .006    | .385         | .131               | .005    |
| autocratic to mixed     | .526         | .139              | .015    | .526         | .138               | .014    |
| mixed to autocratic     | .447         | .071              | .000    | .447         | .074               | .000    |
| democratic to mixed     | .455         | .170              | .035    | .455         | .165               | .030    |
| Controls                |              |                   |         |              |                    |         |
| Relative power          | 1.086        | .304              | .769    | 1.086        | .326               | .784    |
| Contiguity              | 1.224        | .118              | .036    | 1.224        | .119               | .038    |
| Prior conflict history  | 1.043        | .009              | .000    | 1.043        | .007               | .000    |
| Observations            |              | 1083              |         |              | 1083               |         |
| Prob>chi2               |              | .000              |         |              | .000               |         |

(Notes. \*standard errors adjusted for 247 clusters.)

Table 3: Specific regime change and the risk of militarized disputes using Cox regression

|                        | Model 1 v    | vithout cluste | ering   | Mod    | el 2 with clust | ering   |
|------------------------|--------------|----------------|---------|--------|-----------------|---------|
|                        |              | Standard       |         | Hazard | Standard        |         |
| Cox                    | Hazard Ratio | Error          | p-value | Ratio  | Error*          | p-value |
| Regime transition from | 1:           |                |         |        |                 |         |
| mixed to democratic    | .470         | .129           | .006    | .470   | .128            | .006    |
| autocratic to mixed    | .606         | .131           | .020    | .606   | .129            | .019    |
| mixed to autocratic    | .534         | .074           | .000    | .534   | .076            | .000    |
| democratic to mixed    | .565         | .168           | .055    | .565   | .166            | .052    |
| Controls               |              |                |         |        |                 |         |
| Relative power         | 0.998        | .190           | .991    | .998   | .215            | .992    |
| Contiguity             | 1.138        | .071           | .040    | 1.138  | .078            | .058    |
| Prior conflict history | 1.029        | .006           | .000    | 1.029  | .004            | .000    |
| Observations           |              | 1083           |         |        | 1083            |         |
| Prob>chi2              |              | .000           |         |        | .000            |         |

(Notes. \*standard errors adjusted for 247 clusters.)

dent variable to rivalry termination. If democratization, for instance, is pacifying then I should observe, as I have, that the spell between disputes grows longer and I should also observe that the probability of termination increases with democratization, especially the deeper the states are into the rivalry. Likewise, if the situational context is all that is delaying subsequent disputes, then I should find, again using democratization as the illustrative case, that democratization has no impact on the probability of termination even if the rivals have a long prior history of conflict. To evaluate the contending arguments, I run logit analyses using the same set of control variables with measures of broad transitions, democratize and autocratize in model 1. I then repeat the test adding the interaction terms.

Table 4 reports the results of two logit analyses using robust standard errors. Model 1 shows that autocratization is not close to having a significant impact on rivalry termina-

| TADIC 4. | тисспона | Teame | CHAIDE | and | HVAII | v | сининанон | HSHIP | LOSISHCAL | regression |
|----------|----------|-------|--------|-----|-------|---|-----------|-------|-----------|------------|
|          |          |       |        |     |       |   |           |       |           |            |
|          |          |       |        |     |       |   |           |       |           |            |

|   | Mod    | lel 1 without intera     | ction   | $M\alpha$ | odel 2 with interact      | tion    |
|---|--------|--------------------------|---------|-----------|---------------------------|---------|
| Logit   | Coeff. | Robust<br>Standard Error | p-value | Coeff.    | Robust<br>Standard Error  | p-value |
| Democratization (D)                           | .999   | .533                     | .061    | 3.383     | 1.409                     | .016    |
| Autocratization (A)                           | 956    | 1.031                    | 0.354   | .117      | 1.201                     | .922    |
| Interaction Term                              |        |                          |         |           |                           |         |
| Democratization* Prior conflict history (D*H) |        |                          |         | 636       | .363                      | .080    |
| Autocratization* Prior conflict history (A*H) |        |                          |         | 409       | .169                      | .015    |
| Controls                                      |        |                          |         |           |                           |         |
| Relative power                                | .587   | .625                     | .348    | .593      | .630                      | .347    |
| Contiguity                                    | 129    | .185                     | .484    | 123       | .185                      | .506    |
| Prior conflict<br>History (H)                 | 017    | .020                     | .383    | 014       | .020                      | .487    |
| Constant                                      | -1.766 | .279                     | .000    | -1.790    | .280                      | .000    |
| Test: $D + H + D*H = 0$                       |        |                          |         | γ         | $g^2 = 6.19, p < 0.01$    | 3       |
| Test: $A + H + A*H = 0$                       |        |                          |         |           | $\chi^2 = 0.07, p < .780$ |         |
| Observations                                  |        | 1083                     |         | •         | 1083                      |         |
| Prob>chi2                                     |        | .1803                    |         |           | .0097                     |         |

tion. Democratization on its own increases the odds of termination, with statistical significance of 0.061 in a two-tailed test. Shifting to the more demanding tests that include interaction terms in model 2, the data show that democratic transitions by themselves increase the log-odds of rivalry termination by 3.383, holding all other independent variables constant. Since log-odds ratio can be hard to interpret, I convert them to the predicted probability of rivalry termination for ease of interpretation. When a rivalry dyad transitions in a democratic direction, the probability of rivalry termination is 82.7%.

When I take into consideration both democratization and the prior history of conflict in the rivalry I discover that the marginal impact of democratization condition on prior conflict greatly increases the probability that the rivalry comes to an end as anticipated by hypotheses 4b. The effect of democratization on rivalry termination, taking prior history into account, is significant at the 0.013 level [Democratization + Prior History of Conflict + (Democratization\*Prior History of Conflict)]. Turning to the same test, but for autocratization, I find something quite different. The effect of autocratization on rivalry termination by itself is insignificant. Indeed, the probability that the observed relationship occurred by chance is 0.922. Looking at the effect of autocratization, prior history of conflict and the interaction of the two, I discover that there is a 0.785 probability that the relationship is due to chance. This finding is contrary to hypothesis 4a, regime change per se does not sustain rivalry. Consistent with the democratic peace argument, democratiza-

 $<sup>^{19}</sup>$  To determine the total impact of regime change and prior history of conflict on rivalry termination, I tested whether Democratize + Autocratize + Prior History of Conflict + the two interaction terms is significantly different from 0. It is not (p = .122).

Table 5: Specific regime change and the risk of militarized disputes using Weibull with selection.

|                                | Model 1 wit   | hout interact               | ion terms | Model 2 w   | ith interactio              | n terms |
|--------------------------------|---------------|-----------------------------|-----------|-------------|-----------------------------|---------|
| Weibull                        | Coefficient   | Robust<br>Standard<br>Error | p-value   | Coefficient | Robust<br>Standard<br>Error | p-value |
| Selection for dyadic regime of | change        |                             |           |             |                             |         |
| Prior conflict history (H)     | 020           | .009                        | .025      | 020         | .009                        | .025    |
| Logged Income Per Capita       | .110          | .065                        | .090      | .110        | .064                        | .087    |
| Duration of interlude          |               |                             |           |             |                             |         |
| mixed to democratic            | 1.595         | .602                        | .008      | 3.900       | .949                        | .000    |
| mixed to autocratic            | 214           | .462                        | .644      | .713        | .653                        | .275    |
| democratic to mixed            | .767          | .663                        | .248      | 2.055       | .921                        | .026    |
| Interaction between regime of  | hange and cor | iflict history              | (H)       |             |                             |         |
| mixed to democratic*H          |               |                             |           | 719         | .206                        | .000    |
| mixed to autocratic*H          |               |                             |           | 408         | .177                        | .021    |
| democratic to mixed*H          |               |                             |           | 553         | .177                        | .002    |
| Controls                       |               |                             |           |             |                             |         |
| Relative power                 | -2.191        | .928                        | .018      | -2.359      | 1.129                       | .037    |
| Contiguity                     | 091           | .409                        | .823      | .069        | .391                        | .859    |
| Prior conflict history         | 204           | .058                        | .000      | .374        | .161                        | .021    |
| Observations                   |               | 841                         |           |             | 841                         |         |
| Prob>chi2                      |               | .0117                       |           |             | .000                        |         |

(Notes. There were 31 uncensored observations)

tion not only promotes lengthy interludes between spells of conflict but also significantly hastens rivalry termination.

The evidence strongly supports the claim that democratization, especially when coupled with a long sequence of prior disputes, leads to termination but that autocratization, even when associated with a long sequence of prior disputes, does not. Rather, autocratization reduces the prospects of termination. Democratization it seems, promotes international stability by rendering the outbreaks of conflict more sporadic over time.

We can further explore if the relationship between specific regime transitions and interlude holds when the selection process by which dyadic regime change occurs is taken into account. Table 5 presents the results. The first model shows what the results of the Weibull model are (previously presented in Model 1 of Table 2) controlling for selection. This is also why interaction terms were not used. The selection assessment in Model 1 reveals that a history of conflict reduces the likelihood of the rivalry experiencing dyadic regime change in a statistically significant manner. This dovetails with the theoretical literature (example, Horowitz 2003) which argues that participation in war retards democratization and by extension regime change. By contrast, economic development has no statistically significant relationship with the likelihood of dyadic regime change. This result dovetails with the argument (Przeworski et al. 2000) that wealth alone does not necessarily promote democratization. The survival assessment in Model 1 reveals that of the three specific regime transitions, only transitions from mixed to democratic rivalries has a statistically significant relationship with interlude. Such democratizations increase the peace-spell between MIDs. In the follow-up analysis, I test whether the total effect of each specific regime transition, taking prior history into account, is significantly different from a null hypothesis that the total effect is zero. Of the three regime transitions, only the mixed to democratic transition is statistically significant at the .009 level (mixed to democratic transition+ prior history of conflict).

Model 2 reruns the analysis with the interaction terms included. The selection assessment is broadly similar. A history of conflict reduces the likelihood of dyadic regime change while economic development has no statistically significant effect on the likelihood of democratization. The survival assessment in Model 2 reveals that mixed to democratic transitions increase the interlude, with a p-value of .000. It also shows that democratic to mixed transitions increase the interlude, with a p-value of .026. To parse between the specific transitions, I also test if the total effect of each specific regime transition, taking prior history and the respective interaction term into account, is significantly different from a null hypothesis that the total effect is zero. The tests reveal a similar pattern of significance as in Model 1. Of three regime transitions, only the mixed to democratic transition is statistically significant at the .000 level [mixed to democratic transition + Prior History of Conflict + (mixed to democratic transition\*Prior History of Conflict)]. In alternative specifications of the *dursel* estimator conducted as robustness checks, a similar pattern of significance was found.<sup>20</sup> The total effects of mixed to democratic transitions, unlike the case for the other regime transitions, are always significant.

Collectively, the results in Table 5 improve our confidence in the finding that mixed to democratic transitions increase the peaceful interlude between rivals, even when controlling for selection. It constitutes further empirical support for the pacific democratization thesis (H1b).

#### Conclusion

This paper tests four perspectives on the democratization-conflict linkage in the domain of enduring rivalry. Of the regime transitions that were found to reduce the risk of outbreaks of militarized conflict within rivalry, only transitions from mixed to democratic rivalry supports the pacific democratization thesis. This relationship holds up when selection for dyadic regime change is taken into account. I also unpack the process of rivalry termination itself. Unlike autocratization, democratization ends rivalry by making the outbreaks of conflict more sporadic over time. These results suggest that the inverse relationship between democratization and conflict recidivism is robust.

One concern over the use of the variable *interlude* to measure peaceful spells within enduring rivalries is whether a longer interlude between militarized interstate disputes after democratization is representative of conflict amelioration. For example, militarized interstate disputes after democratization could have reached a higher level of escalation. This is a complex issue as the observed level of escalation in a militarized interstate dispute may not be its potential level of escalation due to both selection effects and endogeneity (Smith 1999). I plan to address this issue in follow-up research. In particular, the finding that autocratization or the transition from mixed to autocratic rivalry also reduces the risk of conflict outbreaks is intriguing and deserves further study.

As a policy objective, democracy promotion has had a poor historical record (Enterline, Grieg 2008). It reduces the amount of aid received (Bueno de Mesquita and Alastair Smith 2009). It retards post war economic recovery (Flores and Nooruddin 2008). It leads to realignment against the United States (Ratner 2009). No wonder democracy promotion has fallen out of fashion lately. That said, one should compare democracy promotion

<sup>&</sup>lt;sup>20</sup> These are reported in the replication file to conserve space.

with comparable policy alternatives. Consider for example, the contemporary Middle East. It is remarkable that the United States persists in launching yet another Middle Eastern peace initiative while avoiding a serious engagement with democratic forces within the Arab states. This is despite the fact that ending the rivalry between Israel and its Arab neighbors may be more of a pipe dream than promoting democracy in the Middle East. While resolving the issues underlying a rivalry is most desirable, democratization may be all that the policymaker has to work with; and it may be sufficient to do the job.

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#### Appendix 1.List of all regime transitions

| Tran | sitions from mixed to dem | ocratic rivalry          |                     |                |
|------|---------------------------|--------------------------|---------------------|----------------|
| No   | Rivalry dyad              | Country under transition | Transition end date | MID start date |
| 1    | Ecuador-USA               | Ecuador                  | 30/04/1979          | 25/10/1980     |
| 2    | Russia-USA                | Russia                   | 26/03/2000          | 01/11/2000     |
| 3    | Russia-Canada             | Russia                   | 26/03/2000          | 01/11/2000     |
| 4    | Honduras-El Salvador      | El Salvador              | 02/06/1984          | 23/05/1989     |
| 5    | Russia-Norway             | Russia                   | 26/03/2000          | 14/02/2001     |
| 6    | Russia-Turkey             | Russia                   | 26/03/2000          | 18/06/2000     |
| 7    | Syria-Israel              | Syria                    | 26/02/1954          | 28/02/1954     |
| 8    | South Korea-Japan         | South Korea              | 26/02/1988          | 13/02/1996     |
| 9    | India-Pakistan            | Pakistan                 | 17/11/1988          | 11/02/1990     |
| 10   | India-Bangladesh          | Bangladesh               | 26/09/1991          | 25/06/1996     |
| 11   | Honduras-Nicaragua        | Nicaragua                | 27/02/1990          | 02/02/1991     |
| 12   | Venezuela-Guyana          | Guyana                   | 06/10/1992          | 03/10/1999     |
| 13   | Russia-Japan              | Russia                   | 26/03/2000          | 21/04/2000     |

| No  | Rivalry dyad   | Country under transition  | Transition end date   | MID start date  |
|---|--|---|---|---|
| 1   | Chile-Argentina  | Chile   | 12/09/1973  | 14/07/1977  |
| 2   | France-Russia  | France  | 03/11/1852  | 13/06/1853  |
| 3   | Greece-Bulgaria  | Greece  | 05/08/1936  | 11/10/1940  |
| 4   | Cameroon-Nigeria   | Nigeria   | 01/01/1984  | 02/05/1987  |
| 5   | Uganda-Kenya   | Uganda  | 20/12/1969  | 13/02/1973  |
| 6   | Kenya-Somalia  | Somalia   | 22/10/1969  | 23/06/1977  |
| 7   | Somalia-Ethiopia   | Somalia   | 22/10/1969  | 01/04/1973  |
| 8   | Ethiopia-Sudan   | Sudan   | 13/10/1971  | 01/03/1975  |
| 9   | China-Burma  | Burma   | 01/07/1963  | 01/01/1969  |
| 10  | France-Germany   | France  | 03/11/1852  | 06/06/1859  |
| 11  | Germany-Italy  | Germany   | 15/07/1933  | 25/07/1934  |
|   | TT 1 C 1   | Sudan   | 13/10/1971  | 15/12/1971  |
| Trans   | Uganda-Sudan   |   | 13/10/19/1  | 13/12/1971  |
| Trans   | oganda-Sudan sitions from autocratic to Rivalry dyad   |   | Transition end date   | MID start date  |
| Trans   | sitions from autocratic to   | mixed rivalry   |   |   |
| Trans   | sitions from autocratic to<br>Rivalry dyad   | mixed rivalry  Country under transition   | Transition end date   | MID start date  |
| Trans No 1  | sitions from autocratic to Rivalry dyad Ethiopia-Sudan   | mixed rivalry  Country under transition  Sudan  | Transition end date 02/04/1986  | MID start date 05/12/1986   |
| Trans No 1 2 3  | sitions from autocratic to<br>Rivalry dyad<br>Ethiopia-Sudan<br>Syria-Jordan   | mixed rivalry  Country under transition  Sudan Syria Philippines  | Transition end date 02/04/1986 26/02/1954   | MID start date<br>05/12/1986<br>13/04/1957  |
| Trans No  1 2 3 Trans                                       | Rivalry dyad Ethiopia-Sudan Syria-Jordan China-Philippines   | mixed rivalry  Country under transition  Sudan Syria Philippines  | Transition end date 02/04/1986 26/02/1954   | MID start date<br>05/12/1986<br>13/04/1957  |
| Trans No  1 2 3 Trans                                       | Rivalry dyad  Ethiopia-Sudan Syria-Jordan China-Philippines  | mixed rivalry  Country under transition  Sudan Syria Philippines o mixed rivalry  | Transition end date  02/04/1986 26/02/1954 03/02/1987   | MID start date<br>05/12/1986<br>13/04/1957<br>01/01/1995                              |
| Trans No 1 2 3 Trans No 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Rivalry dyad  Ethiopia-Sudan Syria-Jordan China-Philippines  Sitions from democratic to Rivalry dyad                               | mixed rivalry  Country under transition  Sudan Syria Philippines  o mixed rivalry  Country under transition               | Transition end date  02/04/1986 26/02/1954 03/02/1987  Transition end date                        | MID start date 05/12/1986 13/04/1957 01/01/1995  MID start date                       |
| Trans No 1 2 3 Trans No                                     | Rivalry dyad  Ethiopia-Sudan Syria-Jordan China-Philippines Sitions from democratic to Rivalry dyad  Ecuador-Peru                  | mixed rivalry  Country under transition  Sudan Syria Philippines  o mixed rivalry  Country under transition  Peru         | Transition end date  02/04/1986 26/02/1954 03/02/1987  Transition end date  01/01/1992            | MID start date 05/12/1986 13/04/1957 01/01/1995  MID start date 09/01/1995            |
| Trans   | Rivalry dyad  Ethiopia-Sudan Syria-Jordan China-Philippines  Sitions from democratic to Rivalry dyad  Ecuador-Peru Belgium-Germany | mixed rivalry  Country under transition  Sudan Syria Philippines  o mixed rivalry  Country under transition  Peru Germany | Transition end date  02/04/1986 26/02/1954 03/02/1987  Transition end date  01/01/1992 15/07/1933 | MID start date 05/12/1986 13/04/1957 01/01/1995  MID start date 09/01/1995 07/03/1936 |

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