

Committed To Peace: Liberal Institutions and the Termination of Rivalry

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Rivalry is characterized by mutual mistrust, anger and fear, and becomes increasingly intractable as confrontations between rivals militarize. The empirical record confirms that rivalries account for the vast number of militarized interstate disputes and wars in the international system. Although considerable attention has been spent on the initiation, duration or termination of rivalries, to date no comprehensive theoretical framework for their persistence or failure exists. Following Fearon, a rationalist explanation of rivalry termination is developed. It is argued here that the adoption of liberal institutions helps alleviate the commitment problems arising in rivalry. Free-market reform, democratic institutions and membership in international organizations all build trust and increase defection costs among rival states, and therefore help to shorten the duration of rivalry. Using a Cox proportional hazard model and Thompson's data on rivalries, it is shown that change towards democracy, as well as the joint effect of democracy and economic development increase the likelihood of rivalry termination. Also, joint membership in international organizations with mechanisms for dispute settlement reduces the duration of rivalry. A robustness check using Diehl and Goertz's list of rivalries produces similar results.

Interstate rivalry receives considerable scholarly attention. This is not only because violent conflict remains asymmetrically distributed with few dyads accounting for the vast majority of conflict in the international system, but also rivalry fundamentally acknowledges the importance of event dependence and conflict history.¹ States do not interact in the absence of context, but in fact base foreign policy decisions in part on previous encounters. This distinction remains particularly important for rival states. The hostile nature of rival relationships ensures that any militarized conflict that erupts takes place in an environment characterized by fear, mistrust and sometimes even hatred. Managing rival interactions, then, is crucial to limiting the amount of warfare in the international system.

The case of Ecuador and Peru illustrates well the core concerns of rivalry research. These two states fought frequently over the course of their long political history and although the rivalry never produced a large-scale military conflict, the skirmishes were sometimes quite bloody.² In 1995, for example, the rivalry escalated along a forty-eight mile stretch of the Cordillera del Condor, resulting in the deployment of additional soldiers to the remote mountainous region. The subsequent fighting produced nearly 500 casualties, but both sides finally agreed to a cease fire and eventually to the demilitarization of the disputed

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¹ See Derek D. F. Cornwell and Michael Colaresi, 'Holy Trinities, Rivalry Termination, and Conflict', *International Interactions*, 28 (2002), 325–54. Also see John A. Vasquez, *The War Puzzle* (Cambridge: Cambridge University Press, 1993).

² Ecuador and Peru sparred nearly thirty times over the course of their rivalry according to the Militarized Interstate Dispute dataset. The rivalry centred on a border region that reportedly has mineral resources, such as gold and uranium, as well as oil.

border area.³ With pressure both from the Organization of American States (OAS) and the United States, the two nations signed a peace treaty in October 1998 that delineated the boundary line and seems to have resolved the territorial issues in contention. Crucial to the termination of this rivalry appears to have been measures designed to reassure the two adversaries that the provisions in the peace treaty would be honoured.

If rival states, such as Ecuador and Peru, can fashion agreements that terminate long-standing grievances, then solutions to even the most entrenched conflicts are within reach. Further, since rivalry accounts for over three-quarters of the militarized conflict in the international system, strategies that promote trust and dialogue can effectively bring long-standing belligerents to the bargaining table and send troops back to the barracks.⁴ The case of Ecuador and Peru, though, embodies both the promises of conflict resolution and the profound difficulties of establishing such solutions. The rivalry endured for nearly two centuries and one must wonder why it resisted remediation for so long.

Recent studies on rivalry offer multiple explanations for termination. Political shocks, deepening democracy, interdependence and mutual security threats all help account for the end of an enduring rivalry. No model, however, strictly offers a rationalist account for rivalry duration and termination. Why do enduring rivals find it so difficult to resolve the issues in contention and thus end hostile but clearly costly relationships? The answer lies in the inability of rival states to commit credibly to a settlement in an international system lacking central agency. Rivals find conflict resolution challenging inasmuch as deep mistrust, fear and enmity all characterize their relationship. Given such animosity, neither state expects the other to honour future commitments if auspicious, but unexpected, circumstances arise. Thus, expectations about likely future demands make commitment difficult to achieve in the present.

Institutions that promote trust help alleviate the commitment problems among rival states. In this way, democracy, development and membership in intergovernmental organizations, for example, should influence rivalry duration because they make commitment rationally possible. Rivals resolve their deep disagreements better when they expect negotiated solutions to hold up over time. Therefore, institutions that promote trust and dialogue among adversaries help overcome short-term incentives to renege. Further, these institutions impose exogenous costs on rival states for breaking signed contracts. Thus, liberal institutions facilitate conflict resolution even among rival states by eliminating incentives to bluff and by increasing the transparency of political decision making.

The aim of this article is to assess the role liberal institutions play in rivalry termination. While Cornwell and Colaresi find rivalries between jointly democratic dyads to fail at much higher rates than those between non-democratic pairs, their research left unanswered important additional questions.⁵ First, does the relationship between joint democracy and rivalry duration also characterize transitioning regimes or regimes beset by political instability? If political instability unleashes nationalist forces and leads decision makers to scapegoat a rival, then moves towards deeper democracy or autocracy may only reinforce enemy images and thus prolong belligerent relationships. However, regime

³ See Beth A. Simmons, 'Territorial Disputes and their Resolution: The Case of Ecuador and Peru', *Peaceworks Series*, 27 (Washington, D.C.: United States Institute of Peace, 1999).

⁴ See Gary Goertz and Paul F. Diehl, 'Rivalries: The Conflict Process', in John A. Vasquez, ed., *What Do We Know About War* (New York: Rowman and Littlefield, 2000), pp. 197–218.

⁵ Cornwell and Colaresi, 'Holy Trinities, Rivalry Termination, and Conflict'.

transitions may present an opportunity to resolve the underlying issues in contention with leaders more interested in domestic political development than in the long-standing rivalry, thereby increasing the chances of termination.

Secondly, Cornwell and Colaresi ignore the possible confounding effects of development on rivalry termination.⁶ Does economic development help to shorten the length of rivalry? Presumably developed states recognize that the gains from economic and political exchange are not fully realized in environments of enduring rivalry. Thirdly, might relationships between liberal institutions and rivalry termination be nonlinear? Perhaps the effects of democracy and development are conditional on each other. Recent evidence, in fact, suggests that the pacifying affect of democracy may be conditional on the level of development. As such, we explore the direct effect of development on rivalry termination, as well as the possible added influence of the most developed and democratic states in the system.

Similar to Cornwell and Colaresi, we employ a Cox proportional hazard model to estimate the relationship between liberal institutions and rivalry termination. Using Thompson's Strategic Rivals dataset, our results indicate that democracy and development together strongly increase the probability of rivalry termination.⁷ Therefore, developed democratic states appear to resolve the issues that prolong rivalrous relationships better. We also observe that changes towards democracy increase the likelihood of rivalry termination. Democratization, then, does help to facilitate interstate conflict resolution. Lastly, we find that joint membership in inter-governmental organizations (IGOs) powerfully affects the duration of rivalry. However, unlike Cornwell and Colaresi, our results reveal that joint IGO membership actually shortens the duration of rivalry, rather than lengthens it.⁸ Importantly, we utilize in our analyses only shared IGO memberships with conflict resolution procedures. These findings lead us to conclude that factors that promote trust and make renegeing costly help facilitate conflict resolution.

RIVALS AND RIVALRY

Although interstate rivalry defines a recent research programme into the sources of violent conflict among states in the international system, specific dyads have actually been singled out for quite some time because they exhibit long periods of belligerence and a deep underlying enmity. The Hundred Years War between Great Britain and France, for example, illustrates the current concern with historical rivals. These two countries fought repeatedly over territory, European dominance and royal succession during the fourteenth and fifteenth centuries, such as at Crécy (1346), Poitiers (1356) and Agincourt (1415).⁹ Yet despite the volumes devoted to such cases, we still do not fully understand why such competitive relationships emerge and how they terminate at specific historical time points. Other important rivals include Germany and Russia in the first half of the twentieth century and India and Pakistan in the second. The relationship between India and Pakistan clearly remains hostile; however, the other rivals have seemingly resolved their mutual animosities. Given the frequency of violent clashes between the rivals of the Asian

⁶ Cornwell and Colaresi, 'Holy Trinities, Rivalry Termination, and Conflict'.

⁷ See William R. Thompson, 'Identifying Rivals and Rivalries in World Politics', *International Studies Quarterly*, 45 (2001), 557–86.

⁸ Cornwell and Colaresi, 'Holy Trinities, Rivalry Termination, and Conflict'.

⁹ See Evan Luard, *War in International Society: A Study in International Sociology* (London: I.B. Tauris, 1986).

subcontinent and the potential for a dangerous escalation of the fighting in the future, the importance of resolving this long-standing conflict cannot be overstated. Rivalry research directly targets the most dangerous dyads in the international system to develop policy tools that might enable leaders to overcome fear and suspicion and to cultivate an environment of trust, dialogue and co-operation.

Defining Rivalry

According to Goertz and Diehl repeated militarized competition characterizes states in rivalry.¹⁰ Not only does conflict tend to beget conflict, but also previous encounters shape how states interact with one another in the future. Rivalrous relationships are distinct from other dyadic associations inasmuch as violence exacerbates mutual insecurities that already run deep. Institutional apprehension leads more readily to military force since rivals have utilized force against one another in the past and thus there is an expectation that force will be a policy tool in future encounters. This expectation primes leaders for forceful responses to challenges from rival states. Goertz writes: ‘a rivalry sets the stage for escalating tensions in a dispute to culminate in war. Disputes without a violent past are more likely to be resolved peacefully, or at least without resort to all out force.’¹¹

Rivalry scholars seem to agree that threat perception and expectations about future conflict define these protracted belligerent relationships. However, the extent of militarization remains contentious. While Thompson insists that rivals must view each other as enemies, this condition does not portend that the dyadic confrontation will inevitably become militarized.¹² Indeed, Thompson denies that militarization is a necessary condition of rivalry, unlike Diehl and Goertz.¹³ However, the mutual perception of threat does imply a heightened concern for military confrontation.¹⁴ Military force remains a possible, if not likely, foreign policy option. Since Thompson focuses rivalry around perception and not behaviour, rivalry ends, then, according to Cornwell and Colaresi, ‘when states stop singling each other out for special attention and no longer consider one another a sufficient threat.’¹⁵ Diehl and Goertz, in contrast, consider rivalry termination to be a function of time.¹⁶ That is, rivalry ends when a specified length of time passes without militarized conflict.

Rivalry and the Empirical Record

Rivals account for most militarized conflict in the international system. According to Goertz and Diehl, over 70 per cent of militarized disputes and nearly 55 per cent of

¹⁰ Goertz and Diehl, ‘Rivalries: The Conflict Process’, p. 222.

¹¹ Gary Goertz, *Contexts of International Politics* (Cambridge: Cambridge University Press, 1994), p. 210.

¹² Thompson, ‘Identifying Rivals and Rivalries in World Politics’; Vasquez, *The War Puzzle*; William R. Thompson, ‘Principal Rivalries’, *Journal of Conflict Resolution*, 39 (1995), 195–223. Also see John A. Vasquez, ‘Distinguishing Rivals that Go to War from Those that Do Not: A Quantitative Comparative Case Study of the Two Paths to War’, *International Studies Quarterly*, 40 (1996), 531–58.

¹³ See Paul F. Diehl and Gary Goertz, *War and Peace in International Rivalry* (Ann Arbor: University of Michigan Press, 2001).

¹⁴ See Paul R. Hensel, ‘An Evolutionary Approach to the Study of Interstate Rivalry’, *Conflict Management and Peace Science*, 17 (1999), 175–206.

¹⁵ Cornwell and Colaresi, ‘Holy Trinities, Rivalry Termination, and Conflict’, p. 328.

¹⁶ See Diehl and Goertz, *War and Peace in International Rivalry*.

interstate wars since 1816 occurred between rival states.¹⁷ And, ‘the most serious enduring rivalries are almost eight times more likely to experience a war than pairs of states in isolated conflict.’¹⁸ Further, Leng concludes that previous crisis activity strongly pushes states towards war in future encounters.¹⁹ In fact, nearly all of the dyads Leng observed experienced war after three crises. As expected also, each crisis appears to increase the likelihood of future crisis activity. Colaresi and Thompson observe an increasing hazard rate for the outbreak of a crisis given previous militarized conflict.²⁰ According to Colaresi and Thompson, ‘the risk of a violent crisis increases by a factor of 3.51 after the first crisis and a factor of 8.75 after the second crisis, in comparison to a dyad with no previous crisis.’²¹

Evidence also suggests that bargaining within crises escalates more quickly for rivals than non-rivals. Prins observes that military responses to crisis triggers become increasingly prevalent as a rivalry deepens.²² States with fourteen or more crises resort to force nearly 90 per cent of the time, while those with fewer than six crises rely on military coercion only 60 per cent of the time. Not only that, it also appears that enduring rivalry militarizes the foreign policy interactions between rivals and non-rivals. States in rivalry are much more likely to use military force against non-rival states compared to that of two non-rivals.

The termination of rivalries appears to follow political shocks and domestic change, as well as external security concerns. Shocks, such as civil wars, world wars and territorial changes all decrease rivalry duration.²³ Yet, stronger influences on termination relate to institutional change at the domestic level and threats to security. Change towards democracy shortens rivalry, while issue salience lengthens it. Indeed, rivalries over territory, colonies or regional influence last longer than rivalries over other types of issues, although this finding appears to be confined to the period before the Second World War.²⁴ The influence of democracy, in contrast, has strengthened since the Second World War. Democracies are less likely to be rivals and democratization pushes rivalry resolution. Cornwell and Colaresi also find that shared threat and alliance ties help to end rivalry, while contiguity and power asymmetry lengthen rivalry.²⁵ Further, the chance of rivalry ending

¹⁷ Goertz and Diehl, ‘Rivalries: The Conflict Process’.

¹⁸ Gary Goertz and Paul F. Diehl, ‘Enduring Rivalries: Theoretical Constructs and Empirical Patterns’, *International Studies Quarterly*, 18 (1993), 151–63, p. 148. Also see Paul F. Diehl, *The Dynamics of Enduring Rivalries* (Urbana: University of Illinois Press, 1998).

¹⁹ Russell J. Leng, ‘When Will They Ever Learn? Coercive Bargaining in Recurrent Crises’, *Journal of Conflict Resolution*, 27 (1983), 379–419.

²⁰ See Michael P. Colaresi and William R. Thompson, ‘Hot Spots or Hot Hands? Serial Crisis Behavior, Escalating Risks, and Rivalry’, *Journal of Politics*, 64 (2002), 1175–98. Also see Michael P. Colaresi and William R. Thompson, ‘Strategic Rivalries, Protracted Conflict, and Crisis Escalation’, *Journal of Peace Research*, 39 (2002), 263–87.

²¹ Colaresi and Thompson, ‘Strategic Rivalries, Protracted Conflict, and Crisis Escalation’, p. 1190. Hensel also finds the probability of future dispute involvement increases with the number of disputes. Further, war becomes more likely as dispute occurrence increases as well (Hensel, ‘An Evolutionary Approach to the Study of Interstate Rivalry’).

²² Brandon C. Prins, ‘Interstate Rivalry and the Recurrence of Crises: A Comparison of Rival and Nonrival Crisis Behavior, 1918–1994’, *Armed Forces and Society*, 31 (2005), 323–51.

²³ See D. Scott Bennett, ‘Integrating and Testing Models of Rivalry Duration’, *American Journal of Political Science*, 42 (1998), 1200–32.

²⁴ Bennett, ‘Integrating and Testing Models of Rivalry Duration’, p. 1228.

²⁵ Cornwell and Colaresi, ‘Holy Trinities, Rivalry Termination, and Conflict’.

increased in the Cold War period, which presumably flowed from increased power concentration and decreased systemic uncertainty as Cornwell and Colaresi assert.²⁶

A RATIONALIST EXPLANATION FOR THE TERMINATION OF RIVALRY

Rivalry represents a virulent form of contentious politics. At minimum, rival states distrust one another. At the extreme, rival states view each other as enemies and frequently fight. In both cases long-term hostility generates institutional trepidation for conflict resolution. Yet rivalry, like war, is costly and thus usually *ex-post* inefficient. Actors should negotiate settlements that resolve issues in contention and avoid lengthy contests of political, military and economic strength. Since rivalries exist something must inhibit rival states from recognizing jointly beneficial bargaining outcomes that terminate the belligerent competition. Fearon offers three rationalist explanations for bargaining failure that leads to war: (1) private information on capabilities or resolve with an incentive to misrepresent, (2) inability to commit to a negotiated solution and (3) issue indivisibility.²⁷ All three explanations suggest that institutions wishing to lengthen the shadow of the future should alleviate conditions that generate misperception and punish defection to prevent bargaining breakdown and thus to enable rival states to resolve issues in contention better.²⁸

Private Information

The absence of centralized enforcement, in a system of sovereign actors with offensive military might, easily generates distrust. Since information may provide military advantage, states have incentives to deceive.²⁹ Neither state has confidence in revealed information about preferences, resolve and relative power. Therefore, uncovering the existence of a mutually acceptable bargaining space becomes challenging. According to Fearon, ‘incentives to misrepresent military strength can undermine diplomatic signaling’,

²⁶ Cornwell and Colaresi, ‘Holy Trinities, Rivalry Termination, and Conflict’, p. 339.

²⁷ See James D. Fearon, ‘Rationalist Explanations for War’, *International Organization*, 49 (1995), 379–414. Fearon actually dismisses issue indivisibility as a convincing explanation for bargaining breakdown. Domestic political conditions are likely responsible for preventing issue divisibility (Fearon, ‘Rationalist Explanations for War’).

²⁸ We assume rivalry represents a costly foreign policy action similar to war. Admittedly, rivalry might conceivably provide some benefit to political elites. However, there remains very little (if any) systematic evidence that leaders divert attention from domestic turmoil or engage in costly foreign policy actions to shore up domestic political support at home. It remains, we think, sound to assume that rivalry is *ex post* inefficient. One would expect a selectorate eventually to recognize the costs being incurred by the mass public due to a lack of trade, investment, political stability, military death and international opprobrium that result from a rivalry designed to keep a leader in power.

²⁹ Powell maintains that rationalist explanations for conflict (particularly prolonged conflict like rivalry) must distinguish information asymmetries. For example, are states uncertain about the relative distribution of military capabilities or are they uncertain about the costs of fighting? Different types of uncertainty or misperception may lead to different foreign policy actions. We insist that while misperception undoubtedly plays a role in rival decision making, fear of future exploitation is more crucial in preventing the termination of rivalry. Liberal institutions do help to mitigate misperception, but more importantly for rivalry they lengthen the shadow of the future, punish defection and increase trust (see Robert Powell, ‘Bargaining and Learning While Fighting’, *American Journal of Political Science*, 48 (2004), 344–61).

and as a result 'states may be forced to use war as a credible means to reveal private information about their military capabilities'.³⁰

In a world of complete and perfect information, bargaining breakdown should occur only rarely. However, in an environment where states attempt to misrepresent themselves, challenges will frequently arise as adversaries endeavour to distinguish bluffs from true signals of preferences, power and resolve. Conflict initiation, escalation and even war occur, then, as states seek information about opponents.³¹ A separation mechanism that can accurately verify the true nature of signals would clearly enable more efficient bargaining. Most states would welcome such a system given that it would enable them to avoid costly challenges. The problem lies not with the bluffers. Indeed, states that bluff should actually capitulate before a burgeoning conflict escalates too far. Resolved states, by contrast, will frequently find themselves challenged since adversaries cannot distinguish them from their more deceitful counterparts, and these are of course the dangerous confrontations.

Sunk costs and tying hands offer two such separation mechanisms. Both strategies enable political elites to demonstrate resolve by imposing costs on themselves. Sunk costs involve paying a price up front to reveal the high value placed on the issue in dispute.³² Tying hands, alternatively, involves running the risk of conflict escalation by making commitments public. If backing down or reneging on a policy promise is costly, then such pronouncements help separate resolved states from the many impostors. Tying hands would seem to offer a more efficient and thus effective way of revealing credible commitment.³³ Political leaders only pay the price if challenged by an adversary and sunk costs actually provide little additional information once a dispute escalates.³⁴

Credible Commitment

Misperception and ineffective signalling plague inter-state interaction. Indeed, for Fearon and Blainey, private information with incentives to misrepresent remains the dominant rationalist explanation for violent conflict between states.³⁵ Yet, whereas information

³⁰ Fearon, 'Rationalist Explanations for War', p. 400. Interestingly, even when states share the same information military competition may still ensue. Smith and Stam, for example, suggest that states sometimes draw very different conclusions from the same historical event. Subsequent military strategies or procedures for deploying weapons systems will depend in part on this interpretation. Each state's assessment of the probability of victory is likely to be different if institutional regulations are developed based on these subjective interpretations. Once again, fighting typically leads to a convergence on how such changes affect the probability of victory. However, this is a costly method of gathering information about one's opponent. By contrast, liberal institutions should enable states to assess more effectively and efficiently an opponent's beliefs about military strategy and tactics (see Alastair Smith and Allan C. Stam, 'Bargaining and the Nature of War', *Journal of Conflict Resolution*, 48 (2004), 783–813).

³¹ 'A theory of war', according to Boehmer, Gartzke and Nordstrom, 'is thus an account of why states sometimes fail to achieve *ex ante* the bargains that obtain *ex post*.' Costly signalling should prevent such *ex-ante* bargaining failures. See Charles Boehmer, Erik Gartzke and Timothy Nordstrom, 'Do Intergovernmental Organizations Promote Peace?', *World Politics*, 57 (2004), 1–38.

³² See Branislav L. Slantchev, 'Military Coercion in Interstate Crises', *American Political Science Review*, 99 (2005), 533–47.

³³ According to Koremenos, leaders prefer to avoid tying hands when the strategic environment is characterized by high uncertainty (see Barbara Koremenos, 'Contracting around International Uncertainty', *American Political Science Review*, 99 (2005), 549–65).

³⁴ Slantchev, 'Military Coercion in Interstate Crises', p. 534.

³⁵ Boehmer *et al.*, 'Do Intergovernmental Organizations Promote Peace?'

asymmetry focuses on incentives to misrepresent the values of certain critical factors, such as military power and resolve, commitment problems primarily involve the issue of trust. And trust seemingly provides a better explanation for the continuation of rivalry than uncertainty about preferences or power. Rivals are likely to possess sufficient information about an opponent's current capabilities and resolve to avoid decisions that would escalate a crisis situation. In contrast, reputational concerns and efforts to prevent future exploitation confound attempts to settle the contentious issues underlying rivalry, and sometimes lead to the initiation of military challenges. States frequently fight in the present to avoid having to fight harder in the future.

Extant empirical evidence suggests that rival states do not necessarily have particular difficulty with their ability to signal, but rather with their ability to commit to a negotiated settlement that would remove underlying sources of contention. Azar and Cohen's work on protracted conflict, for example, explicitly models long-term belligerence as dyadic stability.³⁶ Diplomacy that moves the relationship away from rivalry increases uncertainty and fear of exploitation. Since rival states anticipate the use of force by opponents, military moves designed to reduce tensions and build trust also often increase the state's vulnerability. Not only may the redeployment of forces or a decrease in readiness levels invite attack, but such policies may be perceived by the opponent as demonstrating a lack of resolve. Fear of future defection and exploitation, then, inhibits agreements in the present.

Presumably states seek commitments that rationally preclude future renegeing. However, rival states suffer from a deep lack of trust. Negotiated settlements threaten to change the strategic relationship between rivals and such a change may be costly if it upsets the military balance between the two actors. Indeed, even if it remains uncertain how an agreement alters the relationship, fear of adverse consequences is likely to trigger retrenchment on the part of rival states. 'In anarchic systems,' Goemans writes, 'agreements must be self-enforcing.'³⁷ That is, if renegeing in the future provides a state with greater gains than adhering to the current signed contract, then any settlement cannot rationally be binding. Given the security concerns of rival states and the high level of distrust, credible commitment must be a crucial element in bilateral bargaining.

Violent insurgent groups confront similar obstacles in civil war settlement. Even if government leaders earnestly desire peace, the inability of these same leaders to enforce their own contract commitments ensures that negotiations will normally fail.³⁸ Disarmament must be part of any civil war settlement. However, once rebel groups voluntarily give up their weapons, government forces clearly have an incentive to renege on any previous bargains. Rational commitment becomes nearly impossible to fashion in an environment where governments and rebels have such asymmetric obligations. Insurgents must recognize that without weapons they no longer possess the ability to enforce the signed contract nor can they now survive a government assault.³⁹ Consequently, government leaders cannot credibly renounce the use of force in the future if circumstances present a

³⁶ See Edward E. Azar and Stephen P. Cohen, 'Peace as Crisis and War as Status Quo: The Arab-Israeli Conflict Environment', *International Interactions*, 6 (1979), 159–84.

³⁷ H. E. Goemans, *War and Punishment: The Causes of War Termination and the First World War* (Princeton, N.J.: Princeton University Press, 2000), p. 32.

³⁸ According to Walter, four out of every five civil wars fail to reach negotiated settlements. In contrast, nearly six out of ten interstate wars are resolved through negotiation (see Barbara F. Walter, 'The Critical Barrier to Civil War Settlement', *International Organization*, 51 (1997), 335–64).

³⁹ Walter, 'The Critical Barrier to Civil War Settlement'.

military advantage and rebels rationally cannot relinquish their weapons since they are crucial to survival.⁴⁰

Interestingly, Fearon expects variation in civil war settlement depending on the structural relationship between government and rebel forces.⁴¹ Insurgents who are extracting sizeable profits from controlled territory should demand larger benefits from any peace agreement. Presumably this bargaining leverage inhibits settlement. In fact, in some countries the yield from resource hoarding may be so high as to preclude civil war settlement entirely. Rivalry also may produce powerful actors with incentives to prolong hostile relationships. Maintaining emergency laws due to security concerns allows leaders to weaken political opposition and thwart institutional change. Both enable leaders to remain in power and perpetuate costly competition. Colaresi actually finds some empirical support for rivalry shielding leaders from domestic punishment.⁴² Not only do leaders of rival states get deselected from power for acting dovishly, but selectorates also hesitate to punish these same leaders for foreign policy failures.⁴³

LIBERAL INSTITUTIONS AND CREDIBLE COMMITMENT

Democratic Trust

Despite the select benefits some leaders may accrue from rivalry, liberal institutions should in general eliminate leader incentives to frustrate co-operative agreements. Indeed, liberal institutions should enable states and leaders to overcome fears of future exploitation. Liberal institutions increase both trust and defection costs. Consequently, negotiated settlements become easier to design. Democracy, in particular, offers a rule-based environment for bargaining that deters corruption and improves the transparency of decision making. Further, democracies commit more credibly to co-operative agreements as a result of exogenous domestic costs (audience costs). Voters punish democratically-elected leaders for violating established rules of democratic decision making, such as by reneging on promises made to foreign governments. Electorates, then, make it costly for leaders to bluff.⁴⁴

Audience costs, however, are not necessary to elicit efficient foreign-policy signalling.⁴⁵ Opposition parties in democratic states provide additional information to foreign governments about the credibility of signals sent by political leaders. Support for, or opposition to, leader positions by out-of-government parties leads foreign governments to

⁴⁰ According to Walter, outside actors that enforce contract obligations offer one possible solution to the credibility problem. Yet the development of democratic institutions may provide an additional mechanism by which rational commitments can be made even by government leaders and rebel groups (see Walter, 'The Critical Barrier to Civil War Settlement').

⁴¹ James D. Fearon, 'Why Do Some Civil Wars Last So Much Longer than Others?', *Journal of Peace Research*, 41 (2004), 275–302.

⁴² See Michael Colaresi, 'When Doves Cry: International Rivalry, Unreciprocated Cooperation, and Leadership Turnover', *American Journal of Political Science*, 48 (2004), 555–70.

⁴³ Also see Michael Colaresi, 'Aftershocks: Post War Leadership Survival, Rivalry, and Regime Dynamics', *International Studies Quarterly*, 48 (2004), 713–28.

⁴⁴ Guisinger and Smith tie leader reputation to a country's reputation and insist that voters punish leaders for damaging their country's standing in the international arena (Alexandra Guisinger and Alastair Smith, 'Honest Threats: The Interaction of Reputation and Political Institutions in International Crises', *Journal of Conflict Resolution*, 46 (2002), 175–200).

⁴⁵ See Kristopher W. Ramsay, 'Politics at the Water's Edge: Crisis Bargaining and Electoral Competition', *Journal of Conflict Resolution*, 48 (2004), 459–86.

update their beliefs about the veracity of a stated bargaining position. Democratic leaders must recognize that opposition parties have little incentive to co-ordinate in a bluff.⁴⁶ The result tends to be more truthful and accurate signalling.⁴⁷ Therefore, as states develop political institutions that enable free and fair elections among competitive groups within society, leaders can more credibly commit to binding settlements. Institutional development enables states to reveal information truthfully. Since bluffing will be costly in democracies, bargaining becomes more transparent and more credible. Democratic political institutions, then, help ameliorate the conditions cultivated by rivalry and thus make termination more likely.

Interestingly, Gartzke and Gleditsch challenge conventional wisdom by claiming that democratic states should in general be less reliable partners since different leaders with markedly different preferences determine separately the entering and honouring of international commitments. Not only may a newly elected chief executive hold dissimilar preferences from a predecessor who had signed an international agreement, but public opinion may also shift against the maintenance of a foreign commitment.⁴⁸ Despite Gartzke and Gleditsch's assessment, most evidence continues to show democratic distinctiveness.⁴⁹ Lipson, for example, finds democracies to be more efficient bargainers and thus more reliable partners.⁵⁰ Leeds notes that democratic states are less likely to violate commitments, while Werner and Lemke observe alignment choices in militarized disputes to be strongly affected by regime type.⁵¹ Democratic states also appear to make alliances with other democracies and those alliances tend to last longer than other types of alliance pairs.⁵² It appears, then, that argument and evidence denote democracies as more credible negotiators and therefore more trustworthy associates.

Further, institutional change towards greater democracy is likely to bring new political elites to power who have little interest in maintaining previous policies. Indeed, significant polity change empowers opposition parties and leaders that appeal to different domestic constituencies. Presumably these constituencies and the political elites they brought to power see few reasons to retain the current policy status quo. Thus, institutional change

⁴⁶ According to Ramsay, if out-of-government parties are concerned with national security and getting elected then support for or opposition to leader positions becomes a credible signal (Ramsay, 'Politics at the Water's Edge').

⁴⁷ Also see Kenneth A. Schultz, *Democracy and Coercive Diplomacy* (Cambridge: Cambridge University Press, 2001).

⁴⁸ See Erik Gartzke and Kristian Skrede Gleditsch, 'Why Democracies May Actually Be Less Reliable Allies', *American Journal of Political Science*, 48 (2004), 775–95.

⁴⁹ Gartzke and Gleditsch do not consider specific factors relating to alliances that influence reliability, such as the offensive or defensive nature of the agreement. Leeds observes that defensive alliances tend to deter challenges while offensive alliances often lead to the initiation of militarized disputes. See Brett Ashley Leeds, 'Do Alliances Deter Aggression? The Influence of Military Alliances on the Initiation of Militarized Interstate Disputes', *American Journal of Political Science*, 47 (2003), 427–39.

⁵⁰ Charles Lipson, *Reliable Partners: How Democracies Have Made a Separate Peace* (Princeton, N.J.: Princeton University Press, 2005).

⁵¹ Leeds, 'Do Alliances Deter Aggression?' Also see Suzanee Werner and Douglas Lemke, 'Opposites Do Not Attract: The Impact of Domestic Institutions, Power, and Prior Commitments on Alignment Choices', *International Studies Quarterly*, 41 (1997), 529–46.

⁵² See Ashley Leeds, Jeffrey M. Ritter, Sara McLaughlin Mitchell and Andrew G. Long, 'Alliance Treaty Obligations and Provisions 1815–1944', *International Interactions*, 28 (2002), 237–60. Also see William Reed, 'Alliance Duration and Democracy', *American Journal of Political Science*, 41 (1997), 1072–8.

that both strengthens democratic political institutions and brings new leaders to power should increase the chances of rivalry termination.⁵³

Intervening Inter-Governmental Organizations

Inter-governmental organizations further facilitate conflict resolution both by offering neutral forums for diplomatic dialogue and by punishing defection from established agreements.⁵⁴ In an incomplete information environment where actors have incentives to deceive, IGOs can help reduce inefficiency by providing leaders with critical intelligence about opponents' strategic resources.⁵⁵ In rivalry, however, such intelligence may already be fairly well understood. More importantly, then, an IGO may be able to overcome calcified perceptions about an opponent's preferences and their willingness to commit to a settlement. Whereas direct bilateral negotiations fail because of poorly developed communication channels and mistrust stemming from previous hostilities, IGOs assist in breaking down such information barriers while assuring each party of the other's intentions.⁵⁶

Obviously, IGO reassurances to states regarding intentions or trustworthiness still suffer from lack of credibility. So why is the revealed information from the IGO any more credible than information disclosed by one party or the other? True, an IGO has no particular interest in an outcome that favours one of the actors and thus has no incentive to collude in a bluff. However, to avoid simply being used by a rival state to pass on incomplete or inaccurate information, IGOs must either 'verify the veracity of information', or find some method to induce the truthful exchange of information.⁵⁷

According to Boehmer *et al.*, 'sophisticated administrative and intelligence-gathering capabilities' are necessary for IGOs to serve effectively as information arbitrageurs.⁵⁸ This is probably asking too much of most inter-governmental organizations, which remain underfunded and without consistent and robust support from member states. Further, most IGOs have not been given such responsibilities and thus do not possess the necessary institutional structure to provide critical information regarding state preferences, the credibility of promises or the likelihood of future renegeing.

Inter-governmental organizations work more effectively by imposing costs on states for bad behaviour. In fact, in certain circumstances the threat to walk away from the negotiations may be sufficient to induce concessions from one or both of the rival states. If the cost of the talks collapsing is high enough, then such a tactic can successfully produce an acceptable agreement. However, rivals are likely to need assurances that future penalties

⁵³ See D. Scott Bennett, 'Democracy, Regime Change, and Rivalry Termination', *International Interactions*, 22 (1997), 369–97.

⁵⁴ Neutrality, in fact, is not a necessary or sufficient precondition for a successful third-party mediator. Smith argues that 'the debate over the question of the necessity of impartiality is a non-debate – it is a chimera that simply does not exist.' See James D. D. Smith, 'Mediator Impartiality: Banishing the Chimera', *Journal of Peace Research*, 31 (1994), 445–50.

⁵⁵ Boehmer *et al.*, 'Do Intergovernmental Organizations Promote Peace?'

⁵⁶ For a good review of the literature on IGOs, see Lisa L. Martin and Beth A. Simmons, eds, *International Institutions: An International Organization Reader* (Cambridge, Mass.: MIT Press, 2001). Also see Robert O. Keohane and Lisa Martin, 'The Promise of Institutional Theory', *International Security*, 20 (1995), 39–51, and Kenneth Abbott and Duncan Snidal, 'Why States Act through Formal International Organizations', *Journal of Conflict Resolution*, 42 (1998), 3–32.

⁵⁷ Boehmer *et al.*, 'Do Intergovernmental Organizations Promote Peace?' p. 12.

⁵⁸ Boehmer *et al.*, 'Do Intergovernmental Organizations Promote Peace?' p. 12.

will be imposed if a state reneges. Diplomatic and economic sanctions imposed by third parties help to make settlements rationally binding. When the price of renegeing exceeds the benefits accrued from continued rivalry, states should not only negotiate a settlement but also recognize the inherent credibility of the deal. Hawkins also concludes that IGOs can damage the reputation of leaders by openly condemning political positions and public policies.⁵⁹ The OAS, for example, visibly interferes in the domestic politics of member countries by disparaging the bad behaviour of country leaders. This delegitimation function increases the costliness of renegeing and thus helps to make commitments more credible.⁶⁰

Admittedly, the promise to sanction a state for deal breaking may not be credible. The inter-governmental organization and its member states must actually follow through with such a punishment, even if such actions result in costs to member states. However, IGOs created or designed to address issues of security are likely to be the ones willing to incur short-term economic costs in order to preserve a peace agreement. ‘Third parties must also possess a mandate to punish states for political acts’, Boehmer *et al.* write. ‘IGOs with economic or social mandates may be disinclined or unable to punish states for purely political behaviour. Thus, promoting peace through signaling is probably most effectively achieved through security-oriented IGOs’.⁶¹ The analyses below explicitly utilize a measure of shared IGO membership that includes only organizations that provide mechanisms for the peaceful resolution of inter-state disputes. We believe this measure is much more appropriate than ones previously used to explain the absence of violent conflict or the termination of enduring rivalry.

Marketplace Rules and Credible Commitment

Economic development presumably adds to signalling credibility as well. Wealth and advanced industrial production depend on institutional rules that protect private property and allow for non-discriminatory economic exchange. Such rules not only signal commitment ability, but they also help to foster domestic interests that prefer a stable economic environment for commercial transactions.⁶² As the opportunity costs of rivalry increase (and they should with increases in economic development), political leaders recognize the benefits of avoiding costly conflict and ensuring a well-managed marketplace. Further, as economic development leads to international trade, commercial interests integrate into a system of rules and regulations that define not only economic exchange, but also acceptable foreign policy.⁶³ In this way, development enhances credible signalling, promotes trust and punishes non-cooperative conflict resolution.⁶⁴

⁵⁹ See Darren Hawkins, ‘Explaining Costly International Institutions: Persuasion and Enforceable Human Rights Norms’, *International Studies Quarterly*, 48 (2004), 779–804.

⁶⁰ Also see Randall Parish and Mark Peceny, ‘Kantian Liberalism and the Collective Defense of Democracy in Latin America’, *Journal of Peace Research*, 39 (2002), 229–50.

⁶¹ Boehmer *et al.*, ‘Do Intergovernmental Organizations Promote Peace?’ p. 15.

⁶² See Richard Rosecrance, *The Rise of the Trading State* (New York: Basic Books, 1986). Also see Håvard Hegre, ‘Development and the Liberal Peace: What Does It Take to be a Trading State?’ *Journal of Peace Research*, 37 (2000), 5–30.

⁶³ See Mark Souva and Brandon C. Prins, ‘International Trade and Militarized Dispute Initiation and Reciprocation, 1950–1992’, *International Interactions*, 32 (2006), 183–200.

⁶⁴ See Michael Mousseau, ‘Market Prosperity, Democratic Consolidation, and Democratic Peace’, *Journal of Conflict Resolution*, 44 (2000), 472–507.

While democratic political institutions seemingly reduce conflict propensities, Mousseau suggests that the democratic peace may largely, if not entirely, be driven by certain types of democratic states.⁶⁵ ‘The zone of democratic peace’, Mousseau writes, ‘may be contingent on the supplemental presence of wealth and prosperity.’⁶⁶ Private property, the sanctity of contracts and non-discriminatory economic exchange all presuppose an equitable market place governed by rules, norms and laws. Not only do buyers and sellers expect to be treated equally, but they each recognize that punishment may be imposed by the state if such norms and laws are ignored. Alternatively, individual rights and democratic norms of compromise and non-violent conflict resolution flow logically from economic norms governing the exchange of goods and services. As Mousseau argues, ‘a community that values contract forms of cooperation, individual equity, trust in the sanctity of contract, and common law’ will be likely to adopt ‘the democratic social contract [as the] only legitimate form of government’.⁶⁷ Seemingly, then, democracy and development together provide the necessary institutions, rules, regulations and norms that allow for efficient foreign policy signalling.⁶⁸

We conclude, then, that liberal institutions reflected in democracy, development and inter-governmental organizations provide rule-based forums that enable credible commitment. We develop one primary hypothesis and five sub hypotheses to be tested empirically below.

HYPOTHESIS 1: *Liberal institutions increase commitment credibility and thus shorten rivalry.*

H_{1a}: *Democratic institutions shorten rivalry.*

H_{1b}: *Economic development shortens rivalry.*

H_{1c}: *Economic development and democratic institutions together shorten rivalry.*

H_{1d}: *Developing democratic institutions shortens rivalry.*

H_{1e}: *International organizations shorten rivalry.*

RESEARCH DESIGN

Data and Methodology

Thompson’s list of strategic rivalries is used to construct a dataset consisting of 173 rivalries for the period from 1816 to 2000.⁶⁹ Due to limited data availability on some of the independent variables, this results in approximately 3,100 rivalry-dyad years, with a mean rivalry duration of twenty-nine years. More specifically, the unit of analysis is the rivalry-dyad year. For each rivalry dyad identified by Thompson, we include an observation for each year the dyad remained in rivalry. For example, Afghanistan and Iran are considered by Thompson to be rivals from 1816 until 1937. We thus include an observation for each of those 122 years. Thompson reports a greater number of rivalries

⁶⁵ Mousseau, ‘Market Prosperity, Democratic Consolidation, and Democratic Peace’.

⁶⁶ Mousseau, ‘Market Prosperity, Democratic Consolidation, and Democratic Peace’, p. 475.

⁶⁷ Mousseau, ‘Market Prosperity, Democratic Consolidation, and Democratic Peace’, p. 479.

⁶⁸ Economic inter-dependence also may affect rivalry and rivalry termination. We do not model bilateral trade both due to data limitations and our concern with institutional structures that influence the signalling ability of political leaders.

⁶⁹ Thompson, ‘Identifying Rivals and Rivalries in World Politics’.

than other data sources on rivalry because of differences in operationalization.⁷⁰ Thompson bases his definition of rivalries on the perception of threat between states, therefore his data are not limited to dyads experiencing a certain number of militarized disputes.⁷¹

Censored data pose methodological problems for the analysis of rivalries. ‘Left-censoring’ refers to cases that were initiated prior to the first year of observation, but continued throughout the time frame employed here. Data on IGO membership used here are limited to the post-1899 period, thus introducing left-censored cases into the analysis. If not corrected, left-censoring can result in biased estimates.⁷² We follow Cornwell and Colaresi and specify the amount of time passed since rivalry initiation to correct for left-censoring in the data.⁷³ A second problem in rivalry research arises out of right-censoring, which refers to cases that have not ended within the time frame used. Thirty-eight rivalries started prior to 2000, the last year of observation, but continue at least throughout this year. The Cox regression model, however, includes right-censored observations through the partial likelihood function in the estimation.⁷⁴ Surviving observations enter the partial likelihood function and therefore information on some cases that were not terminated is included in the model.

We estimate a proportional hazard model as developed by Cox to investigate the relationship between the covariates and rivalry termination.⁷⁵ In time-series cross-sectional data, the assumption of independence of observations across time and space is often violated. Whereas cluster-specific variation can be corrected through the use of robust standard errors, accounting for temporal dependence is more difficult.⁷⁶ Hazard models offer the advantage of specifically modelling duration dependence that exists in the data.⁷⁷ The Cox regression model is well suited for political science applications since it does not

⁷⁰ See Diehl and Goertz, *War and Peace in International Rivalry*. Also see Bennett, ‘Integrating and Testing Models of Rivalry Duration’, and Bennett, ‘Democracy, Regime Change, and Rivalry Termination’.

⁷¹ Thompson, ‘Identifying Rivals and Rivalries in World Politics’. Thompson’s operationalization offers two advantages for this analysis. First, his emphasis on perception benefits our focus on regime transitions and the potential effects of such processes on enemy images between rival states. Secondly, although the author’s approach is inherently more interpretive, it avoids the problem of defining rivalries solely using a dispute density threshold. Categorizing rivals based on a certain number of disputes is arbitrary, and does not inform us on qualitative differences in rival relationships as compared to other dyads.

⁷² See Paul D. Allison, *Event History Analysis* (Beverly Hills, Calif.: Sage Publications, 1984).

⁷³ See Cornwell and Colaresi, ‘Holy Trinities, Rivalry Termination, and Conflict’, p. 337. This means that the first year of observation of a rivalry that started in 1816, but continued throughout 1899 (such as the Franco-German rivalry) will be labelled Year 83, rather than Year 1. Another method is to exclude left-censored observations. We decided against this since it would greatly reduce the number of cases and also omit a number of important, long-lasting rivalries.

⁷⁴ Box-Steffensmeier and Jones, ‘Time is the Essence: Event History Models in Political Science’.

⁷⁵ See David Cox, ‘Regression Models and Life Tables’, *Journal of the Royal Statistical Society*, B34 (1972), 187–220.

⁷⁶ Recent research, however, recommends that more emphasis should be spent on variation across space (see Christopher Zorn, ‘Estimating Between- and Within-Cluster Covariate Effects, with an Application to Models of International Disputes’, *International Interactions*, 27 (2001), 433–45. Also see James Lee Ray, ‘Explaining Interstate Conflict and War: What Should Be Controlled For?’ *Conflict Management and Peace Science*, 20 (2003), 1–31).

⁷⁷ An alternative approach is to include a duration dependence variable in conventional binary regression analysis (see Nathaniel Beck, Jonathan N. Katz and Richard Tucker, ‘Taking Time Seriously: Time-Series-Cross-Section Analysis with a Binary Dependent Variable’, *American Journal of Political Science*, 42 (1998), 1260–88).

assume a particular probability distribution for the duration until rivalry termination.⁷⁸ The Cox model uses a partial likelihood function to estimate the coefficients without specifying a baseline hazard function; therefore no assumptions are made about the nature or shape of the hazard function.⁷⁹ The calculated hazard rate represents the instantaneous probability of event occurrence (rivalry termination) after time t , given the rivalry lasted until time t . Or, as Allison writes, the hazard rate ‘is the unobserved rate at which events occur’.⁸⁰

Dependent Variable

The dependent variable in Cox regression models is the hazard rate, or risk of event occurrence at a given point in time (in this case rivalry termination). Therefore, covariates in the model are employed to explain an increase or decrease in the likelihood of event occurrence. Initiation and termination dates are derived from Thompson.⁸¹ Rivalries are coded as ongoing until there is evidence for ‘significant de-escalation in threat perceptions and hostility’.⁸² For each rivalry dyad, years are coded as ongoing if the rivalry has not terminated. Rivalries that have not ended in 2000 are coded as continuing until at least the last year of observation. Basically, then, the dependent variable is a count of years until a rivalry ends.

Independent Variables

To test our primary hypothesis and sub-hypotheses, we employ five liberal-institutional variables.⁸³ Level of democracy, the first liberal covariate, is measured using Polity IV data.⁸⁴ Composite democracy scores are used, ranging from -10 (most autocratic) to $+10$ (most democratic).⁸⁵ Composite democracy scores are calculated by subtracting autocracy score values from democracy score values. We expect that the degree of constraint on the

⁷⁸ As the authors point out, political science theories often do not specify in advance which distribution should be used to model duration (see Janet M. Box-Steffensmeier and Christopher Zorn, ‘Duration Models and Proportional Hazards in Political Science’, *American Journal of Political Science*, 45 (2001), 972–88, p. 974).

⁷⁹ See Paul D. Allison, *Survival Analysis Using SAS System: A Practical Guide* (Cary, N.C.: SAS Institute, 1995). The only restriction imposed on the Cox regression model is the assumption of proportionality. The model assumes that the ratio of the hazard functions for two observations with different values for the independent variables does not depend on time. That is, the effect of the covariates on the hazard ratio has to be proportional over the duration of a rivalry. Box-Steffensmeier and Zorn show that this assumption may be violated in studies of international conflict and propose tests for the detection of non-proportionality (Box-Steffensmeier and Zorn, ‘Duration Models and Proportional Hazards in Political Science’). Tests based on Schoenfeld residuals did not show significant evidence for non-proportionality in any of the models specified here. Also see David Lektzian and Mark Souva, ‘Institutions and International Cooperation: An Event History Analysis of the Effects of Economic Sanctions’, *Journal of Conflict Resolution*, 45 (2001), 61–79.

⁸⁰ Allison, *Event History Analysis*, p. 23.

⁸¹ Thompson, ‘Identifying Rivals and Rivalries in World Politics’.

⁸² Thompson, ‘Identifying Rivals and Rivalries in World Politics’, p. 566.

⁸³ Summary statistics for all independent variables can be found in the Appendix table.

⁸⁴ Monty G. Marshall and Keith Jagers, *Polity IV Dataset Version p4v2002e* (College Park, Md.: Center for International Development and Conflict Management, University of Maryland, 2002).

⁸⁵ The combined score is frequently used and argued to be the most reliable measure (for example see, John R. Oneal and Bruce Russett, ‘The Kantian Peace: The Pacific Benefits of Democracy, Interdependence, and International Organizations, 1885–1992’, *World Politics*, 52 (1999), 1–37, p. 429). Polity transition codes (-66 , -77 , -88) are recoded as missing.

less democratic member in a rivalry dyad will affect the likelihood of termination. As the 'weak link' of a dyad, changes in the political authority structure of the less democratic member will be likely to have a greater influence on foreign policy behaviour than changes in the more democratic member of a rivalry dyad.⁸⁶ We anticipate that higher democracy scores in the less constrained member increase the probability of rivalry termination, thus shortening rivalry.

Development is the second liberal variable employed in this analysis.⁸⁷ Comprehensive data on gross domestic product are not available for the pre-1950 period.⁸⁸ Therefore, per capita energy consumption data were used as a proxy.⁸⁹ Data on primary energy consumption and total population are available as subcomponents in the National Material Capabilities dataset.⁹⁰ It is expected that increases in economic development will lead to a greater chance of rivalry termination. Similar to the relative democracy measure, we anticipate that the likelihood of termination depends on the degree of constraint posed on the less constrained member of the dyad, in this case the less developed state. Therefore, increases in development for the less economically advanced dyad-member are expected to increase the probability of termination.

In addition, an interaction term between the measures for economic development and democracy is included. The complex causal linkages between economic and political development are not the subject of this research; rather, we investigate the combined effect of development and democracy on rivalry dyads. Mousseau shows that the pacifying influence of democracy is far greater for economically developed countries.⁹¹ Since rivals are among the most conflict prone dyads in the international system, we expect that the combined effect of economic development and democracy will increase the probability of rivalry termination.

Next, we investigate the effect of change towards democracy on rivalry termination. This analysis investigates how changes in rivals' political structures affect their behaviour. We argue here that changes towards greater democracy should lead to greater rates of rivalry termination. The variable is constructed from composite democracy scores and compares combined autocracy-democracy scores for each dyad-member to the scores five years prior for each state in the dyad. If countries experience positive changes in combined

⁸⁶ See William J. Dixon, 'Democracy and the Peaceful Settlement of Conflict', *American Political Science Review*, 88 (1994), 14–32. Also see John R. Oneal and Bruce Russett, 'The Classical Liberals Were Right: Democracy, Interdependence, and Conflict, 1950–1985', *International Studies Quarterly*, 41 (1997), 267–94.

⁸⁷ Using economic development to assess rivals' behaviour is a departure from previous research. Cornwell and Colaresi use economic interdependence to investigate the influence of economic development on rivalry termination. Interdependence is operationalized as trade flows as a percentage of GDP on the less constrained member of a dyad (Cornwell and Colaresi, 'Holy Trinities, Rivalry Termination, and Conflict').

⁸⁸ Oneal and Russett, 'The Classical Liberals Were Right: Democracy, Interdependence, and Conflict, 1950–1985', p. 14.

⁸⁹ This measure is used by Håvard Hegre, Tanja Ellingsen, Scott Gates and Nils Petter Gleditsch, 'Toward a Democratic Civil Peace? Democracy, Political Change, and Civil War', *American Political Science Review*, 95 (2001), 33–48 and by Hegre, 'Development and the Liberal Peace'.

⁹⁰ See J. David Singer, Stuart Bremer and John Stuckey, 'Capability Distribution, Uncertainty, and Major Power War, 1820–1965', in Bruce Russett, ed., *Peace, War, and Numbers* (Beverly Hills, Calif.: Sage Publications, 1972), pp. 19–48. Also see J. David Singer, 'Reconstructing the Correlates of War Dataset on Material Capabilities of States, 1816–1985', *International Interactions*, 14 (1987), 115–32. Data are available at <http://cow2.la.psu.edu/>.

⁹¹ See Mousseau, 'Market Prosperity, Democratic Consolidation, and Democratic Peace'.

scores of two or greater, this variable is coded as 1.⁹² Therefore, it is a dichotomous measure coded 1 for change towards democracy, 0 otherwise.⁹³

Drawing on Kant, liberal theory argues that international organizations help reduce uncertainty among states by functioning as arenas to resolve disputes.⁹⁴ The measure for inter-governmental organizations used here departs from previous research.⁹⁵ Rather than employing a simple count measure of all IGOs in the international system, regardless of their importance or substantive purpose, we use the ICOW (Issue Correlates of War) project's data on international organizations and multilateral treaties.⁹⁶ The Multilateral Treaties of Pacific Settlement (MTOPTS) dataset codes the membership/ratification of multilateral institutions and treaties that call for the peaceful settlement of disputes among their members.⁹⁷ Organizations that possess mechanisms for conflict resolution should be the most able to affect members' conflict behaviour.⁹⁸ This measure ranges from 0 to a maximum of 12 joint memberships.

Finally, we add four control variables to the model: bipolarity, relative power, joint alliance membership and war involvement.⁹⁹ These variables are included to test for the effect of realist predictions on the foreign policy behaviour of rival states. First, realist theory argues that bipolar systems are more stable than multipolar systems because of

⁹² We define change towards democracy as positive changes in combined democracy–autocracy scores of 2 or greater. Although this cutoff is somehow arbitrary, it is consistent with previous operationalizations of regime change (see Hegre *et al.*, 'Toward a Democratic Civil Peace?'). Data for combined democracy scores come from the Polity IV dataset (Marshall and Jaggers, *Polity IV Dataset Version p4v2002e*).

⁹³ While it is true that this variable is constructed from the same data as level of democracy, we think that a focus on the dynamic element is important to capture the immediate effect of change on rivalry termination. Thompson stresses perception and mutual enemy images as characteristics of rivalries (Thompson, 'Identifying Rivals and Rivalries in World Politics'). Therefore, changes towards democracy should help reduce these perceptions and lead to a higher likelihood of termination. Several operationalizations of democratization and regime change were used for the models, all of which indicated a significant increase in the rate of rivalry termination.

⁹⁴ Immanuel Kant, *Perpetual Peace* (New York: Bobbs-Merrill, 1957 [1795]). Also see Oneal and Russett, 'The Kantian Peace'.

⁹⁵ Cornwell and Colaresi, 'Holy Trinities, Rivalry Termination, and Conflict'; Oneal and Russett, 'The Kantian Peace'; Russett and Oneal, 'Triangulating Peace'.

⁹⁶ See Paul R. Hensel, *ICOW Multilateral Treaties of Pacific Settlement Data Set, Version 1.3* (Tallahassee: Florida State University, 2003).

⁹⁷ Global organizations and treaties included are the League of Nations, the United Nations, the Permanent Court of International Justice or International Court of Justice, The Hague treaties on the peaceful settlement of disputes, and the Kellogg–Briand Pact. Regional organizations and treaties included are the Western European Union, the Council of Europe, the Organization for Security and Co-operation in Europe, the Helsinki Final Act, the North Atlantic Treaty Organization, the Warsaw Pact, the Commonwealth of Independent States, the Organization of African Unity, the League of Arab States, the Organization of American States, as well as the Rio Pact, the 1902 Treaty on Compulsory Arbitration, 1923 Gondra Treaty, 1929 General Convention on Inter-American Conciliation and General Treaty of Inter-American Arbitration, 1933 Saavedra Lamas Pact, 1936 Treaty on Prevention of Controversies, 1936 Inter-American Treaty on Good Offices and Mediation, and 1948 Pact of Bogotá. This dataset is available at <http://data.icow.org> (see Hensel, *ICOW Multilateral Treaties of Pacific Settlement Data Set, Version 1.3*).

⁹⁸ Recent research by Boehmer, Gartzke and Nordstrom distinguishes between international organizations depending on their degree of institutionalization. They find that security-oriented IGOs with extensive institutional structures contribute to the prospects for peace in the international system (Boehmer *et al.*, 'Do Intergovernmental Organizations Promote Peace?').

⁹⁹ We specify separate and combined models to investigate the effect of liberal and realist explanations on rivalry termination. Recently, concern regarding the inclusion of a large number of control variables based on different theoretical accounts has grown (Ray, 'Explaining Interstate Conflict and War'). Ideally, one should expect results that are consistent across different model specifications.

reduced uncertainty in the international system.¹⁰⁰ If power is concentrated between two major blocs, such as during the Cold War, one should observe a greater rate of rivalry termination due to increased transparency. We include a dichotomous variable to account for the stability-enhancing effect of bipolarity on the international system, coded 1 for the years between 1945 and 1991.

Our second realist variable looks at the relationship between capability symmetry and rivalry termination at the dyadic level. To investigate whether power symmetry leads to greater probability of termination among rivals, we measure the capability ratio for each dyad. CINC scores are used to construct this variable.¹⁰¹ Specifically, we take the natural logarithm of the ratio of the CINC score of the stronger dyad member to the weaker member's capabilities index. This results in an index ranging empirically from 0 to 4.9, with greater values indicating greater asymmetry in a dyad.

Alliances are thought to form as responses to external security threats and are aimed at increasing their members' power relative to other states. Realists emphasize the fluidity of alliances and argue that they are conditional on states' national interests.¹⁰² Yet it seems reasonable to expect that for the duration of an alliance, allies should engage in more co-operative behaviour than non-allied countries.¹⁰³ Therefore, we anticipate that states sharing alliance commitments have greater rates of rivalry termination. The variable was constructed using data on formal alliance membership from the Correlates of War project.¹⁰⁴ Our focus on security reasons for the formation of alliances led us to use only mutual defence pacts for the construction of this variable.¹⁰⁵ The measure is a dummy variable coded 1 for the existence of a mutual defence pact in a dyad, 0 otherwise.

Although realism in general emphasizes causal explanations for the occurrence of war in the international system, conflict among rival states may have important consequences for the continuation of rivalries. War occurring between rivals is likely to change the balance of power in a dyad, and therefore make the ending of a rivalrous relationship more likely.¹⁰⁶ Dyadic interstate war data come from EUGene.¹⁰⁷ This variable is a dichotomous measure coded 1 for joint war involvement.

¹⁰⁰ See Kenneth N. Waltz, *Theory of International Politics* (Reading, Mass.: Addison-Wesley, 1979). Also see John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: W. W. Norton, 2001).

¹⁰¹ The CINC score is a composite measure of the COW national capabilities index as developed by Singer, Bremer and Stuckey ('Capability Distribution') and Singer ('Reconstructing the Correlates of War Dataset'). This is an index of a state's proportion of total system capabilities in six areas: the country's iron/steel production; the country's urban population; the country's total population; the country's total military expenditures; the country's total military personnel; and the country's total amount of energy production.

¹⁰² Waltz, *Theory of International Politics*.

¹⁰³ Empirical evidence on the conflict-reducing effect of alliances has been mixed and is sensitive to model specification (see Ray, 'Explaining Interstate Conflict and War').

¹⁰⁴ See Douglas M. Gibler and Meredith Sarkees, 'Measuring Alliances: The Correlates of War Formal Interstate Alliance Dataset, 1816–2000', *Journal of Peace Research*, 41 (2004), 211–22. Dyadic alliance data are available at <http://cow2.la.psu.edu/COW2%20Data/Alliances/alliance.htm>.

¹⁰⁵ The data include information on defence pacts, neutrality or non-aggression pacts and *ententes*.

¹⁰⁶ Thompson notes that rivalries are more likely to persist if dyad members have roughly equal capabilities (Thompson, 'Identifying Rivals and Rivalries in World Politics'). Since interstate wars will have major effects on the capability ratio of a dyad, it seems reasonable to expect that the ratio of failure increases after war occurrence.

¹⁰⁷ See D. Scott Bennett and Allan Stam, 'EUGene: A Conceptual Manual', *International Interactions*, 26 (2000), 179–204. The variable measuring wars among rivals was constructed from EUGene's dyadic militarized interstate dispute data (version 3.01). EUGene provides information on MIDs and hostility levels (with a hostility level of 5 indicating the occurrence of interstate war), which was used to create this variable.

RESULTS

The first model presented here includes all liberal variables except for the interaction term. The results for this model are presented in Table 1, and it offers support for two of our sub-hypotheses. The variable measuring change to democracy has a positive and significant effect on rivalry termination, meaning that progress towards democracy shortens the duration of rivalry ($z = 2.80, p < 0.01$). This supports our expectation that the adoption of democratic procedures alleviates commitment problems among rival states and thus enables rivalry termination.

The Argentine–Chilean rivalry, for example, ended only a few years after Chile’s transition to democracy. After Chile adopted democratic institutions, state leaders negotiated agreements for twenty-four pending boundary and territorial disputes, and thus finally resolved contentious issues between the two states.¹⁰⁸ Furthermore, democratic decision-making procedures made these commitments more credible, as voters could punish political elites for defection from such agreements. Similarly, transitions to democracy also influenced the end of the rivalry between Honduras and El Salvador. After both countries adopted democratic structures, they adhered to a decision by the International Court of Justice regarding a boundary dispute.¹⁰⁹

TABLE 1 *Cox Regression Results for the Effect of Liberal Variables on Rivalry Termination*

Variable	Model 1		Model 2	
	Coefficient	% Change in hazard rate†	Coefficient	% Change in hazard rate†
Minimum Democracy _{<i>t</i>-1}	-0.04 (0.03)	-	-0.41*** (0.13)	-
Minimum Development _{<i>t</i>-1}	0.08 (0.41)	-	1.77*** (0.60)	-
Democracy × Development	-	-	0.28*** (0.09)	+ 13.5%‡
Change towards Democracy	0.82*** (0.29)	+ 123.7%	0.84*** (0.29)	+ 28.8
MTOPS IGO Membership _{<i>t</i>-1}	0.15*** (0.05)	+ 160.7%	0.15*** (0.05)	+ 27.6
<i>N</i>	3,108		3,108	
Wald χ^2	15.89		29.59	
Wald <i>p</i> -value	< 0.01		< 0.0001	

Note: Cell entries are coefficient estimates, robust standard errors in parentheses.

† Percentage changes are calculated by using the *adjust* routine in STATA 8.0. Continuous variables are varied from one standard deviation below the mean to one standard deviation above, dichotomous variables from zero to one (holding other variables at their means).

‡ Main effects and the interaction term are varied simultaneously from one standard deviation below the mean to one standard deviation above (holding other variables constant).

*** $p < 0.01$, ** $p < 0.05$.

¹⁰⁸ See Jorge I. Domínguez, ‘Boundary Disputes in Latin America’, *Peaceworks Series*, 50 (Washington, D.C.: United States Institute of Peace, 2000).

¹⁰⁹ Domínguez, ‘Boundary Disputes in Latin American’.

Regarding the hypothesis on inter-governmental organizations, our expectation is supported. Joint membership in organizations with mechanisms for dispute resolution significantly increases the likelihood of rivalry termination, thus shortening rivalry ($z = 3.12, p < 0.01$). Indeed, going from no shared memberships to five increases the hazard of termination by 84 per cent. This effect is quite large and rivals the influence of democratization.

The operationalization used here includes IGOs and multilateral treaties that specifically call for the peaceful settlement of disputes arising between members.¹¹⁰ This result corroborates prior research using this operationalization, but is also consistent with research by Boehmer, Gartzke and Nordstrom showing that membership in security-oriented IGOs significantly reduces the likelihood of militarized dispute occurrence.¹¹¹ Interestingly, Cornwell and Colaresi use the more common Oneal and Russett measure derived from the *Yearbook of International Organizations*.¹¹² This measure includes all joint memberships in inter-governmental organizations and not just security-related ones. Cornwell and Colaresi unexpectedly observe that joint membership in IGOs lengthens rivalry. Our results, however, indicate just the opposite and suggest that research should focus on the organizations that include mechanisms to restrain the conflict behaviour of member states, rather than all IGOs in the state system.¹¹³ In Table 2 we present results comparing a simple count measure with the one used here.

Finally, neither democracy nor economic development has a significant effect on the hazard rate of rivalry termination. Since theoretical arguments for the interdependence between democracy and development exist, we include an interaction term in the second model discussed below.¹¹⁴

Results in the second model confirm the posited relationship between joint levels of democracy and economic development. The interaction term is positive and significant ($z = 3.00, p < 0.01$), indicating that the effects of democracy and development on the hazard of termination are conditional upon each other. Thus, democracy and development jointly shorten the duration of rivalries. If the less constrained member of a dyad experiences increases in democracy, as well as economic growth, rivalry termination becomes more likely. We present a plot of the survival function for dyad members with low and high levels of democracy and development (varying main effects and the interaction).¹¹⁵ Figure 1 illustrates the strong influence democracy and development jointly have on rivalry termination. We observe greater probabilities of survival for rivalries in which the weak link of the dyad exhibits low levels of democracy and development.

¹¹⁰ Hensel, *ICOW Multilateral Treaties of Pacific Settlement Data Set, Version 1.3*.

¹¹¹ See Sara McLaughlin Mitchell and Paul R. Hensel, 'International Institutions and the Management of Contentious Issues' (paper presented at the Annual Meeting of the Peace Science Society, Tucson, 2002). Also see Sara McLaughlin Mitchell, Kelly Kadera and Mark J. Crescenzi, 'Practicing Democratic Community Norms: Third Party Conflict Management and Successful Settlements' (paper presented at the Annual Meeting of the International Studies Association, Montreal/Quebec, 2004; Boehmer, Gartzke and Nordstrom, 'Do Intergovernmental Organizations Promote Peace?')

¹¹² Cornwell and Colaresi, 'Holy Trinities, Rivalry Termination, and Conflict'; Oneal and Russett, 'The Kantian Peace'; Russett and Oneal, 'Triangulating Peace'.

¹¹³ Cornwell and Colaresi, 'Holy Trinities, Rivalry Termination, and Conflict'.

¹¹⁴ Mousseau, 'Market Prosperity, Democratic Consolidation, and Democratic Peace'.

¹¹⁵ All figures were produced in STATA 8.0. For the plot of the survival function, the main effects and the interaction were varied simultaneously from two standard deviations below their mean to two standard deviations above (holding other variables constant).

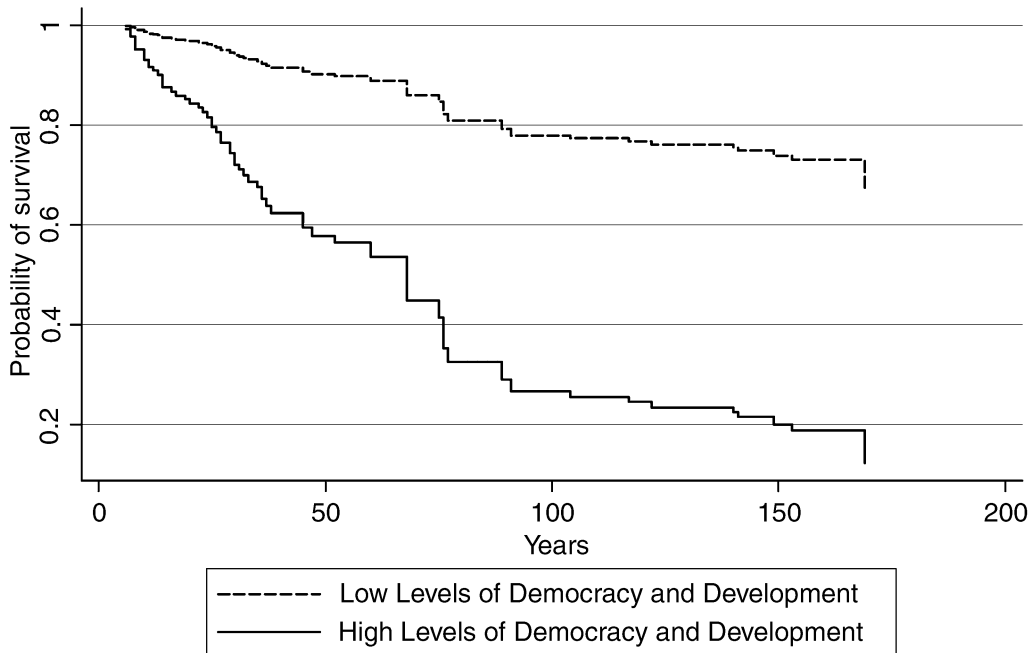


Fig. 1. Plot of survival function, varying democracy, development and the interaction term

Conversely, the likelihood of survival decreases considerably for higher levels of democracy and development in the less constrained dyad member. Thus, we are able to demonstrate that the pacifying effect of democracy in combination with development extends to rival states, the most conflict prone dyads in the international system. The institutionalization of rule-based government, coupled with guarantees for free economic exchange, promotes trust among rivals and therefore increases the hazard of failure.

The effect of change to democracy on rivalry termination is consistent with the first model.¹¹⁶ If a dyad member makes progress in the adoption of democratic procedures (using a five-year window), the hazard of termination increases ($z = 2.89, p < 0.01$). Thus, if rival members experience changes towards more democracy, the duration of the rivalry decreases. For a more intuitive interpretation of this effect, we present a graph of the survival function (see Figure 2). As indicated by the estimated hazard ratio, rivalries that do not experience change to democracy have greater chances of survival. Furthermore, if dyad members make progress towards greater democracy, the likelihood of rivalry surviving is reduced.

In line with the first model, we observe the positive effect of IGO membership on the likelihood of termination in this second model ($z = 3.16, p < 0.05$). Rivalries with joint membership in organizations that possess instruments for dispute settlement are more likely to end. Again, we present a plot of the survival function for varying levels of IGO

¹¹⁶ The variable measuring change to democracy and the relative democracy measure are both derived from combined democracy scores. Although only weakly correlated ($r = 0.14$), we specified models excluding the change to democracy variable. Results remained consistent across specifications.

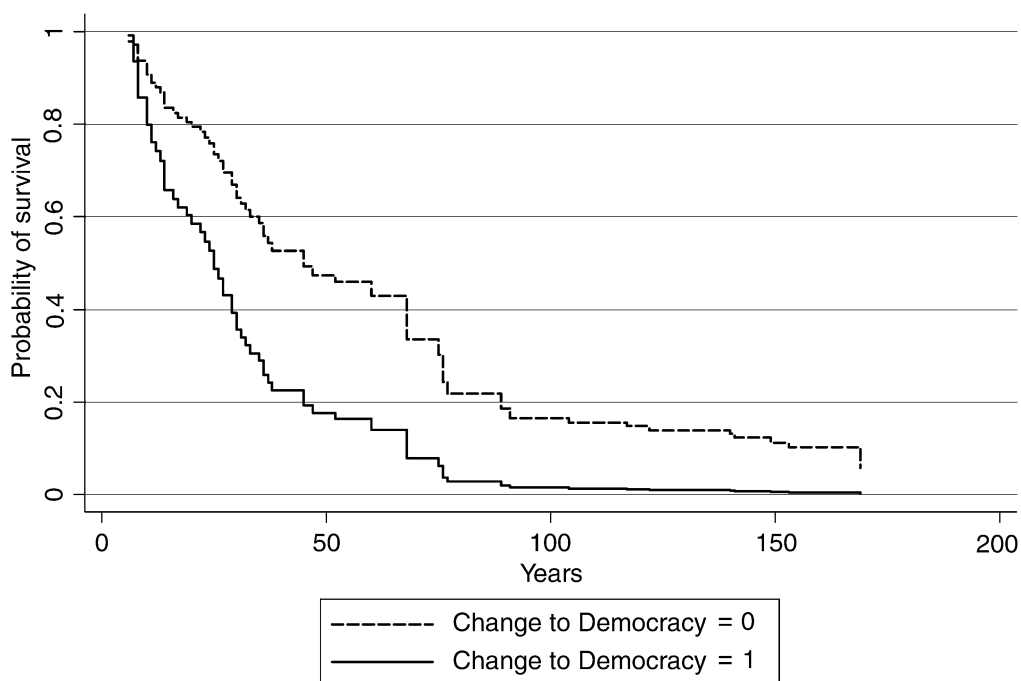


Fig. 2. Plot of survival function, varying change to democracy

membership.¹¹⁷ Figure 3 shows that rivalry endures much longer when states do not share membership in any IGO. In contrast, rival states with five joint memberships are much more likely to terminate their protracted conflict. This second model therefore confirms that liberal institutions ease commitment problems among rival states, supporting the liberal hypothesis.

In a third model, we include a set of realist variables to test whether the above results hold while controlling for rival theoretical expectations. Results in the third model, combining liberal-institutionalist and realist variables, are consistent with the stand-alone specification. The interaction term for development and democracy is again positive and significant. Therefore, democratic procedures and economic growth together shorten the length of rivalry duration ($z = 2.55$, $p < 0.05$). Increases in the protection of citizens' political and economic rights reduce the chances of rivalry survival. Also, changes towards democratic institutional structures again limit the length of rivalries ($z = 3.18$, $p < 0.01$). The IGO variable indicates a decreased rivalry duration ($z = 2.82$, $p < 0.01$) and therefore supports the result in the previous model. Among the realist controls, no variable reaches conventional levels of significance.

To facilitate comparison with previous research on international organizations, we present a separate model employing a count of all joint IGO memberships for the time period under analysis.¹¹⁸ The replication variable ranges in value from 0 to a maximum

¹¹⁷ The IO variable was varied from zero memberships (about one standard deviation below its mean) to five (one standard deviation above its mean) for this plot, while all other variables were held constant.

¹¹⁸ Data come from Pevehouse, Nordstrom and Warnke, 'Intergovernmental Organizations, 1815–2000'.

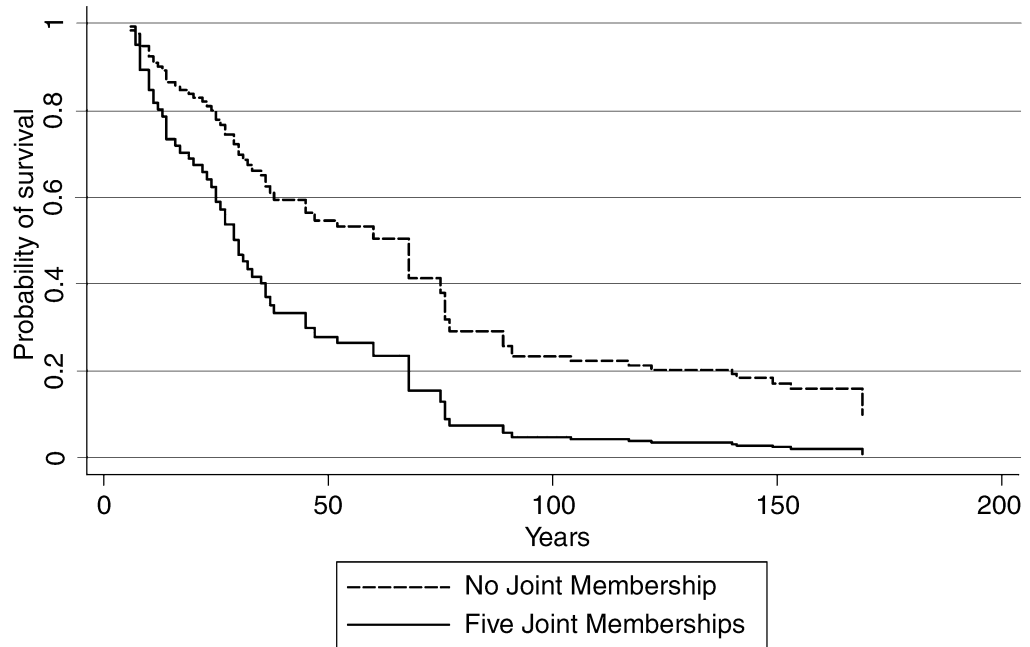


Fig. 3. Plot of survival function, varying joint membership in intergovernmental organizations (MTOPS)

of 75. This measure does not differentiate between different types of IGOs, but weights all organizations equally.¹¹⁹ The coefficient for the count IGO variable is not statistically significant, indicating that joint membership in any IGO, regardless of its mandate, has no effect on rivalry termination. Cornwell and Colaresi actually find that joint IGO membership decreases the probability of rivalry termination, although the result is only weakly significant. They do not have a good explanation for this unexpected result. Our results from Table 2 seem to indicate that international organizations are ‘not all created equal’.¹²⁰ Our results show that IGOs with mechanisms for dispute resolution significantly increase the likelihood of rivalry termination, but the same does not hold for all organizations in the international system.¹²¹

Finally, we conduct a test of our liberal hypotheses using alternative rivalry data. Having analysed the relationship between liberal institutions and rivalry termination with Thompson’s data on strategic rivalries, we want to ensure that our results are not driven by the data source used.¹²² Diehl and Goertz require rival relationships to be militarized,

¹¹⁹ Studies using a similar measure are: Cornwell and Colaresi, ‘Holy Trinities, Rivalry Termination, and Conflict’; Oneal and Russett, ‘The Kantian Peace’; Russett and Oneal, ‘Triangulating Peace’.

¹²⁰ Boehmer *et al.*, ‘Do Intergovernmental Organizations Promote Peace?’ p. 2.

¹²¹ The expected interactive relationship between democracy and development does not hold in the model using a simple count of IGO membership. One should note, however, that missing data for IGOs in the pre-1965 period greatly reduce the number of cases under analysis ($N = 1,724$). The insignificant coefficient for COW IGOs, together with the small number of cases available, provides support for our use of alternative data on security-related IGOs.

¹²² Thompson, ‘Identifying Rivals and Rivalries in World Politics’.

TABLE 2 *Cox Regression Results for the Effect of Liberal and Realist Variables on Rivalry Termination and Comparing MTOPS and COW IGO Specifications*

Variable	Model 1		Model 2
	Coefficient	% Change in hazard rate in Model 1 [†]	Coefficient
Minimum Democracy _{<i>t</i>-1}	- 0.37*** (0.14)	-	0.00 (0.23)
Minimum Development _{<i>t</i>-1}	1.26** (0.62)	-	- 0.89 (1.42)
Democracy × Development	0.25** (0.10)	+ 5.7%‡	- 0.02 (0.17)
Change towards Democracy	0.98*** (0.31)	+ 41.0%	1.16** (0.31)
MTOPS IGO Membership _{<i>t</i>-1}	0.18*** (0.06)	+ 41.5%	-
COW IGO Membership	-	-	0.02 (0.01)
Bipolarity (1945–1991)	0.48 (0.37)	-	0.17 (0.35)
Relative Power _{<i>t</i>-1}	- 0.10 (0.17)	-	- 0.12 (0.17)
Joint Defence Pact	- 0.50 (0.46)	-	- 0.31 (0.45)
Joint War	0.34 (0.88)	-	0.68 (0.55)
<i>N</i>	3,064		1,724
Wald χ^2	30.38		21.03
Wald <i>p</i> -value	< 0.001		< 0.013

Note: Cell entries are coefficient estimates, robust standard errors in parentheses.

[†] Percentage changes are calculated by using the adjust routine in STATA 8.0. Continuous variables are varied from one standard deviation below the mean to one standard deviation above, dichotomous variables from zero to one (holding other variables at their means).

[‡] Main effects and the interaction term are varied simultaneously from one standard deviation below the mean to one standard deviation above (holding other variables constant).

****p* < 0.01, ***p* < 0.05.

and code termination as a function of time passed since the last militarized dispute.¹²³ While there is some overlap in the two data-files, significant differences remain in both the dyads included and in the duration of many rivalries.

Results for the alternative data are very similar to the previous models. We observe the positive and significant effect of the interaction term on rivalry termination, indicating that democracy and development combined reduce the duration of rivalry. Change towards greater democracy, as in previous specifications, increases the chances of rivalry termination. Finally, membership in international organizations with mechanisms for dispute settlements raises the hazard for termination, thus shortening the length of rivalry.

¹²³ See Diehl and Goertz, *War and Peace in International Rivalry*.

TABLE 3 *Robustness Check Using Diehl and Goertz Enduring Rivalry Data*

Variable	Model 1 Coefficient	Model 2 Coefficient
Minimum Democracy _{<i>t</i>-1}	- 0.02 (0.04)	- 0.09 (0.06)
Minimum Development _{<i>t</i>-1}	- 0.11 (0.38)	0.43 (0.49)
Democracy × Development	- (0.05)	0.08*
Change towards Democracy	0.84** (0.33)	0.99*** (0.34)
MTOPS IGO Membership _{<i>t</i>-1}	0.18*** (0.06)	0.17*** (0.06)
<i>N</i>	1,360	1,318
Wald χ^2	21.87	27.80
Wald <i>p</i> -value	< 0.001	< 0.00001

Note: Cell entries are coefficient estimates, robust standard errors in parentheses. Data are from Paul F. Diehl and Gary Goertz, *War and Peace in International Rivalry* (Ann Arbor: University of Michigan Press, 2001).
****p* < 0.01, ***p* < 0.05, **p* < 0.1.

Therefore, our liberal hypotheses are supported using Diehl and Goertz's list of enduring rivalries and Thompson's set of strategic rivalries.¹²⁴

CONCLUSION

Currently, much of the research on conflict processes uses large dyadic datasets that are designed to capture the full universe of strategic interactions among nation-states. While undoubtedly useful, such datasets assume independence of events across time and space, and therefore ignore salient distinctions across cases. Rivalry has emerged to explain fundamental differences in conflict frequency and foreign policy behaviour among a select group of states in the international system. Indeed, rivalry addresses the most dangerous relationships in the international system and acknowledges temporal and spatial non-independence. Given the frequency of violent conflict among rivals, theoretical models supported by empirical evidence that establish effective bargaining strategies, which push these same states away from war, offer policy-makers useful tools for eradicating most of the violent struggles between states today in the international system.

In this article, we have attempted to fill theoretical and empirical gaps in the literature on rivalry. First, a consistent explanation for the making and breaking of rivalries have been developed. Rivalries are undoubtedly costly and ex-post inefficient. Yet, incentives to misrepresent and commitment problems inhibit the termination of such belligerent relationships. Why and how, then, does protracted conflict end? We argue that the adoption of liberal institutions (such as democratic procedures, economic development and

¹²⁴ See Diehl and Goertz, *War and Peace in International Rivalry*, and Thompson, 'Identifying Rivals and Rivalries in World Politics'.

membership in international organizations) shortens rivalry. Liberal reforms increase transparency and allow voters to punish leaders for foreign policy failures. Similarly, membership in organizations with mechanisms for conflict resolution enhances the credibility of commitments and therefore reduces the duration of rivalry. The empirical analysis shows strong support for these liberal expectations.

Secondly, this study offers a comprehensive test of various liberal institutional arguments. Liberal theory emphasizes the pacifying effects of democratization, economic development and international organizations. We show that change towards democracy, as well as the protection of liberal political and economic rights, facilitates the termination of dangerous rivalrous relationships. In addition, membership in security-oriented organizations reduces the length of rivalry as such organizations provide instruments for the peaceful negotiation of settlements. A comparison with a simple count measure of all IGOs confirmed that more focus on organizations' mandates is important. Returning to the Ecuador–Peru case, we see that movement in both democratic political development and IGO membership probably enhanced Peru's ability to credible commitment, since it was the weak link in the dyad. Further, OAS facilitation of the peace deal, coupled with additional commitments by the United States, Brazil, Argentina and Chile helped to increase confidence in the durability of the bargain.

Finally, two aspects of this article should increase confidence in the robustness and consistency of the results. First, by specifying separate models for different theoretical explanations, we have followed the recent advice offered by conflict scholars.¹²⁵ Our evidence remains consistent across different specifications. Secondly, we have used Diehl and Goertz's list of rivalries to see whether our results hold up using alternative data.¹²⁶ We again observe support for our expectations, increasing our confidence that the results are not simply a function of any one particular dataset used. It does appear that liberal institutions shorten rivalry.

¹²⁵ Ray, 'Explaining Interstate Conflict and War'.

¹²⁶ See Diehl and Goertz, *War and Peace in International Rivalry*.

APPENDIX: *Summary Statistics of Independent Variables*

Variable	Mean	Std Dev	Min	Max	Description
Minimum Democracy	- 5.41	4.56	- 10	10	Composite democracy score of less democratic dyad member, lagged
Minimum Development	1.21	0.20	1.09	4.09	Per capita energy consumption, logged
Democracy × Development	- 6.46	5.98	40.99	16.59	Interaction between democracy and economic development
Change towards Democracy	0.18	0.38	0	1	Coded 1 if dyad member changes toward democracy
MTOPI IGO Membership	2.50	2.29	0	12	Count of dyadic IGO memberships, MTOPI data
COW IGO Membership	16.1	15.1	0	75	Count of dyadic IGO memberships, COW data
Bipolarity	0.31	0.46	0	1	Coded 1 for 1945–1991 period
Relative Power	0.99	0.82	0	4.89	Natural logarithm of higher CINC score divided by lower CINC score
Joint Alliance	0.20	0.40	0	1	Coded 1 if dyad in mutual defense pact
Joint War	0.013	0.11	0	1	Coded 1 if dyad in joint interstate war