

# Civil War Intervention and the Problem of Iraq<sup>1</sup>

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Outside intervention in civil warfare is important for humanitarian, theoretical, and practical policy reasons—since 2006, much of the debate over the war in Iraq has turned on the danger of external intervention if the United States were to withdraw. Yet, the literature on intervention has been compartmented in ways that have made it theoretically incomplete and unsuitable as a guide to policy. We therefore integrate and expand upon the theoretical and empirical work on intervention and apply the results to the policy debate over the US presence in Iraq using a Monte Carlo simulation to build upon the dyadic results of probit analysis. We find that Iraq is, in fact, a significantly intervention-prone conflict in an empirical context; the prospect of a wider, regional war in the event that violence returns in the aftermath of US withdrawal cannot safely be ignored.

Civil war is the most common form of armed conflict worldwide and has killed tens of millions of people in the decades since World War II. It poses many important theoretical and empirical questions, but one of the most important is that of foreign intervention. Warfare internal to a state is bad enough, but if intervention causes the war to spread across borders, a local internal tragedy can become a region-wide conflagration with far worse consequences for much greater populations.<sup>2</sup> Its stakes make the causes and incidence of civil war intervention an inherently important question for scholarship.

Intervention is also an important issue for US foreign policy in the form of the post-2003 civil war in Iraq and its potential consequences. By invading Iraq and triggering a civil war, US policy created a risk that this internal conflict would spill over its borders and draw Iraq's neighbors into a wider war with

potentially severe humanitarian and international economic effects. Iraq is a nation of 30 million in the heart of the Middle East's oil fields. Warfare limited to Iraq is bad, but if intervention by Iraq's neighbors creates a regional conflict, the result could be a major increase in the suffering of innocents and a serious blow to global energy markets in a time of extraordinary economic fragility.

In fact, preventing the war from spreading via foreign intervention has become the chief US strategic interest in the conflict since the civil war escalated in intensity in 2004. Ever since that time, much of the US debate on the war has effectively turned on the relative merits of persisting in the conflict in the hope of resolving it successfully, as opposed to removing US forces would risk an escalation of civil conflict that could cause a regional war. Opponents of withdrawal have typically argued that removing US forces would risk a regional war as neighbors intervene to protect their interests, and that this risk militates against withdrawal (for example, Byman and Pollack 2007; National Intelligence Council 2007; Boot 2008a). Proponents of withdrawal have often argued, *inter alia*, that this risk is exaggerated and that US forces could leave Iraq safely without triggering a wider war (for example, Simon 2007, 2008; Gause 2008; Korb, Katulis, Duggan, and Juul 2008).

Today, Iraq's civil war is in remission and the United States is committed to withdrawal. The pace of this drawdown remains controversial, however, and the same issues now underlie this new debate. Opponents of full withdrawal argue that it risks reigniting

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<sup>2</sup> Note that intervention *per se* is not necessarily destabilizing; if used as a form of multilateral conflict management by benign outside powers, it can be a means of ending or moderating a war rather than expanding it. Several studies examine the role of external intervention on the duration of civil wars, including Balch-Lindsay and Enterline (2000), Regan (2002), Regan and Aydin (2006), and Cunningham (2010). Our interest, however, is with third-party motives and methods that do not conduce to stability. As we note below, our definition of "intervention" is restricted to the most forceful of the forms addressed in the broader intervention literature to date, and we exclude multilateral peacekeeping or conflict management interventions from our dataset.

the war and reviving the danger of intervention and regionalization (for example, Boot 2008a; Cordesman 2009; Ricks 2009; Rubin 2009). Proponents of full withdrawal sometimes argue that it can be accomplished without a return to violence, but also that the risk of intervention and regionalization is overblown and that US interests in Iraq are thus too limited to warrant the sacrifice associated with a longer presence (for example, Lynch 2008; Katulis 2009; Ramberg 2009).

The prospect of intervention in the Iraqi civil war has thus been central to the US debate on the war almost since its inception. Yet, this policy debate has been almost devoid of any systematic input from scholarly analysis of the actual risk that others would intervene in the Iraqi civil war should the US leave an unstable Iraq. In principle, there is much that scholarship on this issue could contribute: there is an extensive body of empirical evidence covering over 140 civil wars since 1945, and there is a significant literature on civil war intervention in these cases. This existing literature is not yet directly applicable, however. Its choices of dependent variables, for example, are structured for related but different purposes, making its findings suggestive, but not dispositive, for Iraq.

Perhaps most importantly, the scholarly literature to date has been compartmentalized, with separate analyses focused on subsets of the issues most important for the Iraq debate. The policy debate has turned on a series of central, but largely unarticulated, underlying theoretical assumptions: withdrawal pessimists believe that ethno-sectarian linkages between Sunni rebels in Iraq and Sunni governments in neighboring states will promote intervention, and that the Iraqi civil war's high peak intensity and extensive refugee outflow will exacerbate this (Byman and Pollack 2007; see also National Intelligence Council 2007; Boot 2008a,b; Cordesman 2009); withdrawal optimists believe that the relative military weakness of Iraq's neighbors will preclude intervention (Posen 2007; Simon 2007, 2008; Gause 2008; Lynch 2008; Katulis 2009). Takeyh, Podesta, and Korb (2008) have also argued that Middle Eastern political culture promotes accommodation rather than confrontation, mitigating against the Iraq War spreading outward. Many of these causal linkages have been studied, and there is some basis for claims that ethno-sectarian links, refugee flows, and high casualty levels increase intervention rates—and that military weakness discourages intervention and that regional political culture can also matter. The marginal effects are thus conflicting, which means that their relative causal weight in an integrated analysis is critical to sorting out their net influence on a case such as Iraq.

Yet, the research on this issue has often considered affinity variables, such as ethno-sectarian identity or former colonial relationships, and geopolitical variables, such as military capability or alliances, separately in studies using different data sets and units of analysis. While these families of variables are not mutually exclusive as causes, and while studies sometimes use some variables from either family, the liter-

ature has not to date combined all the variables pertinent to the Iraq debate in a single, unified analysis. This makes it impossible to reach a sound net conclusion for real-world cases such as Iraq, where different explanatory variables point in different directions, and presents an incomplete picture of causation for a phenomenon of real theoretical importance.

The purpose of this paper is thus twofold. First, we seek to extend the theoretical and empirical literature on civil war intervention to integrate the joint causal roles of ethno-sectarian linkages, regional political culture, military materiel, civil war intensity, and refugee flows. Second, we apply the results to the specific problem of Iraq by using the resulting model to estimate the probability that this war would spread beyond Iraq's borders in the event that violence returns to Iraq following a US withdrawal.

To do this requires an extension of standard probit modeling. Probit modeling enables dyadic estimates of the probability that a given state will intervene in a given civil war per unit of time. But our ultimate interest is to assess the risk of wider, multi-state interventions over time in a renewed Iraqi conflict of uncertain duration. For this, we require probability distributions over the number of interventions and the duration of a renewed war, which probit modeling per se cannot provide. We therefore adopt a two-stage methodology in which we use probit modeling to assess the relationship between a variety of causal variables and the probability of intervention for a given dyad-year; we then use Monte Carlo simulation to infer from the dyad-year probit results the likelihood of wider interventions as a function of the number of states posited to intervene and the assumed duration of the war.

We find that the particular circumstances of Iraq and the Gulf region today create a meaningful risk that the war could indeed spread if the United States exits and internal violence escalates. Intervention is a commonplace feature of civil warfare generally, but Iraq's particular combination of multiple ethnic and sectarian linkages outweighs the countervailing effects to make it unusually prone to military intervention. Intervention is by no means a certainty, but our findings suggest a roughly 20–60% probability that two or more of Iraq's neighbors would intervene in a rekindled Iraqi war that lasted another 5–10 years—and a much higher probability that the war would spread to at least one neighboring state, or that a longer war would widen the fighting. This scale of risk warrants serious consideration in the debate over Iraq policy.

We present these findings in six steps. First, we review the literature on civil war intervention. Second, we present the theoretical logic of intervention that underlies the Iraq debate and motivate our treatment of the key causal variables implied by this logic. Next, we discuss our data set and operationalize our variables. We then present statistical results for our probit modeling, after which we present the findings of our Monte Carlo simulation and its

probability distributions over the number of interveners and the duration of civil warfare for the specific case of Iraq. We conclude with a series of implications from these results for scholarship and policy.

### Explanations of Civil War Intervention

Civil war has received increasing attention in the International Relations literature, and most recent analyses of civil war intervention tend toward explanations that come from two different, but compatible, perspectives. The first emphasizes material geopolitics such as formal alliance ties, high conflict intensity, the military balance among combatants and potential interveners, the presence of natural resources in the civil war state, whether the potential intervener is itself engaged in ongoing conflicts, and the potential threat that civil wars pose to the stability of their neighbors. Measurements of these variables are often based on data from the Correlates of War (COW) project; they typically examine a case universe including all civil wars above a certain threshold for battle deaths, and they usually consider every state in the world to be a potential intervener (for example, Regan 1998, 2002; Werner 2000; Lemke and Regan 2004; Findley and Teo 2006; Salehyan and Gleditsch 2006; Mullenbach and Matthews 2008; Kathman 2010).

Other variables often considered in research on civil war intervention come from a perspective that emphasizes the importance of cultural and ethnic affinities, arguing that intervention is more likely when sectarian or ethnic ties link civil war parties with potential interveners, when interveners and civil war states are connected by a former colonial relationship, when they share a common regime type like democracy, or when the nature of the civil war focuses on identity politics (Heraclides 1990; Carment, James, and Rowlands 1997; Khosla 1999; Saideman 2001; Cetinyan 2002; Carment and James 2004; Carment, James, and Taydas 2006). These variables are typically based on the Minorities at Risk (MAR) data, which only examine ethnic conflicts, only treat contiguous states as potential interveners, and offer a limited coverage of geopolitical issues.

Geopolitical and affinity explanations should not be seen as logically exclusive or competing camps, and most studies include at least some variables from each perspective. But most studies tend to focus on one set of variables rather than the other; and since the MAR data have limited coverage, scholars examining the full universe of civil wars and potential interveners typically omit variables for ethnic ties. To date, this has prevented bringing all the relevant argument into a unifying analysis.<sup>3</sup>

<sup>3</sup> Papers that have attempted a unifying analysis tend to be limited in scope. For instance, a paper by Martin Austvoll (2006) indicates that both material and affinity forces are significant in predicting intervention, but it only examines 26 conflicts. Forsberg (2008) produces a similar analysis, but her data are limited to the period 1989–2004. See note 6 for an additional comment on how Forsberg's data differ from those in this paper.

Unfortunately, such a unified analysis is exactly what is needed to inform the policy debate over the consequences of withdrawal from Iraq, because the Iraq debate involves both geopolitical and ethnic factors simultaneously. The civil war has pitted Iraqi Shias against Iraqi Sunnis in the middle of a region that has experienced long historical conflict between these groups both within and between states, and in the midst of rising regional tensions along just such sectarian lines (Nasr 2006). At the same time, many who argue that Iraqi warfare will not spread do so based on a geopolitical argument that Iraq's Sunni neighbors are too weak militarily to intervene (Posen 2007; Takeyh et al. 2008). To assess the net risk of intervention in Iraq thus requires adjudication of potentially conflicting geopolitical and ethno-sectarian influences. But the data set needed for this purpose—combining information on material and ethnic factors across a broad range of conflicts and potential interveners—has not been available heretofore.

Much of the literature, moreover, uses very broad definitions of “intervention.” The most common definition is Regan's “convention-breaking military and/or economic activities in the internal affairs of a foreign country targeted at the authority structures of the government with the aim of affecting the balance of power between the government and opposition forces” (Regan 1998:756). This definition is also used by Lemke and Regan (2004), Austvoll (2006), Findley and Teo (2006), and Kathman (2010). This has the virtue of excluding little, but it also includes much that would fall below the threshold of concern in the Iraq debate, treating modest economic sanctions and large military deployments equally. In addition, Regan codes separate observations of intervention every time a country escalates its activities, weighting certain cases heavily in the findings and producing a higher intervention count than many in the Iraq debate would intuit. For instance, Rwanda intervenes once in the Congo (1996–1997), but Cuba intervenes 11 times in Angola's civil war and Vietnam intervenes 23 times in Cambodia. Others distinguish multiple levels of external involvement, as in a range from “ideological encouragement” to “active combat units in country” for the MAR data (Saideman 2001; Cetinyan 2002).

For the Iraq debate, only a small subset of these interventions speaks to primary concerns. Moreover, the causes of overt unilateral commitment of foreign troops to combat may differ from the dynamics motivating other kinds of intervention. It is important to understand the determinants of major military intervention as a topic in its own right. And until we do, it is difficult to know whether most established findings on the subject of intervention are indeed applicable to the case of Iraq.

### Theory and the Iraq Debate

Since 2007, the scholarly literature has been joined by policy analyses on the prognosis for intervention

in Iraq *per se*. Like most such debates, this one has been mostly silent on theory. But just as typically, its central arguments all rest on implicit theoretical assumptions as to the causes of intervention—and the differences between these implicit theories of intervention drive much of the policy disagreement between Iraq withdrawal pessimists (who see the odds of foreign intervention as high) and optimists (who see them as low).

Withdrawal pessimists are concerned with the role of sectarian linkages between Iraq and its neighbors, refugee flows from Iraq to its neighbors, and the intensity of the war within Iraq (Byman and Pollack 2007; National Intelligence Council 2007; Boot 2008a,b; Cordesman 2009). Much of this concern stems from an underlying assumption that potential interveners are motivated by regime survival considerations. Civil warfare inevitably creates pressures on neighboring states to act, but military intervention is risky and costly. Small-scale and covert assistance to allies in the civil war state can sometimes protect the interests of neighbors at modest cost and risk without sending troops across the border. Under some conditions, however, such modest action falls short. In particular, where the neighbor shares a majority ethnic or sectarian affiliation with a party to the civil war, and where co-ethnics in the civil war are suffering badly enough, there will be growing political pressures on the neighbors to act decisively in order to rescue threatened brethren and end this suffering. Refugee flows aggravate these pressures. Refugee populations are often poorly housed, poorly fed, and dissatisfied. Where they represent co-ethnics dispossessed by common rivals across the border, and where a destructive war threatens permanent loss of abandoned property and kin to those rivals' control, the result can be internal political instability in the prospective intervening state unless decisive action is taken to protect co-ethnics' stakes across the border.

Withdrawal optimists tend not to address these assumptions directly, but to posit at least two potentially important countervailing influences and to claim that these outweigh the marginal effects of identity linkage, violence, and refugees. In particular, they emphasize the constraining role of military weakness and political culture (Posen 2007; Simon 2007, 2008; Gause 2008; Korb et al. 2008; Lynch 2008; Katulis 2009). For intervention to make sense, even a threatened regime needs the military wherewithal to act effectively; a weak state would incur the cost and risk of warfare without an ability to affect the military outcome of the civil war and hence would have no rational incentive to intervene even if it otherwise wanted to. And military intervention is only one option by which states can affect civil war outcomes; a variety of diplomatic or economic means could protect the interests of co-ethnics in a neighboring war, and domestic instability arising from dispossessed refugees could be addressed by internal repression rather than military intervention abroad. Takeyh et al. (2008) argue that the Persian Gulf and the larger Middle East have a political cul-

ture that encourages leaders to adopt these kinds of strategies rather than choosing direct military confrontation. Repressive political regimes also seem more likely than liberal ones to address internal dissent by suppression rather than by acquiescence in calls for the military rescue of threatened co-ethnics abroad. Hence, the weaker the prospective intervener militarily, the more the intervener's political culture dissuades military confrontation; and the more repressive the intervener's regime, the lower is the likelihood of intervention, *ceteris paribus*.

Neither Iraq camp's analysis, however, has yet been informed by any systematic, large-*n* empirical investigation. Nor can this be provided by simple reference to the existing literature on intervention. Much of the affinity-oriented academic literature excludes some of the military materiel issues so important in the Iraq debate, whereas the geopolitics-oriented literature excludes some of the ethnic and sectarian factors. The literature rarely considers the effects of refugee flows or arms-race dynamics on intervention. The result is an incomplete theoretical and empirical account of intervention—and one with important limitations as a means of understanding the policy issues associated with Iraq today.

A more complete account thus requires a synthesis and extension of the available research on intervention. In particular, this requires a new data set with coverage of a complete set of both affinity and geopolitical variables; a dependent variable that focuses on the more forceful forms of intervention pertinent to the Iraq debate; and explicit treatment of region-specific features of the Middle East, refugee flows, the effects of potential interveners' military capability, the regional military balance, and the effects of change in this balance as a prospective regional arms race in the Middle East unfolds.

### Data and Variables

To test these hypotheses, we examine 142 civil wars between 1950 and 1999, each with a minimum of 200 battle fatalities. Our baseline data are configured in dyad-years: for every year in which a conflict is ongoing, there is a separate observation for every state in the international system paired with the civil war state. To test whether our findings are being driven by "irrelevant" dyads (cf. Croco and Teo 2005; Bennett 2006; Quackenbush 2006), we consider two additional, contrasting units of analysis: politically relevant dyad-years, and contiguous dyad-years.

The key variables in the policy debate are not mutually exclusive in their effects. Nor do the individual component elements of the pessimist or optimist brief necessarily require the others; in logical terms, all are *ceteris paribus* marginal effects that can co-exist theoretically. They do, however, tend to imply countervailing influences for the Iraq case—with its multiple ethno-sectarian linkages, high civil war intensity to date (and thus prospectively for the future), large refugee flows, Middle Eastern political culture, and often-repressive neighboring

regime types. One or all could be valid influences; one or all could be important. We thus frame the analysis below as a comparative test of multiple marginal effects' independent empirical strength given appropriate controls; we then evaluate their net effect for the Iraq case given the empirical results.

Our dependent variable, *Intervention*, is a dummy coded as 1 when a third party intervenes in a conflict by sending combat troops into the civil war state. Each intervention must involve state soldiers being sent across borders by an intervener for the first time in the civil war; subsequent escalation, reinforcement, or other policy changes are not coded as additional "interventions."<sup>4</sup> If a state sends troops to participate in a multilateral peacekeeping mission, we do not count this as an intervention.<sup>5</sup>

Others have operationalized "intervention" in much less restrictive ways. Regan (2002), Lemke and Regan (2004), Austvoll (2006), and Kathman (2010), for example, include economic assistance, arms transfers, intelligence cooperation, or military advising, in addition to armed border crossings; these authors also code secondary troop movements such as reinforcements or escalation as additional interventions. While valid for their authors' purposes, these broader codings include as "interventions" an enormous range of cases that most in today's Iraq debate would not consider the primary focus of policy concern. In Regan (2002), for example, 912 of 1,036 total cases of "intervention" involve reinforcements of ongoing military action or instances of assistance short of cross-border troop movements. We thus adopt a conservative coding designed to speak both to the scholarly theoretical literature, whose interests include high-end as well as more modest forms of external involvement, and the Iraq policy debate—where the central issue is the fear that the Iraq war will engulf the neighbors in active warfare per se. Forms of intervention short of cross-border troop movements have occurred and may continue to occur in Iraq; but overt military force is more likely to lead to large-scale destabilization, and including other actions in our definition of intervention would only limit the utility of our study for the ongoing policy debate.

<sup>4</sup> This rule implies that dyad-years for ongoing interventions would be coded as 0s even though the case involved a continuing intervention. To avoid bias from this effect, dyad-years for states that intervene are dropped for years subsequent to the first cross-border troop movement.

<sup>5</sup> Multilateral peacekeeping poses several challenges here. From the standpoint of the policy debate in Iraq, we are most interested in finding the determinants of intervention by individual states. The causes of intervention by international organizations may differ. The concern is not only that states and organizations have different decision-making processes, but also that they may have systematically different objectives when intervening in civil wars. In particular, the existing literature typically treats multilateral peacekeeping as a tool for conflict management, whereas intervention by individual states is more likely to be considered as a form of internationalizing civil war, or the contagion of violence. Again, we are most concerned with the latter phenomenon when it comes to informing the Iraq debate. Finally, if we conceptualized multilateral efforts as separate interventions by all participating states, this could assign a disproportionate amount of statistical influence to cases where large multilateral organizations intervened.

To bridge the divide between affinity and geopolitical treatments of intervention and their respective data sources, we begin with the COW data, given its broader coverage, and add data from other sources as necessary to account for affinity variables and a variety of controls. Following Lemke and Reed (2001), Lemke and Regan (2004), and Kathman (2010), we adopt a less restrictive civil war definition than COW's (200 or more battle deaths, as opposed to COW's 1000), and we used Kathman's data to add these cases. We draw our dependent variable values from Regan (2002), but limit interventions to cross-border troop movements alone as noted above. We use data on regime type from POLITY IV (Marshall and Jaggers 2007) and Freedom House (2008); on fatalities from the International Peace Research Institute (Lacina and Gleditsch 2005) and Regan (2002); on conflict type from Sarkees (2002); and on refugee flows from the United Nations High Commissioner for Refugees (UNHCR 2000).

The most challenging data issues involve ethnic linkages. Fearon, Kasara, and Laitin (2007) record the ethnicity of the "top political leader" in each state since 1945, but no data set provides systematic information on rebel group ethnicity.<sup>6</sup> We therefore compiled new data on this, following Fearon, Kasara, and Laitin's logic of coding groups by the ethnic background of their leaders. Where rebellions comprised multiple factions we included each. We documented rebel ethnicity for 139 of 142 civil wars in the data set.<sup>7</sup> We then reviewed the merged data, changing 29 of the 142 fatality values, correcting five double-counts or erroneous civil war state identifications, and coding missing ethnicity values for more than 30 state leaders.

A key issue in the coding was determining whether an ethnic group in one country is the "same" as in another. Although it is possible to cluster ethnicities in some cases (for example, Moldovans/Romanians, Turks/Turkmen), we adopted a stricter approach to avoid imputing questionable connections:

- *Rebel link, State link*: Ethnic connections between civil war combatants and third parties are one of the most important potential determinants of civil war intervention according to the withdrawal pessimists in Iraq. We therefore created *Rebel link* as a

<sup>6</sup> Several new datasets exist on ethnic politics. For instance, Weidmann, Rod, and Cederman (2010) provide new information on the settlement patterns of ethnic groups; Cederman and Girardin (2007) present data on ethnic polarization. But these data do not necessarily speak to the identity of rebel groups. Forsberg's (2008) data capture ethnic connections between rebel groups and neighboring states, but they are limited to the post-Cold War period and operationalized in a manner that is different from what we present here. Forsberg codes an ethnic link as existing if a group involved in civil war is "present" in the neighboring state, regardless of its power status (Forsberg 2008:290). Here, we only examine ties to ethnic groups in power, since this speaks more directly to the theoretical logic of the Iraq policy debate.

<sup>7</sup> Sources include Clodfelter (2002), "Minority Group Assessments" from MAR (2009), Library of Congress country studies, *Encyclopedia Britannica*, and individual sources particular to each conflict.

dummy variable coded as 1 if the rebel group and the potential intervener are led by individuals from the same group with the same name in each country but the civil war state government is not, and 0 otherwise. Similarly, *State link* is a dummy variable coded as 1 if the civil war state government and the potential intervener are led by individuals from the same group with the same name in each country but the rebel group is not, and 0 otherwise.

To capture additional components of the argument that ethnic affinities or cultural factors drive civil war intervention, we coded the following variables:

- *PI is Former Colonizer*: This is a dummy variable with a value of 1 if the potential intervener was formerly a colonizer of the civil war state, and 0 otherwise, including if the civil war state was never a colony (Hensel 2006). Former colonizers are potentially more likely to intervene in civil wars if they retain a sense of responsibility for a state's political stability, or if they have significant expatriate communities remaining in the former colonies, or if there are lingering political disputes between the two states.
- *Joint Democracy*: Democracies, especially in pairs, are widely expected to display distinctive security behavior. Democracies tend to be more selective when deciding to go to war, and they avoid direct military confrontation with each other.<sup>8</sup> Both of these dynamics may reduce the incidence of civil war intervention in dyads that are jointly democratic. To control for this potential influence, *Joint Democracy* is coded as a dummy variable with a value of 1 if the potential intervener and the civil war state both score six or greater in POLITY IV. POLITY contains a large number of missing values, and where that was the case, we considered a state a "democracy" if it was listed by Freedom House as "Free" (Freedom House 2008), following the procedure in Regan (2002).
- *Identity War*: This is a dummy variable with a value of 1 if the war is an ethnic or religious conflict (Sarkees 2000).

In addition to the five variables we coded to capture theoretical determinants of civil war intervention that revolve around affinity, we will also examine the following geopolitical factors:

- *CWS Power Share*: This is the natural logarithm of the potential intervener's military personnel, divided by the natural logarithm of the civil war state's military personnel

(Singer, Bremer, and Stuckey 1972). As the ratio gets smaller, it indicates that the potential intervener is relatively weak, and thus potentially less likely to initiate a direct military intervention.

- *Power Mismatch*: An alternative logic of deterrence might hold that third parties are only dissuaded from intervening when their material disadvantage is particularly large, especially since the civil war state is largely preoccupied with internal challenges. We therefore coded this dummy variable as 1 if the civil war state has ten times the number of military personnel or ten times the amount of military expenditures as the potential intervener, and 0 otherwise (Singer et al. 1972).<sup>9</sup>
- *Alliance*: Since allies may be more likely to come to each other's defense when facing civil wars, we coded a dummy variable with a value of 1 if the potential intervener and the civil war state have a formal alliance consisting of a "defense pact, neutrality or non-aggression treaty, or entente agreement," and 0 otherwise (Gibler and Sarkees 2004).
- *Violence*: When civil wars cause more destruction, they are more likely to create spillover effects, damage economic interests, threaten regional stability, and generate other incentives for third parties to intervene. We measure levels of violence with the natural logarithm of the average number of battle-related fatalities per month of the conflict. We based our data on Regan (2002) and checked it against figures from Clodfelter (2002), *Correlates of War* (Sarkees 2000), the International Peace Research Institute (PRIO) Battle Deaths data (Lacina and Gleditsch 2005), and other sources cited in the PRIO documentation. When Regan's values differed from multiple crosschecks by more than a factor of 2, we replaced them with the figure given in PRIO.<sup>10</sup>
- *PI in Civil War, PI in Intl. War*: When states are involved in ongoing conflicts, they may display different proclivities for intervening in civil wars. For instance, when a state is involved in a civil war of its own, it is plausible to expect that its military resources will be tied down at home, and thus that the state will be less likely to engage in military expeditions elsewhere. We incorporate this argument into our model with *PI in Civil*

<sup>8</sup> On the first claim, see Levy (1988) and Bueno de Mesquita and Siverson (1995).

<sup>9</sup> In very few cases, where the civil war state has an order of magnitude advantage in one metric and an order of magnitude disadvantage in the other, the variable is coded 0.

<sup>10</sup> There are two exceptions to this coding rule. Conflict #922 (Iran) was coded from Leitenberg (2003), since the PRIO figure did not include battle-related civilian deaths for that conflict; conflict #971 (Iraq) was coded from Clodfelter, since PRIO did not record any value for battle deaths in that conflict.

*War*, a dummy variable with a value of 1 if the third party is engaged in a civil war of its own, and 0 otherwise (Sarkees 2000). The expected effect of a state being engaged in an international war is more ambiguous: these might also tie down a potential intervener's military forces, but they also might indicate that the state has a more aggressive foreign policy in general. To see whether either of these mechanisms systematically affects a state's intervention behavior, we coded *PI in Intl. War*, a dummy variable with a value of 1 if the third party is engaged in an international war of its own, and 0 otherwise (Sarkees 2000).

- *Refugees*: Refugee flows are one of the most important spillover effects of civil wars. We measure them here using the natural logarithm of the total number of refugees that reside in the potential intervener and that originated in the civil war state. These data are compiled by the Population Data Unit of the UN High Commissioner for Refugees (2000).

Finally, there are several potential determinants of civil war intervention that do not necessarily reflect either geopolitical or affinity explanations. We therefore include the following variables in each of our empirical models:

- *Middle Eastern*: This is a dummy variable reflecting the unique regional culture posited in the Iraq debate (Takeyh et al. 2008), with a value of 1 if the civil war state is in the Middle East.
- *Cold War*: The Cold War superpower competition created an intervention incentive for great powers that may not have been present since then. The *Cold War* variable controls for this potential influence and is coded as a dummy variable with a value of 1 if the dyad-year is before 1990, and 0 otherwise.
- *African*: Sub-Saharan Africa is widely considered an unusually intervention-prone region. The *African* variable controls for this potential influence and is coded as a dummy variable with a value of 1 if the civil war state is in Sub-Saharan Africa and 0 otherwise.
- *Land Border*: Potential interveners who share a land border with the civil war state are more likely to experience spillover effects. It is also less logistically demanding for them to send troops to intervene. We therefore include a dummy coded as 1 if the civil war state and the potential intervener are separated by a land or river border; and a 0 otherwise (Stinnett, Tir, Schafer, Diehl, and Gochman 2002).
- *Previous Intervention, Multiple Intervention*: Previous studies—most recently, Findley and Teo (2006)—have shown that the likelihood of intervention in civil wars increases once an intervention has already occurred. This

supports the notion that civil war intervention may be “contagious.” Following Findley and Teo’s (2006) model, we capture this potential effect using a dummy variable coded as 1 if another state has intervened prior to the observation, and 0 otherwise. We are also interested in the possibility that the contagion effect becomes more severe after multiple interventions have taken place, so we code a dummy for *Multiple Intervention*, scored as 1 if more than one other state has intervened prior to the observation, and 0 otherwise.<sup>11</sup>

### Analysis

Table 1 presents statistical findings for a probit analysis on our all-dyad-year data for our binary intervention/no intervention dependent variable.<sup>12</sup> We cluster standard errors by dyad, since any two cases involving the same states may violate the assumption of observational independence.

Table 2 compares the magnitude of substantive effects for each statistically significant variable from Model I, showing changes in estimated net intervention probabilities as key variables’ values are altered around their means. The results suggest several key findings.<sup>13</sup>

<sup>11</sup> A related literature emphasizes spatial interdependencies and sees interstate warfare spreading outward geographically as a function of the conflict’s, and the potential interveners’, locations: see Gleditsch (2002); Simmons, Dobbin, and Garrett (2006); Buhaug and Gleditsch (2008). We disaggregate the politico-strategic and spatial-geographic logics of intervention via the dummies *Previous Intervention* and *Multiple Intervention* (for the former) and the dummy *Landborder* (which accounts for the latter).

<sup>12</sup> All analyses have been checked for specification error (using the “linktest” command in Stata 10) and multicollinearity (using the “collin” command). Model I showed high sensitivity to the number of groups chosen for the “lfit” goodness-of-fit test, and Model III showed moderate sensitivity to the number of groups, but we believe that the many other measures of model fit described in note 16 provide a more useful overview of model fit than the general Hosmer-Lemeshow statistic behind the “lfit” command. Given the relatively infrequent occurrence of interventions in civil wars, a rare event logit analysis could also be a reasonable approach. However, as the purpose of rare events logit is generally to avoid a 0-heavy dependent variable from masking relationships, and since we are able to observe statistically significant results without artificially reducing the effect of 0s, rare events logit is not appropriate here. Using rare events logit would also decrease the robustness of our results, since it precludes controlling for clustering by dyad, an important error reduction step in our analysis.

<sup>13</sup> The results in Table 1 derive from data on all possible state-state dyads, even those with few chances for interaction due to geography. As robustness checks, we also ran the analysis in datasets including only politically relevant dyads or contiguous dyads. In the politically relevant dyads data, all variables in Model I retain their signs and statistical significance. In an even more restrictive data set featuring only contiguous dyads (arguably those most likely to intervene), four variables retain their sign but lose statistical significance (*Rebel Link*  $p = .12$ , *PI is Former Colonizer*  $p = .35$ , *PI in Civil War*  $p = .13$ , and *Previous Intervention*  $p = .37$ ), and the sign on *Alliance* becomes negative while remaining insignificant. The loss of significance on several of these variables is attributable to the far fewer observations in the contiguous-dyads dataset (5,320 vs 124,514 for all-dyads). In a more restricted specification including only significant variables from Model I, *Rebel Link*, *PI in Civil War*, and *Previous Intervention* are all significant at the 0.05 level across all three units of observation. On the whole, the results show remarkable robustness across three very different data structures.

TABLE 1. Determinants of Civil War Intervention

	<i>Model I: Full Model</i>	<i>Model II: Affinity and Controls</i>	<i>Model III: Geopolitics and Controls</i>
Rebel link	0.4664 (0.225)**	0.7234 (0.199)***	
State link	-0.9752 (0.599)	-0.5326 (0.484)	
PI is Former Colonizer	1.1088 (0.214)***	1.1509 (0.210)***	
Joint Democracy	-0.1959 (0.269)	-0.3549 (0.258)	
Identity War	-0.0646 (0.104)	-0.1122 (0.093)	
CWS Power Share	0.2307 (0.028)***		0.2385 (0.024)***
Power Mismatch	-0.4586 (0.218)**		-0.5718 (0.201)***
Alliance	0.1705 (0.151)		0.0992 (0.136)
Violence	0.0816 (0.025)***		0.0701 (0.024)***
PI in Civil War	-0.2629 (0.122)**		-0.2400 (0.109)**
PI in Intl. War	0.4762 (0.143)***		0.5582 (0.116)***
Cold War	0.2678 (0.097)***	0.2097 (0.097)**	0.2674 (0.087)***
African	0.4029 (0.121)***	0.4674 (0.105)***	0.3567 (0.106)***
Middle Eastern	0.0554 (0.184)	0.1548 (0.160)	0.0036 (0.161)
Refugees	0.0170 (0.014)	0.0183 (0.014)	0.0219 (0.013)
Land Border	1.4917 (0.128)***	1.3220 (0.107)***	1.4509 (0.126)***
Previous intervention	0.2696 (0.133)**	0.2024 (0.124)	0.2105 (0.115)*
Multiple previous interventions	0.0351 (0.147)	0.1140 (0.144)	0.0521 (0.134)
Constant	-4.7628 (0.218)***	-3.9283 (0.132)***	-4.6208 (0.190)***
	<i>N</i> = 124,514	<i>N</i> = 128,153	<i>N</i> = 161,563
	Wald $\chi^2$ (18)=312.16	Wald $\chi^2$ (12)=279.48	Wald $\chi^2$ (13)=374.19
	Pr > $\chi^2$ = 0.000	Pr > $\chi^2$ = 0.000	Pr > $\chi^2$ = 0.000
	MZ's $R^2$ = 0.290	MZ's $R^2$ = 0.138	MZ's $R^2$ = 0.271
	McF's Adj $R^2$ = 0.329	McF's Adj $R^2$ = 0.269	McF's Adj $R^2$ = 0.308

(Notes. \*\*\**p*-value .01 or less; \*\**p*-value .05 or less; \**p*-value .10 or less.)

TABLE 2. Model I Effects on the Predicted Probability of Intervention\*

<i>Covariates</i>	<i>Min</i>	<i>Predicted p at Min</i>	<i>Max</i>	<i>Predicted p at Max</i>
Rebel link	0	0.00004	1	0.00024
PI is Former Colonizer	0	0.00004	1	0.00222
CWS Power Share	0	0.00002	11.6257	0.07094
Power Mismatch	0	0.00004	1	0.00001
Violence <sup>†</sup>	-0.4336	0.00001	10.0971	0.00023
PI in Civil War	0	0.00004	1	0.00001
PI in Intl. War	0	0.00004	1	0.00025
Cold War	0	0.00001	1	0.00004
African	0	0.00004	1	0.00019
Land Border	0	0.00004	1	0.00691
Previous Intervention	0	0.00004	1	0.00011

(Notes. \*Predicted probabilities calculated holding continuous variables at their means and dummy variables at their modes. Each row presents the predicted probability of intervention when a given variable is set to its minimum, and then to its maximum. Only variables with a significance level of *p* = .1 or better are presented.

<sup>†</sup>Violence has a negative minimum value, because the variable is on a logarithmic scale.)

First, there is empirical support for both affinity and geopolitical explanations for civil war intervention. As we argue above, these are not mutually exclusive theoretically, and the empirical results give no reason to exclude either class of explanation. In particular, the affinity variables *Rebel link* and *PI is Former Colonizer* are both positive and statistically significant—*PI is Former Colonizer* at the 0.001 level, and *Rebel link* at the 0.05 level. This suggests that in the general empirical record of civil wars over a broad period of time, links between the rebel groups in civil wars and outside actors create incentives for those outside actors to intervene militarily. This supports the argument among Iraq withdrawal pessi-

mists that, given rebel Iraqi groups' ties to outside actors, the chances for intervention in this case may be higher than in cases without such links.

Likewise, the geopolitical variables, *CWS Power Share*, *Power Mismatch*, and *PI in Civil War*, are all positive and statistically significant. The combination of these three findings tells a compelling story, as well. As we anticipated, when the balance of power between the potential intervener and the civil war state tips in favor of the latter, the chances of intervention decline. We also confirmed our hypothesis that the coefficient on *Violence* would be positive and statistically significant, indicating that when civil wars are more destructive, they are more likely to

precipitate military intervention, as potential interveners are more willing to take risks to prevent the violence from spiraling out of control.

These findings present mixed implications for the Iraq policy debate. Though some of Iraq's neighbors are small and militarily weak, others have considerable military capability; none of Iraq's neighbors is currently involved in a civil war, and if sectarian violence in Iraq re-ignites, it could be highly destructive. One somewhat surprising result is that *PI in International War* is positive and significant, which is opposite to involvement in a civil war, even though the logic of unavailable resources would seem to be the same for both. One reason for this result could be that, despite the drain on resources associated with international war involvement, intervention in a civil war at the same time may be seen as part of, or at least related to, the goals of the international war. For instance, a state fighting another state may find advantage in producing instability on the enemy's borders. Our quantitative analysis cannot provide sufficient nuance to verify this, but more research into individual cases may be able to clarify the causal connection.

In addition to the significant findings, we can learn from insignificant results provided in Table 1. Not all potential affinity and geopolitical variables emerge as significant. This helps to refine our theoretical propositions by showing that some proposed mechanisms are not as strong as others in encouraging states to intervene militarily in civil wars. In particular, *State Link* did not prove to be statistically significant. This is an important result for the Iraq policy debate, where Shia ties to Tehran are often considered to be an important cause of a potential Iranian intervention. But Table 1 suggests that this kind of linkage does not consistently lead states to intervene in civil wars. One theoretical explanation is that states are much more likely to intervene in support of co-ethnics when the latter are in exceptional danger. Since most rebel movements do not pose an existential threat to the ethnic group in power, this affinity mechanism tends not to be activated by state-to-state links. This notion is also supported by our finding that *Refugees* are not a statistically significant predictor of intervention, either. Refugee flows are a problem in their own right, but they do not capture the magnitude of the physical threats rebels face as directly as measurements of violence. If physical threats are what motivate potential interveners to respond with military force, then it makes sense to see *Violence* as being more statistically significant than *Refugees*, and for *Rebel links* to be more significant than *State links*.

The affinity variables *Joint Democracy* and *Identity War* also failed to achieve significance at the 0.1 level, as did the geopolitical variable *Alliance*. *Joint Democracy's* weak statistical performance here contrasts with its often-robust role in much of the international relations literature. This is due partly to the tendency of positively correlated variables such as *CWS Power Share* to pick up causal influence that might otherwise be attributed to democracy. But it is

due largely to the way the POLITY data treat democratic transition: where the state in question is in the process of moving from one clear regime category to another, POLITY excludes the case. Many states in the midst of civil warfare are undergoing such transitions; as a result, the absence of codings for such cases drops about one-third of the potential data points from the all-dyads data set and presumably clouds the causal role of regime type.<sup>14</sup> Regarding alliances, most are formed to balance against international, not internal, threats. It therefore makes sense that alliances would be less informative as explanations of civil war intervention than for other interactions. Moreover, while much of the literature on conflict supports the argument that alliances powerfully affect the behavior of states in times of conflict, alliances have been shown not to be as reliable as some early work predicted them to be (Leeds, Ritter, Mitchell, and Long 2002; Leeds 2003).

Even among the significant variables, all are not equal in their importance. In particular, the affinity variable *PI is Former Colonizer*, the geopolitical variable *CWS Power Share*, and the control variable *Land Border* are disproportionately influential. As Table 2 shows when other variables are set at their means (for continuous variables) or modes (for dummies), *PI is Former Colonizer* increases the predicted dyad-year intervention probability from 0.00004 to 0.00222 when the dummy takes on a value of 1 rather than 0; *CWS Power Share* swings the intervention probability from essentially zero at its minimum value to 0.07094 at its maximum; *Land Border* increases intervention probability from 0.00004 to 0.00691 when the dummy moves from 0 to 1.<sup>15</sup>

The results also suggest that analyses of either affinity or geopolitics in isolation can yield nontrivially biased results. Model II in Table 1 considers only affinity variables plus controls; Model III considers only geopolitics variables plus controls. Neither partial model performs as well as Model I on any of six pseudo- $R^2$  measures; statistical performance for the partial models varies by measure but can reach a 52% falloff, as in McKelvey & Zavoina's  $R^2$  when comparing Model I to Model II, or a 58% falloff, as in Efron's  $R^2$  when comparing Model I with Model III.<sup>16</sup> And omitted variable bias, while generally modest, can sometimes affect coefficients in problematic

<sup>14</sup> As a robustness check, we considered models without *Joint Democracy*, recovering thereby the dropped cases; while the statistical performance of the model improves, all variables retain their signs and their level of significance.

<sup>15</sup> While these changes may appear small in magnitude, this follows the nature of the data structure. Given that the dependent variable is intervention by one of a very large number of potential interveners in a given civil war in a given year, all probabilities are naturally quite low. This does not mean that the changes are unimportant; it is simply a matter of scale.

<sup>16</sup> There is no consensus on a single best measure of fit quality for profit. We considered six pseudo- $R^2$  variants (McKelvey and Zavoina, McFadden, McFadden adjusted, Cox-Snell, Cragg-Uhler, and Efron), and two information criterion measures (Akaike, or AIC, and Bayesian, or BIC). All six pseudo- $R^2$  measures show a loss of fit quality for Models II and III relative to Model I, with a degree ranging from 7% (0.290–0.271) for McKelvey and Zavoina's  $R^2$  in Model III to 58% (0.052–0.022) for Efron's  $R^2$  in Model II.

ways: in Model II, for example, the estimated coefficient of *Rebel links* is biased upward by almost 60% relative to the more complete analysis in Model I; in Model III, the estimated coefficient of *Power Mismatch* is biased upward by almost 25%.

The results suggest several other findings of note. Cold War-era civil wars were more prone to intervention than subsequent conflicts, and the effect is statistically significant at the 0.01 level. This confirms the intuition among many that the general political dynamics of the Cold War were meaningfully different from periods outside the Cold War. The superpowers' global competition created incentives for the United States, the Soviet Union, and their regional clients to intervene in otherwise local conflicts that might have been left alone without this added incentive. These factors may have led to higher levels of intervention during the Cold War in general, even by states other than the USSR and the United States.

Interstate war involvement makes potential interveners more likely to intervene in civil wars, raising the baseline annual probability of intervention within a given dyad from 0.00004 to 0.00025, while civil war involvement decreases the chances. The presence of a land border between the potential intervener and the civil war state has a positive and highly significant effect, which confirms the highly active relationship that territorial neighbors often have. Given the increased numbers of interests and disputes that contiguous states share, it is unsurprising that they are also more likely to intervene in each other's civil wars. What is interesting about this finding, though, is that it is significant even in the presence of the ethnic linkage variables, one of the causal mechanisms that we might expect to drive the observed relationship between contiguity and civil war intervention. This suggests that there is still some theoretical development that could take place to further explain the special properties of contiguous states when it comes to civil war politics across borders. The strategic dynamics of counter-intervention are also important in these results: *Previous Intervention* is positive and significant at the 0.05 level, and the net effect of a previous intervention is to increase the baseline annual probability of intervention from 0.00004 to 0.00011.

Regional distinctions can be important. African civil wars, for example, are five times as susceptible to intervention as civil conflicts elsewhere. Middle Eastern civil wars, however, are not meaningfully less likely than others to see intervention. Thus, there is no evidence in these data to support the claim that Middle Eastern states are unusually free of intervention risk by virtue of a distinctive, accommodationalist political culture, despite the policy currency of such claims.

### Implications for Iraq

What do these results imply for the net likelihood of regional intervention in Iraq? How great a risk of a multi-state intervention is there, and how does this change over time?

Dyad-year probit analysis is necessary but insufficient to answer these questions. It can predict the probability that a given state will intervene in a given civil war in a given year, but it cannot in itself estimate the odds of more than one intervention or the cumulative probability of a given number of interventions over time for a potentially multi-year war. To answer these questions, we thus require an additional modeling task to extrapolate from the dyad-year results presented above to probability distributions over the number of interventions and the duration of the war for the specific case of Iraq.

Our approach uses a Monte Carlo simulation methodology for this extrapolation. That is, we computed unique time-dependent intervention probabilities per year for each of Iraq's neighbors using the coefficients in Model I.<sup>17</sup> We then drew a random number (from a uniform distribution on the interval 0,1) for each neighbor in each year and compared this random number draw to the computed intervention probability. If the random number drawn was less than or equal to the probability, that neighbor was scored as having intervened in that year, otherwise not. We then summed interventions over states for that year, yielding a simulated intervention count for that year. We then repeated the process for the next year, less any neighbor that had already intervened, and summed the total interventions observed over time intervals of 5, 10, and 15 years of reignited civil warfare, yielding a single replication of the simulation. We then repeated this process for a total of 1 million replications. The results are given in Table 3, which presents probabilities for interventions by none, one, more than one, more than two, and more than three of Iraq's neighbors, as a function of the duration of the reignited war (where the probabilities represent the fraction of simulation

<sup>17</sup> In these simulations, Iran is coded as having ethnic links to the civil war state; Bahrain, Jordan, Kuwait, Qatar, and Saudi Arabia have links to the rebels; Syria is majority Sunni but is ruled by Alawites, who are a Shia offshoot, so we ran the simulation twice, once with Syria coded as linked to the rebels and once with it linked to the state. The results presented in Table 3 are based on coding Syria as linked to the rebels (Syria's Sunni majority to Iraq's Sunni rebels). The alternative coding (linking Syria's Alawite leaders to Iraq's government) yields only moderate differences in overall intervention probabilities: for instance, the probability of more than two states intervening over 5 years of warfare remains at 0.04; it changes from 0.20 to 0.19 over 10 years; and from 0.41 to 0.39 over 15 years. Dummies for alliances, civil war democracy, joint democracy, the Cold War, and Africa are all set to 0. Turkey is coded as a former colonizer of Iraq, and it is currently engaged in an internal conflict with the Kurds. Military personnel scores for Iraq and its neighbors were calculated for 2008 using the most up-to-date information possible (International Institute for Strategic Studies 2008). We assume that current trends in regional arms acquisition will continue, and that Iraq's neighbors' military personnel will grow by roughly 10% per year (though the results are largely insensitive to this assumption: if military personnel scores are held constant over time, no computed intervention probability changes by more than 1% point). Refugee counts were drawn from the UNHCR's 2007 tabulation. The violence of the Iraq civil war was calculated by taking the Iraq Body Count's estimate of total violent deaths among the Iraq Security Forces and Iraqi civilians from the beginning of 2004 through the end of 2007 (roughly 95,000), adding 4,000 for the number of American troops killed in Iraq, and adding twice that number (8,000) as an estimate of the number of insurgents killed in Iraq. For Iraq's ratio of primary commodity exports to total GDP, we used the figure reported by Collier and Hoeffler (2004) for 1999.

TABLE 3. Net Probability of Intervention

<i>Within (years)</i>	<i>0 States</i>	<i>&gt;0 States</i>	<i>&gt;1 State</i>	<i>&gt;2 States</i>	<i>&gt;3 States</i>
5	0.36	0.64	0.23	0.04	0.00
10	0.12	0.88	0.55	0.20	0.04
15	0.04	0.96	0.77	0.41	0.12

replications in which the given number of interventions was observed).

The results suggest that the probability of intervention by at least one neighbor becomes extremely high after even 5 years of renewed warfare, with a 64% estimated probability of at least one intervention, and a 23% probability of more than one.<sup>18</sup> Within 10 years, the probabilities rise to 88% for at least one intervention and 55% for more than one. And within 15 years, these probabilities rise to 96% and 77%, respectively. The odds of more than two of Iraq's neighbors intervening in the war reach 20% within 10 years, and 41% if the war continues for 15 years.<sup>19</sup>

Of course, no statistical model can fully capture the nuances of the complex political dynamics at play in Iraq today. But we believe the results provide a useful set of baseline expectations, with a theoretical and empirical footing that is much stronger and more systematic than the current policy debate. These findings indicate a substantively significant risk of one or more interventions in Iraq, within a relatively short period of time after the re-emergence of an Iraqi civil war. Moreover, the simulation results are robust to reasonable variations in the specification of the underlying empirical model. The substantive findings from the simulation are the same if we change the units of analysis in our empirical model from all dyads in the data set to politically relevant dyads, or to contiguous dyads only; nor are they affected if we exclude variables that were not statistically significant in Model I, examining a more limited set of causal factors across all three units of analysis.<sup>20</sup> The simulation also enables an examination of the identity of prospective interveners and

<sup>18</sup> Note that these values would be substantially lower for counterfactual analysis of intervention in the war as it raged in Iraq between 2003 and late 2007. In this period, substantial US military forces in Iraq dramatically altered the prospective military balance facing potential interveners; the US presence was insufficient to end the civil warfare, certainly prior to 2007, but it did play an important role in deterring foreign intervention.

<sup>19</sup> The average (standard deviation) number of interveners across the one million simulation runs is: 0.92 (0.85) within 5 years; 1.67 (1.02) within 10 years; and 2.27 (1.05) within 15 years.

<sup>20</sup> Across these six empirical models—all dyads, politically relevant dyads, and contiguous states, each with all variables in Model I or only with the subset of variables that are statistically significant—the average number of interventions within 5 years ranges from 0.62 to 0.92; the average number of interventions within 10 years ranges from 1.19 to 1.67; and the average number of interventions within 15 years ranges from 1.72 to 2.27. If we run the simulation based on predicted probabilities generated from Model I using a dataset with contiguous dyads only, the likelihood of multiple interventions after five and 10 years is 13% and 36%, respectively—compared to the 23% and 55% we present in Table 3 based on the all-dyads data. The substantive findings of our Monte Carlo simulation therefore appear to be robust across a range of empirical specifications and units of analysis.

the relative magnitude of risk across states in the region. These findings are presented in Table 4, which reports the estimated probability of intervention for each of Iraq's neighbors assuming 5, 10, and 15 years of civil warfare, given each neighbor's values for the independent variables reported in Table 1, and given one million iterations of the Monte Carlo simulation.<sup>21</sup> The results imply that the greatest threats of intervention are from Turkey, Saudi Arabia, Syria, and Jordan. Syria poses coding complexities given its Sunni majority population but heterodox Alawite Shia regime: if coded by reference to its Sunni majority, it is likelier than Saudi Arabia to intervene; if coded by reference to its Shia leadership, it is less likely than Kuwait to intervene. Note that none of these individual-state intervention probabilities exceed 10% in any given year. But because Iraq has many neighbors, even modest probabilities of intervention individually cumulate into serious aggregate risks over time.

The greatest single intervention risk in these findings stems from Turkey, given its military potential and its affinity relationship as a former colonizer. Turkey's 0.38 probability of intervention within 5 years nearly doubles Syria's (0.22) or Jordan's (0.20); for a 10-year horizon, Turkey's intervention probability of 0.62 is over 50% higher than Syria's (0.39), and over 70% higher than Jordan's (0.36). These estimates, moreover, may understate the actual risk, in that the specification of our probit model does not account for the particular circumstances of Turkey's problematic relationship with Iraqi Kurds. Iraq's Kurds have not heretofore been in rebellion against the Iraqi state, and the model in Table 1 does not explicitly consider the problem of non-rebellious ethnic minorities in civil war states or their minority presence in neighboring states. Iraqi Kurdish militants, however, have used Iraqi Kurdistan to launch terrorist attacks into Turkey; it is entirely possible that an escalation of these attacks could lead to major Turkish military intervention in response. Turkey has already mounted small-scale, temporary punitive incursions; renewed civil warfare and associated instability within Iraq could reduce the ability of government officials in the Kurdish Regional Authority to restrain such cross-border terrorism, and in the absence of a US military presence to dissuade the Turks, this could increase the danger of major Turkish intervention accordingly.

Interestingly, Iran is among the least likely of Iraq's neighbors to intervene, with less than a 5% probability of intervention after even 15 years of Iraqi civil warfare—it is overwhelmingly Turkey and Iraq's Sunni neighbors who pose the greatest intervention risk. To some extent, this is a function of the aggregate treatment of the strategic dynamics of counter-intervention here. Iran has sectarian links with Iraq's government, rather than its Sunni insur-

<sup>21</sup> Values in Table 4 are the fraction of all (1,000,000) simulation replications in which the given state intervened in an Iraqi civil war assumed to be ongoing as of the given time.

TABLE 4. Country-Specific Results (Cumulative Probability of Intervention for Each State)

<i>Within (years)</i>	<i>Bahrain</i>	<i>Iran</i>	<i>Jordan</i>	<i>Kuwait</i>	<i>Qatar</i>	<i>Saudi Arabia</i>	<i>Syria</i>	<i>Turkey</i>
5	0.000	0.003	0.171	0.045	0.000	0.166	0.194	0.337
10	0.001	0.007	0.323	0.092	0.001	0.314	0.359	0.571
15	0.001	0.011	0.453	0.139	0.001	0.442	0.497	0.728

gency, which makes it an unlikely initial intervener given our empirical findings. But an entry by a Sunni state into an Iraqi civil war would probably swing the military balance within Iraq dramatically in the Sunni rebels' favor, and this would greatly increase Shiite Iran's incentives to counter-intervene in order to avoid a Sunni takeover of Iraq. Iranian secondary intervention as a downstream consequence of Sunni initial intervention is thus more likely than the aggregate treatment of intervention presented here implies. But considered in the broader context of the empirical record as a whole, these results suggest that Iran is unlikely to be the first state to cross the border with uniformed military formations and may pose a smaller danger of regionalization for the conflict than Iraq's Sunni neighbors.

Of course, none of these values reach unity, and for the odds of multiple interventions to reach dangerous levels requires multiple years of post-US warfare in Iraq. Intervention is far from a certainty, whether for any given neighbor or across the region as a whole. And it cannot be known how long the Iraqi civil war would continue after a US withdrawal—it could last <5 years or more than 15.

But given the potential consequences—both strategic and humanitarian—of regional warfare in the Persian Gulf, the results in Tables 3 and 4 are grounds for concern. Certainly these findings give no basis for dismissing the danger of regional intervention in the Iraq war if the United States withdraws and civil conflict returns. This is a nontrivial risk which must be considered carefully in the design of US policy for Iraq and in any planning for troop reductions there—it cannot safely be ruled out on the basis of a belief that Iraq's unique conditions make a renewed war unlikely to spread.

### Conclusions

Our findings thus suggest that ethno-sectarian affinity and geopolitical dynamics can be significant contributors to the risk of outside intervention in civil warfare. In particular, links between the civil war rebel group and the governments of neighboring states significantly increase the risk that neighbors will intervene by sending troops across the border, as do material power advantages for potential interveners and high levels of combat intensity in the civil war. Not all factors noted in either the scholarly literature or the policy debate are of comparable importance, however—in particular, neither alliance links, Middle Eastern political culture, nor refugee flows had statistically significant effects. The results

improve our understanding of intervention in particular and civil war in general and suggest the importance both of combining geopolitical and affinity approaches to the study of internal warfare, and of extending analysis to new explanatory variables outside either tradition.

These findings also have important implications for US foreign policy and the debate over Iraq. In particular, they imply a meaningful danger that the Iraq war could spread if the United States withdraws and internal violence in Iraq escalates. Many proponents of prompt withdrawal have argued that the risk of intervention is exaggerated, and this assessment is often supported by arguments that Iraq's neighbors are too weak, or that Middle Eastern states resolve differences by appeasement rather than invasion. The findings above, however, imply that the unique features of Iraq and its neighborhood could have the opposite effect—increasing, not decreasing, the risk of intervention in this war relative to others. Iraq presents an unusually interconnected ethno-sectarian conflict in a neighborhood with a large number of potential interveners who share the Sunni majority populations and/or regimes of Iraq's Sunni insurgency. The neighbors are relatively weak now, but so is Iraq, and the region's ongoing arms race stands to increase those neighbors' material capacity to intervene over time. Iraq is also a state with a civil war that reached very high average intensity. These factors are all strongly linked with an elevated risk of intervention in the data as a whole. And the findings above show no reason to expect that anything unique to the Middle East region per se should imply any unusual freedom from danger: whereas Africa, for example, is an especially intervention-prone region, the Middle East is not significantly different from the rest of the world in this regard.

By the same token, these findings do not suggest that intervention is inevitable, as pessimists sometimes imply, and the likelihood of immediate intervention is considerably lower than the risk over time. The danger is real, but should not be exaggerated. And of course the findings above are based on necessarily imperfect data, and statistical analyses never explain the totality of their variance; a degree of caution is always in order in drawing policy implications from empirical analysis. It is also possible that US withdrawal could reduce rather than increase the risk of civil warfare returning to Iraq, though this is unlikely (Biddle, O'Hanlon, and Pollock 2008). Nor does the empirical analysis above suggest anything like a guarantee of disaster in the event that Iraqi internal violence does escalate in

the wake of a withdrawal. But the odds of intervention implied by the findings above are daunting all the same: it cannot safely be argued that there is only a negligible risk that a rekindled Iraq war could spread.

Perhaps most broadly of all, the results above suggest that policy debates need not be conducted in isolation from empirical scholarship in international relations. The theoretical and empirical literature has much to offer if framed appropriately and extended where necessary to account for the particular issues at stake. Yet such decisions are often made in the absence of any systematic consideration of the range of evidence and experience that empirical scholarship can consider. Knowledge is important in its own right. But where the stakes in public decision-making are as grave as those in war and peace, opportunities to apply knowledge to inform public debate can be—and should be—exploited more often.

### References

- AUSTVOLL, MARTIN. (2006) Transnational Ethnic Dimensions of Third-Party Interventions in Civil Wars. Paper presented at the annual meeting of the American Political Science Association, August-September, Philadelphia, PA.
- BALCH-LINDSAY, DYLAN, AND ANDREW ENTERLINE. (2000) Killing Time: The World Politics of Civil War Duration, 1820–1992. *International Studies Quarterly* 44 (4): 615–642.
- BENNETT, D. SCOTT. (2006) Exploring Operationalizations of Political Relevance. *Conflict Management and Peace Science* 23 (3): 245–261.
- BIDDLE, STEPHEN, MICHAEL O'HANLON, AND KENNETH POLLACK. (2008) How to Leave a Stable Iraq: Building on Progress. *Foreign Affairs* 87 (5): 40–58.
- BOOT, MAX. (2008a) How Not to End the War. *Washington Post*, March 31. Available at <http://www.washingtonpost.com/wp-dyn/content/article/2008/03/28/AR2008032801729.html>. (Accessed February 19, 2010).
- BOOT, MAX. (2008b) Behind Maliki's Games. *Washington Post*, July 23: A15.
- BUENO DE MESQUITA, BRUCE, AND RANDOLPH M. SIVERTSON. (1995) War and the Survival of Political Leaders: A Comparative Study of Regime Types and Political Accountability. *American Political Science Review* 89 (4): 841–855.
- BUHAUG, HALVARD, AND KRISTIAN SKREDE GLEDITSCH. (2008) Contagion or Confusion? Why Conflicts Cluster in Space. *International Studies Quarterly* 52 (2): 215–233.
- BYMAN, DANIEL, AND KENNETH POLLACK. (2007) *Things Fall Apart: Containing the Spillover from an Iraqi Civil War*. Washington, DC: The Brookings Institution.
- CARMENT, DAVID, AND PATRICK JAMES. (2004) Third-Party States in Ethnic Conflict: Identifying the Domestic Determinants of Intervention. In *Ethnic Conflict and International Politics: Explaining Diffusion and Escalation*, edited by Steven E. Lobell, and Philip Mauceri. New York: Palgrave Macmillan.
- CARMENT, DAVID, PATRICK JAMES, AND DANE ROWLANDS. (1997) Ethnic Conflict and Third Party Intervention: Riskiness, Rationality, and Commitment. In *Enforcing Cooperation: Risky States and Intergovernmental Management of Conflict*, edited by Gerald Schneider, and Patricia Weitsman. New York: St. Martin's Press.
- CARMENT, DAVID, PATRICK JAMES, AND ZEYNEP TAYDAS. (2006) *Who Intervenes? Ethnic Conflict and Interstate Crisis*. Columbus, OH: Ohio State University Press.
- CEDERMAN, LARS-ERIK, AND LUC GIRARDIN. (2007) Beyond Fractionalization: Mapping Ethnicity onto Nationalist Insurgencies. *American Political Science Review* 101 (1): 173–185.
- CETINYAN, RUPEN. (2002) Ethnic Bargaining in the Shadow of Third-Party Intervention. *International Organization* 56 (3): 645–677.
- CLODFELTER, MICHAEL. (2002) *Warfare and Armed Conflicts: A Statistical Reference to Casualty and Other Figures, 1500–2000*. Jefferson, NC: McFarland & Company.
- COLLIER, PAUL, AND ANKE HOEFFLER. (2004) Greed and Grievance in Civil War. *Oxford Economic Papers* 5 (4): 563–595.
- CORDESMAN, ANTHONY. (2009) *How Soon Is Safe? Iraqi Force Development and "Conditions-Based" U.S. Withdrawals*. Washington, DC: Center for Strategic and International Studies.
- CROCO, SARAH E., AND TZE KWANG TEO. (2005) Assessing the Dyadic Approach to Interstate Conflict Processes: a.k.a. "Dangerous" Dyad Years. *Conflict Management and Peace Science* 22 (1): 5–18.
- CUNNINGHAM, DAVID E. (2010) Blocking Resolution: How External States Can Prolong Civil Wars. *Journal of Peace Research* 47 (2): 115–127.
- FEARON, JAMES D., KIMULI KASARA, AND DAVID D. LAITIN. (2007) Ethnic Minority Rule and Civil War Onset. *American Political Science Review* 101 (1): 187–193.
- FINDLEY, MICHAEL G., AND TZE KWANG TEO. (2006) Rethinking Third-Party Interventions into Civil Wars: An Actor-Centric Approach. *Journal of Politics* 68 (4): 828–837.
- FORSBERG, ERIKA. (2008) Polarization and Ethnic Conflict in a Widened Strategic Setting. *Journal of Peace Research* 45 (2): 283–300.
- FREEDOM HOUSE. (2008) *Freedom in the World 2008*. New York, NY: Freedom House.
- GAUSE III, F. GREGORY. (2008) United States Senate Committee on Foreign Relations. Iraq 2012: What Can it Look Like, and How Can We Get There? Hearing before the Committee on Foreign Relations. 110th Congress, 2nd session, April 3.
- GIBLER, DOUGLAS M., AND MEREDITH R. SARKEES. (2004) Measuring Alliances: The Correlates of War Formal Interstate Alliance Dataset, 1816–2000. *Journal of Peace Research* 41 (2): 211–222.
- GLEDITSCH, KRISTIAN SKREDE. (2002) *All International Politics Is Local: The Diffusion of Conflicts, Integration, and Democratization*. Ann Arbor: University of Michigan Press.
- HENSEL, PAUL. (2006) Issue Correlates of War (ICOW) Project: Colonial History Data Set. Version 0.4.
- HERACLIDES, ALEXIS. (1990) Secessionist Minorities and External Involvement. *International Organization* 44 (3): 341–378.
- INTERNATIONAL INSTITUTE FOR STRATEGIC STUDIES. (2008) *The Military Balance 2008*. London: International Institute for Strategic Studies.
- KATHMAN, JACOB D. (2010) Civil War Contagion and Neighbor State Intervention. *International Studies Quarterly* 54 (4): 989–1012.
- KATULIS, BRIAN. (2009) *Standoff in Central Baghdad: The Iraq Surge Bubble Begins to Collapse*. Washington, DC: Center for American Progress.
- KHOSLA, DEEPA. (1999) Third World States as Interveners in Ethnic Conflicts: Implications for Regional and International Security. *Third World Quarterly* 20 (6): 1143–1156.
- KORB, LAWRENCE J., BRIAN KATULIS, SEAN DUGGAN, AND PETER JUUL. (2008) *How Does this End? Strategic Failures Overshadow Tactical Gains in Iraq*. Washington, DC: Center for American Progress.
- LACINA, BETHANY, AND NILS PETTER GLEDITSCH. (2005) Monitoring Trends in Global Combat: A New Dataset of Battle Deaths. *European Journal of Population* 21(2–3): 145–166.
- LEEDS, BRETT ASHLEY. (2003) Alliance Reliability in Times of War: Explaining State Decisions to Violate Treaties. *International Organization* 57: 801–827.

- LEEDS, BRETT ASHLEY, JEFFREY M. RITTER, SARAH McLAUGHLIN MITCHELL, AND ANDREW G. LONG. (2002) Alliance Treaty Obligations and Provisions, 1815–1944. *International Interactions* 28: 261–284.
- LEITENBERG, MILTON. (2003) Death in Wars and Conflicts between 1945 and 2000. *Occasional Paper 29*. Ithaca, NY: Peace Studies Program, Cornell University.
- LEMKE, DOUGLAS, AND WILLIAM REED. (2001) The Relevance of Politically Relevant Dyads. *Journal of Conflict Resolution* 4 (1): 126–144.
- LEMKE, DOUGLAS, AND PATRICK M. REGAN. (2004) Interventions as Influence. In *The Scourge of War*, edited by Paul Diehl. Ann Arbor: University of Michigan Press.
- LEVY, JACK S. (1988) Domestic Politics and War. *Journal of Interdisciplinary History* 18 (4): 653–673.
- LYNCH, MARC. (2008) Politics First: Why Only U.S. Withdrawals Can Spur Iraqi Cooperation. *Foreign Affairs* 87 (6): 152–155.
- MARSHALL, MONTY G., AND KEITH JAGGERS. (2007) Polity IV Project: Political Regime Characteristics and Transitions, 1800–2006. Center for Systemic Peace, George Mason University.
- MINORITIES AT RISK PROJECT (MAR). (2009) *Minorities at Risk Dataset*. Center for International Development and Conflict Management, University of Maryland.
- MULLENBACH, MARK, AND GERARD P. MATTHEWS. (2008) Deciding to Intervene: An Analysis of International and Domestic Influences on United States Interventions in Intrastate Disputes. *International Interactions* 34 (1): 25–52.
- NASR, VALL. (2006) *The Shia Revival: How Conflicts within Islam Will Shape the Future*. New York: W. W. Norton.
- NATIONAL INTELLIGENCE COUNCIL. (2007) Prospects for Iraq's Stability: A Challenging Road Ahead. National Intelligence Estimate, January 29. Available at [http://www.dni.gov/press\\_releases/20070202\\_release.pdf](http://www.dni.gov/press_releases/20070202_release.pdf).
- POSEN, BARRY R. (2007) The Risks of Staying vs. Leaving Iraq. *Boston Globe*, April 19: A11.
- QUACKENBUSH, STEPHEN L. (2006) Identifying Opportunity for Conflict: Politically Active Dyads. *Conflict Management and Peace Science* 23 (1): 37–51.
- RAMBERG, BENNETT. (2009) The Precedents for Withdrawal. *Foreign Affairs* 88 (2): 2–8.
- REGAN, PATRICK M. (1998) Choosing to Intervene: Outside Intervention in Internal Conflicts. *Journal of Politics* 60 (3): 754–779.
- REGAN, PATRICK M. (2002) Third-Party Intervention and the Duration of Intrastate Conflicts. *Journal of Conflict Resolution* 46 (1): 55–73.
- REGAN, PATRICK M., AND AYSEGUL AYDIN. (2006) Diplomacy and Other Forms of Intervention in Civil Wars. *Journal of Conflict Resolution* 50 (5): 736–756.
- RICKS, TOM. (2009) *The Gamble: General David Petraeus and the American Military Adventure in Iraq, 2006–2008*. New York, NY: Penguin.
- RUBIN, MICHAEL. (2009) Troop Drawdown Could Be Costly for Iraq. *Wall Street Journal*, June 30: A13.
- SAIDEMAN, STEPHEN M. (2001) *The Ties that Divide: Ethnic Politics, Foreign Policy, and International Conflict*. New York, NY: Columbia University Press.
- SALEHYAN, IDEAN, AND KRISTIAN SKREDE GLEDITSCH. (2006) Refugees and the Spread of Civil War. *International Organization* 60 (2): 335–366.
- SARKEES, MEREDITH R. (2000) The Correlates of War Data on War: An Update to 1997. *Conflict Management and Peace Science* 18 (1): 123–144.
- SIMMONS, BETH A., FRANK DOBBIN, AND GEOFFREY GARRETT. (2006) Introduction: The International Diffusion of Liberalism. *International Organization* 60 (4): 781–810.
- SIMON, STEVEN N. (2007) *After the Surge: The Case for U.S. Military Disengagement from Iraq*. New York, NY: Council on Foreign Relations.
- SIMON, STEVEN N. (2008) The Price of the Surge: How U.S. Strategy is Hastening Iraq's Demise. *Foreign Affairs* 87 (3): 57–76.
- SINGER, J. DAVID, STUART BREMER, AND JOHN STUCKEY. (1972) Capability Distribution, Uncertainty, and Major Power War, 1820–1965. In *Peace, War, and Numbers*, edited by Bruce Russett. Beverly Hills, CA: Sage Publications.
- STINNETT, DOUGLAS M., JAROSLAV TIR, PHILIP SCHAFER, PAUL F. DIEHL, AND CHARLES GOCHMAN. (2002) The Correlates of War Project Direct Contiguity Data, Version 3. *Conflict Management and Peace Science* 19 (2): 58–66.
- TAKEYH, RAY, JOHN PODESTA, AND LAWRENCE J. KORB. (2008) A War We Must End. *Washington Post*, February 26: A17.
- UNITED NATIONAL HIGH COMMISSIONER FOR REFUGEES (UNHCR). (2000) *The State of the World's Refugees: Fifty Years of Humanitarian Action*. New York: Oxford University Press.
- WEIDMANN, NILS B., JAN KETIL ROD, AND LARS-ERIK CEDERMAN. (2010) Representing Ethnic Groups in Space: A New Dataset. *Journal of Peace Research* 47 (4): 491–499.
- WERNER, SUZANNE. (2000) Detering Intervention: The Stakes of War and Third-Party Involvement. *American Journal of Political Science* 44 (4): 720–732.