

Civil War Intervention and the Problem of Iraq

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 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.ⁱ 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 withdrawing US forces and leaving Iraq to its fate militarily. Withdrawal

opponents 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). Withdrawal proponents 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; Gause 2008; Korb et al 2008; Simon 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 rapid withdrawal argue that it risks reigniting the war and reviving the danger of intervention and regionalization (for example, Boot 2008a; Cordesman 2009; Ricks 2009; Rubin 2009). Proponents of rapid withdrawal sometimes argue that it can be accomplished without a return to violence, but also that the risk of intervention and regionalization are overblown and that US interests in Iraq are thus too limited to warrant the sacrifice associated with a longer presence (e.g., 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 important, 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; Boot 2008b; Cordesman 2009); withdrawal optimists believe that the relative military weakness of Iraq's neighbors will preclude intervention (Posen 2007; Simon 2007; Gause 2008; Lynch 2008; Simon 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 ethnosectarian identity or former colonial relationships, and geopolitical variables, such as military capability or alliances, separately in studies using different datasets 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 literature 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, multistate 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 twostage 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 five to 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 dataset 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; Werner 2000; Regan 2002; 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; Centinyan 2002; Carment and James 2004; 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.ⁱⁱ

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, Podesta, and Korb 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). The 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 (1996-97), 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; Boot 2008b; 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; Gause 2008; Korb et al 2008; Lynch 2008; Simon 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, Podesta, and Korb (2008) argue that the Persian Gulf and the larger Middle East have a political culture 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 coethnics 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 dataset 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 coexist 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."ⁱⁱⁱ If a state sends troops to participate in a multilateral peacekeeping mission, we do not count this as an intervention.^{iv}

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. Including them here in our definition of intervention would only limit the utility of our study for the ongoing policy debate.

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 Regan (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.^v 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.^{vi} 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 (e.g., 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 dummy variable coded as 1 if the rebel group and the potential intervener are 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 country but the potential intervener are 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 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.^{vii} 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, Bremer, and Stuckey 1972).^{viii}
- *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 them against figures from Clodfelter (2002), Correlates of War (Sarkees 2002), 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 two, we replaced them with the figure given in PRIO.^{ix}

- *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 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, Podesta, and Korb 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 et al. 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

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.^x

Analysis

Table 1 presents statistical findings for a probit analysis on our all-dyad-year data for our binary intervention/no intervention dependent variable.^{xi} 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 1, showing changes in estimated net intervention probabilities as key variables' values are altered around their means. The results suggest several key findings.^{xii}

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 to intervene militarily. This supports the

argument among Iraq withdrawal pessimists 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 dataset and presumably clouds the causal role of regime type.^{xiii} 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 et al 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.^{xiv}

[Table 1 about here]

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 Effron's R^2 when comparing Model I with Model III.^{xv} And omitted variable bias, while generally modest, can sometimes affect coefficients in problematic 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%.

[Table 2 about here]

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 along 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 U.S.S.R. 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, accomodationalist 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.^{xvi} 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 five, 10, and 15 years of reignited civil warfare, yielding a single replication of the simulation. We then repeated this process for a total of one 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 replications in which the given number of interventions was observed).

[Table 3 about here]

The results suggest that the probability of intervention by at least one neighbor becomes extremely high after even five years of renewed warfare, with a 64% estimated probability of at least one intervention, and a 23% probability of more than one.^{xvii} 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 ten years, and 41% if the war continues for 15 years.^{xviii}

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.^{xix} The simulation also enables an examination of the identity of prospective interveners and 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 five, 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.^{xx} 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.

[Table 4 about here]

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 five 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 insurgency, 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 less than five 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. 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 the 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 interventionprone 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 Pollack 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.

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Rebel link State link PI is Former Colonizer Joint Democracy Identity War CWS Power Share Power Mismatch Alliance Violence PI in Civil War PI in Intl. War Cold War African Middle Eastern	0.4664^{**} (0.225) -0.9752 (0.599) 1.1088^{***} (0.214) -0.1959 (0.269) -0.0646 (0.104) 0.2307^{***} (0.028) -0.4586^{**} (0.218) 0.1705 (0.151) 0.0816^{***} (0.025) -0.2629^{**} (0.122)	$\begin{array}{c} 0.7234^{***}\\ (0.199)\\ -0.5326\\ (0.484)\\ 1.1509^{***}\\ (0.210)\\ -0.3549\\ (0.258)\\ -0.1122\\ (0.093) \end{array}$	0.2385*** (0.024) -0.5718*** (0.201) 0.0992 (0.136) 0.0701*** (0.024) -0.2400**
PI is Former Colonizer Joint Democracy Identity War CWS Power Share Power Mismatch Alliance Violence PI in Civil War PI in Intl. War Cold War African	-0.9752 (0.599) 1.1088*** (0.214) -0.1959 (0.269) -0.0646 (0.104) 0.2307*** (0.028) -0.4586** (0.218) 0.1705 (0.151) 0.0816*** (0.025) -0.2629**	-0.5326 (0.484) 1.1509*** (0.210) -0.3549 (0.258) -0.1122	$\begin{array}{c} (0.024) \\ -0.5718^{***} \\ (0.201) \\ 0.0992 \\ (0.136) \\ 0.0701^{***} \\ (0.024) \end{array}$
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Identity War CWS Power Share Power Mismatch Alliance Violence PI in Civil War PI in Intl. War Cold War African	-0.1959 (0.269) -0.0646 (0.104) 0.2307*** (0.028) -0.4586** (0.218) 0.1705 (0.151) 0.0816*** (0.025) -0.2629**	-0.3549 (0.258) -0.1122	$\begin{array}{c} (0.024) \\ -0.5718^{***} \\ (0.201) \\ 0.0992 \\ (0.136) \\ 0.0701^{***} \\ (0.024) \end{array}$
Identity War CWS Power Share Power Mismatch Alliance Violence PI in Civil War PI in Intl. War Cold War African	(0.269) -0.0646 (0.104) 0.2307*** (0.028) -0.4586** (0.218) 0.1705 (0.151) 0.0816*** (0.025) -0.2629**	(0.258) -0.1122	$\begin{array}{c} (0.024) \\ -0.5718^{***} \\ (0.201) \\ 0.0992 \\ (0.136) \\ 0.0701^{***} \\ (0.024) \end{array}$
Identity War CWS Power Share Power Mismatch Alliance Violence PI in Civil War PI in Intl. War Cold War African	-0.0646 (0.104) 0.2307*** (0.028) -0.4586** (0.218) 0.1705 (0.151) 0.0816*** (0.025) -0.2629**	-0.1122	$\begin{array}{c} (0.024) \\ -0.5718^{***} \\ (0.201) \\ 0.0992 \\ (0.136) \\ 0.0701^{***} \\ (0.024) \end{array}$
CWS Power Share Power Mismatch Alliance Violence PI in Civil War PI in Intl. War Cold War African	-0.0646 (0.104) 0.2307*** (0.028) -0.4586** (0.218) 0.1705 (0.151) 0.0816*** (0.025) -0.2629**	-0.1122	$\begin{array}{c} (0.024) \\ -0.5718^{***} \\ (0.201) \\ 0.0992 \\ (0.136) \\ 0.0701^{***} \\ (0.024) \end{array}$
CWS Power Share Power Mismatch Alliance Violence PI in Civil War PI in Intl. War Cold War African	0.2307*** (0.028) -0.4586** (0.218) 0.1705 (0.151) 0.0816*** (0.025) -0.2629**		$\begin{array}{c} (0.024) \\ -0.5718^{***} \\ (0.201) \\ 0.0992 \\ (0.136) \\ 0.0701^{***} \\ (0.024) \end{array}$
Power Mismatch Alliance Violence PI in Civil War PI in Intl. War Cold War African	0.2307*** (0.028) -0.4586** (0.218) 0.1705 (0.151) 0.0816*** (0.025) -0.2629**		$\begin{array}{c} (0.024) \\ -0.5718^{***} \\ (0.201) \\ 0.0992 \\ (0.136) \\ 0.0701^{***} \\ (0.024) \end{array}$
Alliance Violence PI in Civil War PI in Intl. War Cold War African	-0.4586** (0.218) 0.1705 (0.151) 0.0816*** (0.025) -0.2629**		-0.5718*** (0.201) 0.0992 (0.136) 0.0701*** (0.024)
Alliance Violence PI in Civil War PI in Intl. War Cold War African	-0.4586** (0.218) 0.1705 (0.151) 0.0816*** (0.025) -0.2629**		-0.5718*** (0.201) 0.0992 (0.136) 0.0701*** (0.024)
Alliance Violence PI in Civil War PI in Intl. War Cold War African	0.1705 (0.151) 0.0816*** (0.025) -0.2629**		$\begin{array}{c}(0.201)\\0.0992\\(0.136)\\0.0701^{***}\\(0.024)\end{array}$
Violence PI in Civil War PI in Intl. War Cold War African	0.1705 (0.151) 0.0816*** (0.025) -0.2629**		0.0992 (0.136) 0.0701*** (0.024)
PI in Civil War PI in Intl. War Cold War African	0.0816*** (0.025) -0.2629**		0.0701*** (0.024)
PI in Civil War PI in Intl. War Cold War African	0.0816*** (0.025) -0.2629**		0.0701*** (0.024)
PI in Civil War PI in Intl. War Cold War African	(0.025) -0.2629**		(0.024)
PI in Intl. War Cold War African	-0.2629**		
PI in Intl. War Cold War African			0.2.00
Cold War African	11/ 1441		(0.109)
Cold War African	0.4762***		0.5582***
African	(0.143)		(0.116)
African	0.2678***	0.2097**	0.2674***
	(0.097)	(0.097)	(0.087)
	0.4029***	0.4674***	0.3567***
Middle Eastern	(0.121)	(0.105)	(0.106)
	0.0554	0.1548	0.0036
	(0.184)	(0.160)	(0.161)
Refugees	0.0170	0.0183	0.0219
iteragees	(0.014)	(0.014)	(0.013)
Land Border	1.4917***	1.3220***	1.4509***
	(0.128)	(0.107)	(0.126)
Previous intervention	0.2696**	0.2024	0.2105*
r revious intervention	(0.133)	(0.124)	(0.115)
Multiple previous	0.0351	0.1140	0.0521
interventions	(0.147)	(0.144)	(0.134)
	(0.147)	(0.144)	(0.134)
Constant	-4.7628***	-3.9283***	-4.6208***
Constant	(0.218)	(0.132)	(0.190)
	124,514	N=128,153	N=161,563

TABLE 1. Determinants of Civil War Intervention

Wald X^2	Wald X^2	Wald X^2
(18)=312.16	(12)=279.48	(13)=374.19
Pr >X ² =0.000	Pr >X ² =0.000	Pr >X ² =0.000
MZ'sR ² =0.290	MZ'sR ² =0.138	MZ'sR ² =0.271
McF'sAdj	McF'sAdj	McF's Adj
P ² =0.220	P ² =0.260	P ² =0.208
$R^2 = 0.329$	$R^2 = 0.269$	

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

Covariates	Min	Predicted p at min	Max	Predicted p at max
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 ^{xxii}	-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

TABLE 2. Model 1 Effects on the Predicted Probability of Intervention^{xxi}

Within	0 states	>0 states	>1 state	>2 states	>3 states
5 yrs	0.36	0.64	0.23	0.04	0.00
10 yrs	0.12	0.88	0.55	0.20	0.04
15 yrs	0.04	0.96	0.77	0.41	0.12

TABLE 3. Net Probability of Intervention

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

 TABLE 4. Country-Specific Results (cumulative probability of intervention for each state)

¹ 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.

ⁱⁱ 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 v for an additional comment on how Forsberg's data differ from those in this paper.

ⁱⁱⁱ 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.

^{iv} 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.

^v Several new data sets 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 data (2010) 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 (p. 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.

^{vi} Sources include Clodfelter 2002, "Minority Group Assessments" from MAR 2009, Library of Congress country studies, Encyclopedia Britannica, and individual sources particular to each conflict.

^{vii} On the first claim, see Levy (1988) and Bueno de Mesquita and Siverson (1995).

^{viii} 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.

^{ix} 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.

^x 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).

^{xi} 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 *xv* 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.

^{xii} 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 data sets 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 a 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 data set (5,320 versus 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 .05 level across all three units of observation. On the whole, the results show remarkable robustness across three very different data structures.

^{xiii} 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.

^{xiv} 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.

^{xv} There is no consensus on a single best measure of fit quality for probit. 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 to 0.271) for McKelvey and Zavoina's R^2 in Model III to 58% (0.052 to 0.022) for Efron's R^2 in Model II.

^{xvi} 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 five years of warfare remains at .04; it changes from 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 one percentage 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.

^{xvii} 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.

^{xviii} The average (standard deviation) number of interveners across the one million simulations runs is: 0.92 (0.85) within five years; 1.67 (1.02) within 10 years; and 2.27 (1.05) within 15 years.

xix 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 five 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 data set 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.

^{xx} 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.

^{xxi} 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=0.1 or better are presented.

^{xxii} Violence has a negative minimum value, because the variable is on a logarithmic scale.