DOES PEACEKEEPING KEEP PEACE AFTER CIVIL WAR? AND IF SO, HOW?

Page Fortna

Dept. of Political Science
Institute of War and Peace Studies
Columbia University

Visiting Scholar
American Academy of Arts and Sciences

fortna@columbia.edu

Draft: October 21, 2002

Prepared for presentation at the
Pacific Northwest Colloquium in International Security
University of Washington, Seattle
November 1, 2002

This project was made possible by a grant from the Carnegie Corporation,
for which the author is extremely grateful

Abstract:

This paper examines international interventions in the aftermath of civil wars to see whether peace lasts longer when peacekeepers are present than when they are absent. Because peacekeeping is not applied to cases at random, I first address the question of where international personnel tend to be deployed. I then attempt to control for factors that might affect both the likelihood of peacekeepers being sent and the ease or difficulty of maintaining peace so as to avoid spurious findings. I find, in a nutshell, that peacekeeping after civil wars does indeed make an important contribution to the stability of peace. While they cannot be tested with the quantitative analysis presented here, the paper also develops hypotheses about the causal mechanisms by which peacekeepers contribute to lasting peace.

Does peacekeeping work? Do international interventions to help maintain peace in the aftermath of civil war actually contribute to more stable peace? Since the end of the Cold War the international community and the UN have moved beyond "traditional peacekeeping" between states and have become much more involved in civil conflicts, monitoring and often managing or administering various aspects of transitions to peace within states.

Early optimism about the potential of the UN to help settle internal conflicts after the Cold War was tempered by the initial failure of the mission in Bosnia and the scapegoating of the UN mission in Somalia. The United States in particular now seems disillusioned with peacekeeping, favoring more aggressive (and less multilateral) peace enforcement in some cases (such as Kosovo), and a minimal international response in others (Rwanda, for example). Even in Afghanistan, where vital interests are now at stake, the US is reluctant to participate in, or even to encourage others who might contribute to a widespread peacekeeping mission.

Scholars and practitioners of peacekeeping have meanwhile been engaged in debate over the merits of the new wave of more "robust" and complex forms of peacekeeping and peace enforcement developed after the Cold War, and even over the effectiveness of more traditional forms of peacekeeping.[1] However this debate is hampered by shortcomings in our knowledge about peacekeeping. In particular, the effectiveness of these interventions by the international community has not been rigorously tested. We do not have a very good idea of whether they really work. Nor do we have an adequate sense of **how** exactly peacekeeping helps to keep the peace.

Opponents of peacekeeping often point to dramatic failures that dominate news coverage of peacekeeping without acknowledging the success stories that make less exciting news. Proponents are also guilty of selection bias, however. The vast literature on peacekeeping compares cases and missions, but generally examines only cases in which the international community intervenes, not cases in which belligerents are left to their own devices.

[1] On this debate see, for example, Tharoor 1995/96; Luttwak 1999.

Surprisingly, very little work has been done to examine empirically whether peace is more likely to last in cases where peacekeepers are present than when they are absent.[2]

Moreover, the few studies that do address this empirical question, at least in passing, come to contradictory findings. In their study of peacebuilding in 124 civil wars since World War II, Doyle and Sambanis find that "multilateral United Nations peace operations make a positive difference."[3] In particular, they find strong evidence that multidimensional peacekeeping, i.e, "missions with extensive civilian functions, including economic reconstruction, institutional reform, and election oversight" significantly improve the chances of peacebuilding success. They find weaker evidence that observer missions and enforcement missions improve the chances for peace, but, surprisingly, that traditional peacekeeping has no effect on the chances for peacebuilding success.[4]

Hartzell, Hoddie, and Rothchild examine, among other things, the role of third-party enforcement on the duration of negotiated settlements to civil wars (also in the period since 1945). Their coding of third-party enforcement includes peacekeeping missions (as in Angola, El Salvador, and Mozambique, for example).[5] They find that such third-party involvement significantly and substantially increases the duration of peace.

---

[2] Case studies of peacekeeping's effect in particular missions either do not address this issue or rely, usually implicitly, on counterfactual assessments. See, for example, Dawson 1994; Doyle 1995; Holiday and Stanley 1992. For a good example of comparative work on when peacekeeping is successful and when it is not that takes peacekeeping missions as the universe of cases, see Howard 2001. See also Durch 1996; and Hampson 1996.

[3] Doyle and Sambanis 2000, p. 779.

[4] Doyle and Sambanis 2000, p. 791.

[5] They define a third-party enforcer as "an outside power that sends troops to separate or protect civil war antagonists from one another or at least promises to do so if the security situation calls for such action." Hartzell, Hoddie, and Rothchild 2001, p. 205. This finding is consistent with a related study not of the durability of peace but of war termination and the implementation of peace agreements: Walter 2001 argues that third party security guarantees are critical to overcoming the commitment problems inherent in peace processes after civil wars.

However, in a study using Doyle and Sambanis' data set but more sophisticated statistical techniques, Amitabh Dubey finds, inter alia, that third-party peacekeeping interventions, including that by the UN, have no significant effect on the duration of peace.[6] In sum, of the three studies that examine whether peace lasts longer when peacekeepers are present than when they are absent, one finds that it does, one that it does not, and one finds that only some kinds of peacekeeping are effective.[7] From the existing studies, it is not at all clear whether peacekeeping works. A closer look is clearly needed.

The literature on peacekeeping is also surprisingly underdeveloped theoretically. Causal arguments about peacekeeping are therefore often misinformed. The conventional wisdom is that peacekeeping works only "when there is peace to keep" and depends crucially on the "political will" of the belligerents. These phrases have become almost clichés in the peacekeeping literature. If this wisdom is true, however, it is not clear what peacekeepers do, causally, to enhance the prospects for peace. Opponents of intervention might argue that peacekeeping then only "works" in cases where peace would last in any case. Where there is already peace and the belligerents support it whole-heartedly, war is unlikely to resume whether peacekeepers are present or not. Peacekeeping, according to this argument, is therefore unnecessary. Proponents simply list the functions of peacekeeping (monitoring, interposition, electoral oversight etc.), describing its practices with little discussion of how exactly the presence of unarmed or lightly armed international personnel, there with the consent of the parties, might influence the prospects for peace.[8] Little theoretical work has been done to

[6] Dubey 2002.

[7] In a study of UN intervention and the recurrence of interstate crises, Diehl, Reifschneider, and Hensel 1996 find that the UN has had "no effect on the occurrence, timing, or severity of future conflict." p. 697. On the other hand, Fortna Forthcoming, 2003 finds that peacekeeping has helped keep peace after interstate wars (see Chapter 6).

[8] The principles of defensive use of force and consent, along with the principle of impartiality are the traditional "golden rules" defining peacekeeping. In the analysis below I examine both consent-based peacekeeping and enforcement missions.

specify what peacekeepers do to help belligerents maintain a cease-fire once one is in place. Perhaps more important, little has been done to specify how peacekeepers might be able to affect the incentives faced by belligerents so as to shape "political will."[9]

This paper examines peacekeeping in the aftermath of civil wars. I test the hypothesis that peacekeeping contributes to more durable peace, and the null hypothesis that it does not make peace significantly more likely to last. I look at both UN peacekeeping and peacekeeping by other organizations or ad hoc groups of states, and explore the effects of different types of peacekeeping: observer missions, traditional peacekeeping, multidimensional peacekeeping (all of which are based on the consent of the belligerents themselves), and peace enforcement (which is not). The former are authorized under Chapter VI of the UN Charter, the latter under Chapter VII.

This paper surveys civil conflicts in the period since World War II, but it focuses in particular on peacekeeping since the end of the Cold War. The role played by outsiders in civil wars changed drastically with the end of the Cold War. Between 1946 and 1988, the international community was generally not in the business of keeping peace between belligerents within states. The UN occasionally intervened in civil wars during this time period (in the Congo, Lebanon, and Cyprus), but these missions were intended in large part to contain civil conflicts that might otherwise draw in the great powers and/or to assist decolonization, not necessarily to keep peace between civil war belligerents themselves.[10]

---

[9] On the disconnect between peacekeeping practice and theory, see Ryan 1998 and Fetherston 1994. See also the classic work by Rikhye 1984.

[10] The data used here also code for UN peacekeeping after the partition of India and Pakistan, though because partition took place, this was peacekeeping between sovereign states. A few peacekeeping missions by organizations other than the UN were deployed in internal conflicts during the Cold War: the Organization of African Unity in Chad, the Organization of African States in the Dominican Republic, and the British Commonwealth in Zimbabwe. In an interesting foreshadowing of the administrative tasks the UN would later take on in Cambodia, Kosovo, and East Timor, the UN Temporary Executive Authority was set up in West New Guinea in 1962-63 as the territory transferred from Dutch to Indonesian control. (On this mission, see Durch 1993, Chapter 17.) But again, this was more about avoiding interstate conflict than about keeping civil peace.

Starting with the peacekeeping mission in Namibia in 1989, however, the international community has attempted peacekeeping in many more civil wars. The practice of peacekeeping has changed accordingly, now generally involving much more extensive civilian components: electoral observation, police monitoring and training, and civilian administration. Since the Cold War, the primary purpose of peacekeeping has been to prevent the resumption of civil conflict. It is therefore likely that the relationship between peacekeeping and the duration of peace changed with the end of the Cold War.[11]

The final section of the paper begins to explore the causal mechanisms by which peacekeeping might contribute to lasting peace. The quantitative research presented here is not well suited to answering this question, but I spell out hypotheses about how peacekeeping might make renewed warfare less likely. These hypotheses will be tested in the qualitative portion of the project of which this paper is a part.

A First Glance, and Why a Second is Needed

As noted above, to know whether peacekeeping makes a difference we need to look at the aftermath of all civil wars, not just those in which peacekeepers were deployed. From such a look it is not at all self-evident that peacekeeping works. A first glance at civil wars and peacekeeping does not bode well for judgments about the effectiveness of the international community's attempts to maintain peace. Table 1 shows the relationship between peacekeeping and whether war resumes.[12] The relationship is broken down in four ways: for all peacekeeping

[11] Note that my reason for differentiating between the Cold War and the years since is not that I think civil wars have changed drastically. I agree with Kalyvas 2001 that recent internal conflicts are not fundamentally different (more brutal or irrational, more driven by greed than grievance, etc) than older civil wars. It is peacekeeping that has changed with respect to civil wars, not the wars themselves. For one take on the shift in peacekeeping's aim after the Cold War see Last 1997, p.24.

[12] See below for a description of the data used in Table 1.

(top half), and for UN peacekeeping only (bottom); for the whole post-World War II period (left half) and only for the post-Cold War period (right).

[Table 1 about here]

Peacekeeping appears to make very little difference. Of the civil wars since 1944, there is another round of fighting between the same parties in about 42% when no peacekeepers were deployed, and in approximately 39% of those with peacekeeping. The numbers are even worse for UN peacekeeping, with peace slightly **more** likely to fail when UN peacekeepers are present than when they are absent. After the Cold War, the record of peacekeeping is slightly better, but in none of these cross tabulations is the difference between peacekeeping and no peacekeeping statistically significant. A breakdown by type of peacekeeping (Table 2) suggests that observer missions and multidimensional peacekeeping may reduce the likelihood of another war, but that traditional peacekeeping and enforcement missions do not.

[Table 2 about here]

But looks, especially first glances, can be deceiving. To begin with, these tables treat peace that falls apart many years down the line the same as peace that fails in a matter of months. The resumption of war in Rwanda in 1990 after 26 years of peace is considered just as much a failure as the renewed fighting in Rwanda in 1994 after less than a year of peace. This quick glance also does not take into account the fact that our data are "censored." We know whether peace has lasted to date, but we do not know if it will continue to last in the future. Peace is holding for the time-being in Cambodia, for example, and in Northern Ireland, but these conflicts may yet flare up anew.[13] Both of these problems can be dealt with using duration models, such as those employed in the analysis below.

[13] This problem is highlighted by cases in the Doyle & Sambanis data set in which peace failed after the data set was compiled, such as in Israel/Palestine and Sierra Leone. I have recoded these accordingly, but there is no guarantee that other cases will not fail in coming months or years.

However, the most important problem with the quick glance provided in Tables 1 and 2 is that peacekeeping is not applied to cases of civil war at random. If peacekeepers tend to deploy only to relatively easy cases, where peace is quite likely to last in any case, then looking just at whether peacekeepers were present and the duration of peace will lead us to overestimate any positive effect on peace. When analysts of peacekeeping argue that the international community should only deploy "when there is peace to keep" and when the parties exhibit "political will" for peace, they may help the UN and the international community to avoid embarrassing failures, but if pushed too far, this policy will also ensure the irrelevance of peacekeeping. On the other hand, if as is quite plausible, peacekeepers tend to be sent where they are most needed, when peace would otherwise be difficult to keep, this first glance at the cases will underestimate the effectiveness of peacekeeping.

Either way, to reach accurate assessments of the international community's effectiveness at maintaining peace, we need to know something about the "degree of difficulty" of the various cases.[14] And we need to know in what sorts of conflicts peacekeepers are likely to be dispatched. There have been a handful of studies examining the former question, and one (to my knowledge) on the second question.

What makes peace more or less likely to endure after civil wars? Peace is thought to be harder to maintain when war ends in a stalemate or compromise settlement than if one side achieves a military victory.[15] On the other hand, peace that is ushered in with a formal peace settlement may be more stable than an informal truce.

Many have argued that identity conflicts are particularly intractable.[16] Peace might therefore be harder to keep in conflicts that pit different ethnic or religious groups against each

[14] One of the early attempts to put the study of peacekeeping in the context of relative degrees of difficulty is Blechman et al. 1997.

[15] Both Licklider 1995 and Dubey 2002 found this to be true of civil wars. It also holds for interstate wars. Fortna Forthcoming, 2003.

[16] See, for example, Mearsheimer and Pape 1993; Kaufmann 1996.

other as compared to wars fought over ideology. There is conflicting evidence on this count. Both Licklider and Doyle & Sambanis found identity wars to be more likely to resume than others, but Hartzell et. al. and Dubey found no significant difference.[17] There is some evidence that the cost of war affects the durability of peace. Civil wars with higher death tolls have been found to be more likely to resume than less deadly conflicts.[18] On the other hand, longer wars may be followed by more stable peace.[19]

Complicated wars involving many factions have been found to be harder to solve in a lasting way than wars with only two sides. And peace is harder to maintain in countries where a high level of economic dependence on natural resources means that there are easily "lootable" goods (diamonds or oil, for example) that can drive continued conflict.[20] The level of democracy in the country may also affect the durability of peace.[21]

Michael Gilligan and Stephen Stedman have examined where and when the United Nations tends to intervene. Their focus is on intervention during conflict, and on how quickly

---

[17] Licklider 1995; Doyle and Sambanis 2000; Hartzell, Hoddie, and Rothchild 2001; Dubey 2002. On a related issue, Walter 2001 found that ethnic conflicts are no less likely to end in negotiated settlement (as opposed to being fought to the finish) than are other types of conflict. There does not appear to be a relationship between the ethnic heterogeneity of the country and the difficulty of maintaining peace. Doyle and Sambanis 2000; Dubey 2002.

[18] Doyle and Sambanis 2000; Dubey 2002. Interestingly, however, the relationship is the opposite in interstate wars, where higher deaths tolls are associated with more stable peace, all else equal. Fortna Forthcoming, 2003.

[19] Hartzell, Hoddie, and Rothchild 2001 found the duration of war to be positively correlated with the duration of peace after negotiated settlements, but Doyle and Sambanis 2000 found only weak support for this hypothesis, and Dubey 2002 found no significant relationship.

[20] Doyle and Sambanis 2000; Dubey 2002. On the role of both greed and grievance in civil wars see Collier and Hoeffler 2000 and Collier and Hoeffler 2002. Fearon and Laitin [cite APSA 2001 paper] argue that while access to financial resources may affect the likelihood of war, measures of primary commodity exports do not capture this effect well because some commodities are much harder to loot than others (agricultural products as opposed to diamonds, for example).

[21] Hartzell, Hoddie, and Rothchild 2001. Dubey 2002 focuses on institutionalized constraints on the executive branch after the war, finding they help enhance stability.

the international community responds to civil wars, but their study provides some insight into the selection issue of interest here. Most relevant for our purposes, they find that "one of the best predictors of UN intervention is the number of deaths in a conflict," and strong evidence that the UN is less likely to intervene in countries with large government armies (i.e. militarily strong states). They find no clear evidence that the UN is more likely to intervene when a treaty has been signed, though they attribute this non-finding in part to problems of multicolinearity. They find that democracy, the war aims of the rebels (i.e. whether the war was secessionist), primary commodity exports, and whether the country is a former colony of a permanent member of the UN Security Council make no difference to the likelihood of UN intervention.[22]

Their findings that peacekeepers are more likely after very deadly conflicts (which are more prone to recurrent warfare), but not in strong states (which may be at less risk) suggests, not surprisingly, that the selection process for peacekeeping and its relation to the ease or difficulty of the case, is fairly complicated. In the empirical analysis below, I examine first where peacekeepers are most likely to be deployed, with a focus on factors that are also likely to affect the stability of peace. Second, I examine the effects of peacekeeping on the durability of peace, controlling as much as possible for factors that might affect the "degree of difficulty" of the case.

The Data

This paper examines a data set consisting of 115 spells of peace (some of which are ongoing) in or after civil wars. The cases are listed in Appendix A. The data are adapted from the data set put together by Michael Doyle and Nicholas Sambanis (D&S for short).[23] Their data

[22] They also find that the UN is more likely to respond quickly in Europe than in Africa, but more quickly in Africa than in Asia, and that the likelihood (or more precisely the hazard rate) of intervention increases as the war drags on. Gilligan and Stedman 2001.

[23] Doyle and Sambanis 2000. The D&S data and data set notes are available at: www.worldbank.org/research/conflict/papers/peacebuilding/index.htm. There are now a number of lists and data sets of civil wars available. I use theirs in part because they draw on many of

cover civil wars that started after 1944 and ended, at least temporarily, before 1997. They define a civil war as an armed conflict that caused more than 1,000 battle deaths (total, rather than in a single year as in the Correlates of War definition); that represented a challenge to the sovereignty of an internationally recognized state; and occurred within the recognized boundary of that state; that involved the state as one of the principal combatants; and in which the rebels were able to mount an organized military opposition to the state and to inflict significant casualties on the state.

Ideally, to test the effects of peacekeeping on maintaining peace, we would want information on every cease-fire in every civil war. Unfortunately, given the messy nature of most civil wars and, frequently, their stop-and-start nature, a comprehensive accounting of cease-fires does not exist. One of the benefits of using Doyle and Sambanis' data is that they attempted to code significant peacebuilding attempts, even if those attempts did not ultimately succeed in ending the war. In a few cases, I have also added observations (e.g. in Rwanda and Angola) for cease-fires missed in their list. However, the data used here undoubtedly omit a number of short-lived cease-fires. Because we are more likely to notice (and there is more likely to be information on) such ill-fated cease-fires when peacekeepers are present, this omission should tend to bias our findings away from the conclusion that peacekeeping works. That is, the data more likely omit failures of peace without peacekeeping than with it, so that if we had more comprehensive data we would find the stabilizing effects of peacekeeping to be greater.

The *duration of peace*, the main dependent variable of interest, is the time between the termination of fighting and the start of another war, if any, between the same parties.[24] If no war

---

these to compile their own. This data set was converted to a time-varying data set by Amitabh Dubey, whom I would like to thank for generously sharing his work, as well as for his consultation about numerous cases and coding decisions. I have followed both Dubey 2002 and Gilligan and Stedman 2001 in adapting the data some what. See appendix B for coding changes.

[24] Cease-fire dates and the dates of renewed warfare were coded by Amitabh Dubey based on entries in *Keesing's Record of World Events*..

has resumed, the duration of peace is considered censored on December 31, 1999. Of the 115 cases, 47, or just over 40% "fail" with the eruption of another war.

Peacekeeping is both a dependent variable (for the first part of my analysis), and an independent variable (for the second part). It is coded using both dummy variables (any vs. none) and by category of peacekeeping mission (none, observer, traditional peacekeeping, multidimensional peacekeeping, peace enforcement). Separate variables capture UN missions only, non-UN missions only, and both combined.[25] Peacekeeping is coded both as a time-constant and a time-varying covariate. The former notes the most extensive type of peacekeeping deployed for the case, while the latter records changes in mission type over time, or the termination of the mission. So, for example, in the time-varying version, Cambodia is coded as having a traditional peacekeeping mission at first, then a multidimensional peacekeeping mission starting in March 1992, and as having no peacekeeping after the withdrawal of UNTAC in September 1993. In the time-constant version, Cambodia is coded as having a multidimensional mission. When peacekeeping is analyzed as a dependent variable, I use the time-constant version. To judge the effects of peacekeeping, I use both versions (see below).[26]

In the 115 civil wars examined here, international personnel were sent to keep the peace after 41 (7 during the Cold War, and 34 since 1989). The UN sent missions in 30 cases (all but 5 after the Cold War), and states or organizations other than the UN sent missions in 23 cases (all but 2 since 1989).[27]

---

[25] In cases that saw both a UN and non-UN mission, the "all peacekeeping" variables denote the higher category mission. For example, in Central Africa there was a traditional peacekeeping mission of African troops, and the UN deployed a multidimensional mission, so the coding for the latter is used.

[26] Data are from D&S, with the time-varying version adapted by Dubey. See appendix B for some changes to the D&S codings.

[27] Twelve cases had both a UN and a non-UN mission.

Dummy variables based on D&S's coding of the war's outcome capture whether the fighting ended with a victory by one side (*victory*), or whether a peace treaty was signed (*treaty*). Inclusion of these two variables allow us to see differences between these categories and wars that end with an informal truce or cease-fire.[28] A further dummy variable (*wartype*) distinguishes ethnic, religious, and identity conflicts from ideological, revolutionary or other wars. The cost of the war (*logdead*) is measured using the natural log of the number of people killed (both battle deaths and civilian deaths). The duration of the war (*wardur*) is measured in months. A dummy variable (*faction*) marks whether the war involved more than two factions. The level of development of the country is coded with a proxy based on per capita electricity consumption (*develop*), and "lootables" or natural resource dependence is measured using primary commodity exports as a percent of GDP (*exp*). Prior history of democracy is measured using the average Polity score over the five years before the war (*gurrlag5*), and the size of the government's army is recorded (*garm*).[29]

Where Do Peacekeepers Get Sent?

Table 3 shows the results of logistic regressions in which the dependent variable is whether any peacekeeping mission (observer, traditional, multidimensional, or enforcement) was deployed after a civil war. The first column presents the results for the entire period 1947-1999. Columns two, three, and four show the results in the post-Cold War period (1989-1999) for all

[28] As in most quantitative studies of civil war, D&S do not distinguish between the military outcome (victory vs. stalemate) and the political outcome (settlement vs. none). This would be problematic for interstate wars, in which it is possible to have both a victory by one side and a settlement (e.g. after the Yom Kippur War), but is probably less so for civil wars. More problematic is the lack of distinction between the formality of an agreement, if there was one, and whether it was a cease-fire or a political settlement. That is, should a formally signed cease-fire be treated as an "informal truce" or a "peace treaty"? D&S appear to include such cases in their "informal truce" category.

[29] All of these data are from D&S.

peacekeeping, UN peacekeeping, and non-UN peacekeeping, respectively.[30] Because the determinants of peacekeeping might be very different for different types of missions, Table 4 shows the results of a multinomial logistic regression for a trichotomous variable distinguishing consent-based peacekeeping and enforcement missions from cases of no peacekeeping.[31] In both tables, negative coefficients indicate factors that make peacekeeping less likely, positive coefficients indicate variables that are associated with peacekeeping deployments.[32]

[Tables 3 and 4 about here]

Not surprisingly, wars that end with a victory by either the government or the rebels are very unlikely to see UN peacekeepers deployed. In fact, there are no multidimensional peacekeeping missions in cases of victory by one side, and other forms of peacekeeping are rare in such cases. (The exceptions are Congo in 1965, Haiti and Rwanda in 1994.) However, as the fourth column of Table 3 shows, this relationship does not hold for non-UN peacekeeping (which is, if anything more likely after a clear victory).[33] Nor is the relationship statistically

[30] Breaking down the 1947-1999 period by UN vs non-UN peacekeeping adds very little information as there were only 5 cases of the former and 2 of the latter before 1989.

[31] The three types of consent-based peacekeeping may also have different determinants. Unfortunately we do not have enough data to perform multinomial regression for all of the categories separately. I examined each mission type on its own by running 4 separate logistic regressions (results not shown). This method is imperfect as it lumps no peacekeeping in with other types of peacekeeping as the comparison category (that is, it can tell us whether a variable makes traditional peacekeeping more or less likely than any other outcome – either no peacekeeping or enforcement or observer or multidimensional peacekeeping, but not whether it makes traditional missions more likely than no peacekeeping, say, but less likely than enforcement operations). In general, the three types of consent-based missions had similar results. When there are important differences, I note these in the discussion that follows.

[32] Robust standard errors are calculated assuming that observations between countries are independent but that observations within countries (and within the former Soviet Union) are not necessarily independent of each other.

[33] Non-UN missions were deployed after victories by the rebels in Iraq (Kurds) in 1991, in Chad, Haiti, and Rwanda in 1994, and by the government in Yemen in 1994. (1994 was apparently a big year for such interventions). Note that in some cases the D&S coding of victory is largely due to the effects of this intervention, as in Iraq, so that the direction of the causal arrow is unclear.

significant for enforcement missions (there is substantial overlap here, almost half of the non-UN missions are enforcement missions). But as Table 4 makes clear, consent-based peacekeeping is much more likely after wars that end in a stalemate rather than a decisive victory for one side over the other. These stalemated cases are likely to be difficult cases in which to keep peace.

More surprising are the results for the treaty variable. If peacekeepers deployed where there was "peace to keep" or where the combatants had signaled their "political will" for peace by signing a treaty, we would expect this variable to have a positive effect, especially on consent-based missions. While there are no strong relationships in Table 3, Table 4 shows quite clearly that this is not the case. In fact Chapter VI peacekeeping is less likely when a formal peace treaty has been reached. Because of the way D&S code these variables, both the victory and treaty dummy variables show the difference from wars that end in an "informal truce" (the omitted category in the victory/treaty/truce trichotomy). So while peacekeepers were deployed in over 60% of the cases that ended with a treaty, as compared to 11% of those that ended with a victory, they were sent to over 78% of those that ended in a truce. The negative relationship between treaties and peacekeeping (in cases with no clear victor) is not robust when we separate UN from non-UN peacekeeping, and is less true for multidimensional peacekeeping (when examined on its own), but we can confidently reject the hypothesis that peacekeepers are **more** likely to intervene when a formal treaty has been signed.[34]

There is no statistically significant relationship between peacekeeping and identity conflicts.[35] Nor is there strong evidence that the cost of war is related to the probability of

[34] Note that my interpretation differs from the argument of Gilligan and Stedman 2001 that the lack of robust findings of a positive relationship between treaties and peacekeeping is due to multicolinearity in the data. Because they do not control for whether the war ends in victory, their treaty coefficient is picking up the UN's proclivity to go where conflicts end with a treaty rather than either a truce or a victory.

[35] When examined in separate logistic regressions, observer missions appear to be less likely in wars between groups defined by ethnicity or religion, while traditional peacekeeping forces are more likely in identity wars. Given the well-known problems of distinguishing "identity" wars from "ideological" wars (for example, which is Angola? D&S code it as an identity conflict, but during the Cold War most outside observers dubbed it an ideological conflict), I am inclined to

intervention. The coefficient for the war's death toll is only statistically significant (and only marginally so) for enforcement missions. The lack of a strong relationship stands in contrast to Gilligan and Stedman's finding, noted above, that the UN tends to intervene more quickly in the most costly civil wars.[36] And it suggests a disheartening possibility. Because Gilligan & Stedman use the total number of deaths in the war (rather than the number of deaths up to the point of intervention) as their independent variable, their finding may suggest not that the UN responds quickly to deadly wars, but rather that when the UN intervenes early in a conflict, the death toll tends to rise (this was dramatically the case, for example, in Rwanda where the genocide took place **after** UN intervention). The D&S data simply do not allow us to determine which way the causal arrows run.

The effect of the duration of war on the deployment of peacekeepers depends on the type of mission. Enforcement missions (and non-UN missions) are significantly less likely in long wars, while consent-based peacekeeping is, if anything, more likely after long conflicts.[37]

Peacekeeping seems generally more likely when there are three or more factions in the fight than in simpler two-way conflicts, particularly after the Cold War, but this is driven entirely by Chapter VII enforcement missions. In every enforcement case there were at least three parties to the conflict.[38] For consent-based forms of intervention, there is no significant relationship.

---

suspect that the difference between observer missions and traditional peacekeeping in this regard is spurious, but it is an intriguing finding, perhaps worthy of further investigation.

[36] Note that my research method differs from theirs because my concern is with where peacekeepers get sent, and what effect they have after the fighting is over, not on how long it took them to get there.

[37] When examined separately, the positive relationship is statistically significant for observer missions and multidimensional peacekeeping, but not for traditional peacekeeping.

[38] For example, there were three factions each in Georgia-Abkhazia, Sierra Leone, and in Rwanda, and five in Bosnia, all of which had enforcement missions. Logit models cannot estimate coefficients when a variable perfectly predicts the outcome, as having more than two factions does for enforcement, so this variable is not included in Table 4 (see note in table). The bivariate relationship between multiparty wars and enforcement is significant, however. The

Since 1989, the UN has been less likely to send peacekeepers to states with a high dependence on primary commodity exports. However, this finding does not apply to peacekeeping in general, which is, if anything, more likely in states with highly lootable commodities. It is possible that when intervention is required and access to primary commodities is at stake, regional powers would rather keep the peace themselves than entrust the job to the UN.[39] During the Cold War, levels of development (or at least of the electricity consumption proxy) were positively associated with the probability of peacekeeping, but this relationship drops away, becoming tiny and insignificant, after the Cold War.

Since 1989, peacekeeping has also been more likely in countries that enjoyed higher levels of democracy before the war, but the relationship is only significant for non-UN peacekeeping. Not surprisingly, this effect is strongest for multidimensional peacekeeping operations, which generally include electoral observation as one part of their mission.[40]

Peacekeepers, especially consent based missions, are much less likely to be deployed to states that have large armies. It is no surprise, of course, that peacekeepers have not been deployed to civil wars within China or Russia, but this relationship is not simply a reflection of Security Council membership. Non-Council members with relatively large armies, such as Nigeria, Mexico, India, the Philippines have all resisted peacekeeping in their own civil wars, even as they have participated in them elsewhere. The only peacekeeping in a country with a larger than average army (for those that experience civil war) is the enforcement mission in Iraq, an exception that proves the rule.[41]

---

probability of seeing such an "empty cell" in our data if no true relationship existed is less than 0.01 ($Pr(\chi^2)=0.003$).

[39] This is an admittedly post hoc explanation for the puzzling negative coefficient for UN peacekeeping in Table 3. Thanks to Amitabh Dubey for suggesting it as a possibility.

[40] Observer missions, on the other hand, are less likely in more democratic states

[41] The recent peacekeeping in Indonesia - East Timor is a notable exception not included in this data set because the war ended after the D&S data set was created.

In sum, the answer to the question where do peacekeepers get sent is quite complicated. It depends on whether we are talking about UN peacekeeping or missions by other actors, and it depends on what type of peacekeeping we are interested in. In several respects, however, consent-based peacekeepers tend to get sent to the hard cases rather than the easy ones. Peace is generally more stable after decisive victories than after wars that end in a tie, and peacekeepers are usually deployed where there was no clear winner in the war. Moreover, peacekeepers are no more likely to deploy when belligerents have signaled their will for peace in a formal treaty; just the opposite in fact. If renewed conflict is less likely in states with large armies, a hypothesis I will examine below, the fact that peacekeepers tend to shy away from militarily strong states also strengthens the conclusion that peacekeepers go where they are most needed rather than where peace is easy to keep in any case.

Does Peacekeeping Work?

To test the effects of peacekeeping on the durability of peace, I employ duration analysis (also sometimes known as hazard or survival analysis), more specifically a Cox proportional hazards model.[42] This model estimates the effects of independent variables on the risk, or "hazard" of peace failing in a particular time period, given that peace has lasted up to that time period. It can thus tell us whether the risk of renewed warfare is lower after wars that end in a victory, say, and whether the risk falls when peacekeepers are present, or rises when they depart.[43]. In the tables that follow, hazard ratios are reported, rather than coefficients that might

[42] The Cox model does not assume a particular shape for the "baseline hazard," that is whether the risk of another war goes up or down the longer peace lasts, or even that the hazard be monotonic. Estimates using a parametric model, the Weibull distribution, which can be more efficient with small samples, are not substantially different and so are not reported here.

[43] For a good introduction to duration models and their use in political science, see Box-Steffensmeier and Jones 1997.

be more familiar to readers used to linear or logistic regression. Hazard ratios are interpreted relative to one (1.0): a hazard ratio greater than one means that high values of that variable increase the risk of another war (that is, they are associated with peace that fails more quickly); hazard ratios less than one indicate variables that decrease the hazard (i.e. that are associated with more durable peace).[44]

Table 5 shows the results of this duration analysis for the entire post WWII period (1947-1999). Table 6 focuses on the era of peacekeeping activism in civil wars, the post Cold War period (1989-1999). Table 7 examines the effects of different mission types after 1989.[45] All three tables use the time-varying coding of peacekeeping.

[Table 5 about here]

Looking first at Table 5, there is some evidence that peacekeeping works in the full post-WWII period. The hazard ratios of just over 0.7 for all peacekeeping missions and only those performed by the UN (columns 1 and 2) indicate that the risk of another war drops by about 30% (e.g. from 1.0 to 0.7) when peacekeepers are present (the effect is much smaller for non-UN peacekeeping in column 3).[46] But these hazard ratios are not statistically indistinguishable from one – we cannot conclude with confidence that peacekeeping works in civil wars when we look at its entire history (since 1947).

[Table 6 about here]

But, as expected, things change in the post Cold War era. After 1989, the positive effect of peacekeeping on peace is much stronger (Table 6). *Ceteris paribus*, when the international

[44] As in the logistic regressions above, I calculate robust standard errors assuming independence between observations in different countries, but not necessarily between observations from the same country.

[45] There are not enough cases before 1989 for such a breakdown by mission type to tell us much for the earlier period.

[46] The results are the same whether separate models are run for UN and non-UN peacekeeping (as in Tables 5 and 6) or they are included together as two dummy variables in one regression.

community deploys peacekeepers the risk of another round of fighting drops by almost 70% (from 1.00 to 0.32). It is statistically unlikely (less than 5% chance) that we would see such a large effect if no true relationship between peacekeeping and peace existed. The size of the effect is a bit smaller for UN peacekeeping, which reduces the hazard of war by about half. Non-UN missions appear to have a larger effect (smaller hazard ratio) than UN missions, but because of the smaller number of such missions, our estimates are less precise. The larger standard error here means that this hazard ratio just misses the rather lax 10% mark for statistical significance ($p = .12$). We should therefore have less confidence in this result.

[Table 7 about here]

In Table 7, four dummy variables indicate the effects of different types of peacekeeping missions relative to cases with no peacekeeping (the omitted category). Over the 50 year period, consent-based peacekeeping is associated with a drop in the risk of war. Observer missions appear to have the largest effect on the durability of peace, reducing the hazard of peace failing by almost 80%.[47] Notice, however, the hazard ratio for enforcement missions, which is slightly over two. This means that the risk of war was about twice as high in the post WWII period when an enforcement mission was in place. If anything, enforcement missions are associated with unstable peace, though this finding is not statistically significant.

In the post Cold War era, all four types of missions have decreased the risk of another war, all else equal. Traditional peacekeeping missions and observer missions have been the most successful, reducing the risk of war by about 87% and 81% respectively. Multidimensional peacekeeping appears to cut the risk of war by more than half, and enforcement missions by just under half. Taken individually, only one of the peacekeeping hazard ratios is statistically

[47] The joint probability of observing the hazard ratios we do for observer, traditional, and multidimensional peacekeeping, if peacekeeping truly had no effect is 0.07, hence the single asterisk after the bracket. Joint probability tests are appropriate for categorical independent variables, such as peacekeeping mission type.

significant, but jointly they pass the significance test with flying colors (in a joint test, $Pr(\chi^2) = 0.015$, hence the asterisks after the "js" notation).

The analyses in Tables 5-7 calculate the effect of peacekeeping in a way that probably underestimates the true influence of peacekeepers. Use of the time-varying version of the peacekeeping variables means that if peacekeepers complete their mission and leave, and peace continues to hold, this counts against the hypothesis that peacekeeping has an effect.[48] So peacekeepers are not given any credit for peace lasting after they are gone. But for the UN and policy-makers, true success is not just preventing another war, but the ability to go home and still have peace hold; to create a self-sustaining peace.

To test the effects of peacekeeping that linger after the mission departs, a time-constant coding of peacekeeping is more appropriate. In Table 8, I use a measures of peacekeeping that denote whether peacekeepers were deployed and the type of mission, no matter how long the mission stayed. Over the 1947-1999 time period, the presence of peacekeepers reduces the risk of another war by more than 50%. Consent-based peacekeeping is much more effective than enforcement missions, which are actually associated with shorter peace (though not significantly so). Looking just at the post-Cold War period in which most peacekeeping in civil wars has taken place, we see that the presence of international personnel reduces the risk of another war dramatically, by 84%, and can be quite confident that this result is not an artifact of chance. In the post-Cold War period, all forms of peacekeeping reduce the risk of another war, but again, consent-based peacekeeping is more effective than enforcement missions.

[Table 8 about here]

In short, peacekeeping helps maintain peace. In the decade following the Cold War, when the international community became involved in peacekeeping in internal war, its efforts to prevent recurrent fighting have worked. If we give credit to peacekeepers for peace that holds after they depart, then the effects of peacekeeping are overwhelming. But even if we use a more

[48] The model assumes that if a purported cause (peacekeeping) is taken away and the result (peace) still holds, this is evidence that it is not the real cause.

stringent measure of their influence, it is clear that peacekeeping works. Because of the selection bias in the data – the probable under-reporting of very short-lived cease-fires when no peacekeepers were present – it is likely that peacekeeping has been even more effective than these statistics indicate. We can thus be quite confident in the finding that peacekeeping helps maintain peace.

Other Influences on the Durability of Peace

Tables 5-8 also tell us something about when peace will be harder or easier to maintain, whether or not the international community intervenes. As we would expect, peace tends to be quite stable after wars that end in a victory. The hazard for another war drops by about 80% when there is such a decisive military outcome. However, this relationship is less clear after the Cold War – large standard errors in Table 6, column 2 of Table 7, and columns 3 and 4 of Table 8 mean that this finding is not statistically significant the post-1989 era. The hazard ratio for formal treaties is consistently lower than one, indicating a stabilizing effect on peace, but, surprisingly, this effect is never statistically significant. We cannot with confidence reject the null hypothesis that whether or not a treaty is signed makes no difference for the durability of peace.[49]

Peace may be harder to keep in identity conflicts than in wars fought along other kinds of lines. This effect is larger in the post-Cold War period, with the risk of another war estimated to be more than twice as high for conflicts between competing identities than for non-identity wars. But this finding is not statistically significant – it could be due to random chance in our data.

The more deadly the civil war, the harder it is to maintain peace. A high death toll apparently fuels animosity and makes post-civil war reconciliation harder.[50] As noted above, the

[49] Note that both of these findings, that military victories have a sizable effect and that treaties do not, stand in contrast to those of Doyle and Sambanis 2000.

[50] This relationship could be spurious rather than causal. It may be that wars over particularly intractable issues tend both to have high body counts and to flare up again after a cease-fire.

relationship is the opposite in wars between sovereign states. Perhaps the necessity of living in close contact with those responsible for the killing in civil wars accounts for this difference between intrastate and interstate wars. While particularly deadly civil wars are prone to recur, very long wars are not. The positive relationship between the length of war and the length of peace gives support to the war weariness hypothesis; those who have endured particularly drawn-out wars have, if anything, less of a tendency to fight again.

Surprisingly, I find no support for the notion that it is harder to keep peace among many factions than after simpler wars between two parties. In Table 5 just the opposite appears to be the case, though there is no statistically significant relationship. Nor is there any relationship between prior levels of democracy and the durability of peace.[51] There is some weak support for the hypothesis that the presence of easily lootable commodities makes peace harder to maintain, but this is much less pronounced (and no longer significant) after the Cold War. As we might expect, peace is easier to maintain in countries with higher levels of economic development. (The size of this effect appears small because of the size of the units of this measure rather than because it is substantively unimportant.) States with large military forces appear to be no more able to prevent the recurrence of war than less well-armed states.

In sum, peace will generally be easier to maintain, all else equal, after wars that end with a decisive victory than after those that end in an informal truce. Peace will also be easier to keep after long wars, and in countries with higher levels of development. But peace will tend to be harder to maintain after very deadly wars. Other hypotheses about what makes peace easier or harder to maintain receive less consistent or robust support. During the Cold War, primary commodity exports tended to fuel renewed conflict, but this does not hold as well in more recent conflicts. Peace may be somewhat less stable after identity conflicts and somewhat easier when

---

That longer wars tend to yield more stable peace suggests this is not the case since intractable issues should also take longer to solve.

[51] Note that this does not contradict the findings of Dubey 2002 and Walter 2002 that democracy **after** the war yields more durable peace, a hypothesis not tested here.

a treaty has been signed, but in neither case do we see statistically significant effects. The number of factions in the fight, prior experience with democracy, and the size of the government army do not have a consistent or significant effect on the duration of peace.

How Does Peacekeeping Work? Possible Causal Mechanisms

The quantitative evidence above shows clearly that peacekeeping in civil war works. When peacekeepers are present peace lasts much longer than when combatants are left to their own devices. What remains unclear, however, is how exactly peacekeeping works. This is particularly true for consent-based peacekeeping. How well-armed enforcement missions, operating with mandates that allow the use of heavy force if necessary, might make a difference is not quite so puzzling. But we have seen that consent-based peacekeeping is even more effective than enforcement. How does the presence of unarmed or lightly armed international personnel, deployed with the consent of both sides make a difference? Through what causal mechanisms do peacekeepers keep peace? This section develops some hypotheses that can be tested in a closer qualitative look at the cases.

The peacekeeping literature is surprisingly silent on this subject. The literature tends to list the functions of peacekeeping (interposition, monitoring, police training. etc.) without linking these functions explicitly to a causal theory of how peacekeeping works.[52] Alan James' discussion of the definition of peacekeeping is fairly typical. He notes that the "dictionary definition" of peacekeeping "suggests...an independent and influential impact on the situation" but that in practice peacekeeping refers to something less ambitious: "it offers help to disputants with the help dependent on the willingness of all sides to accept it."[53] But he never specifies

[52] Even works that purport to present a theory of peacekeeping do not spell out a causal explanation of how peacekeeping works to keep war from resuming. See for example, Fetherston 1994 and Doyle and Sambanis 2000.

[53] James 1994, pp.4-5.

what this help entails or why those willing to accept peacekeepers need their help, why they cannot reach peace on their own.

In part, this gap stems from a focus on the problem from the perspective of the peacekeepers, as opposed to the combatants themselves.[54] It is also a result of a literature that tends to examine only those cases where peacekeepers are sent, and focuses on "success" vs. "failure" rather than on how the presence of peacekeepers makes things different than they would be in the absence of international personnel.

Barbara Walter's study of civil war termination provides a start for developing a causal theory of peacekeeping. She argues that a third party security guarantee is needed to overcome the commitment problem inherent in moving from civil war, through the dangerous period of demobilization and disarmament, to create a unified country with a single national military. The belligerents cannot credibly commit on their own to abide by the terms of a peace settlement because there is nothing to prevent them from cheating at the demobilization stage and launching a surprise attack once the other side disarms.[55] Combatants in civil wars cannot effectively monitor their own agreements; they need a third party with the technology, manpower, and access to sensitive sites to verify that neither side is cheating. But unless the parties to the conflict are roughly balanced militarily, and will remain so throughout the demobilization process, Walter argues that verification will not be enough to ensure peace. The third party must also be capable and willing to use force against a party that tries to renege on the agreement.[56] Her theory thus helps us explain how peace enforcement makes peace more likely, and in some cases how verification might help, but it does not fully explain how consent-based, unarmed or lightly armed peacekeepers make much of a difference.

---

[54] For a critique along these lines, and an interesting take on the difference in perspective between peacekeepers and the "peacekept" see Clapham 1998.

[55] Walter 2001. See also Walter 1997.

[56] Walter 2001, pp.25-26.

David Last's study of peacekeeping theory, doctrine, and practice, also provides some insight. He starts with the right question: "how can peacekeepers control and de-escalate violent situations?" What do peacekeepers actually do, at the tactical, operational, and strategic levels to keep the peace?[57] He draws on theories of protracted social conflict to derive some lessons for how peacekeepers should operate. These include separating belligerents, an emphasis on education and social learning, and the importance of meeting basic needs to defuse resource conflicts. Last's description of what peacekeepers do on the ground (for example, constabulary intervention, arbitration, go-between mediation) includes some mention, in places, of how these actions affect the belligerents. For example, go-between mediation can prevent misinterpretation of intentions, and constabulary investigations can provide recourse other than retaliation to violations by the other side.[58] But it does not represent a full-blown theory of what changes on the ground when UN or other personnel are present that makes peace more likely to hold.

To develop such a theory we might begin by thinking about the ways in which peace might fail. Once belligerents have reached some sort of cease-fire, war might resume through deliberate aggression, through a security dilemma spiral of fear and uncertainty, or by accident. By definition, recent combatants are deadly enemies with deeply conflicting goals, willing to fight to further them. Despite agreeing to peace, one or more sides may be simply biding their time for a more advantageous moment to attack in pursuit of military victory or a better deal at the bargaining table. Even if a combatant agreed to peace in good faith, if it comes to believe its interests will be compromised by the settlement, that is, if it is "losing the peace" it may decide that renewed hostilities are a better option.

Even if neither side would choose to reinitiate the war, mistrust and fear can lead peace to falter. Deeply ingrained mistrust of the enemy will make both sides extremely wary. And since they can never know for sure whether the other side intends to maintain peace or is plotting an

---

[57] Last 1997, 7.

[58] Ibid, pp. 30-37.

attack, security dilemma spirals are likely. Moves that one side makes to protect itself, either militarily or politically, are likely to be interpreted as evidence of hostile intentions by the other.[59] At best these will stall implementation of the peace process; at worst they can spiral until war seems inevitable and one side preempts rather than waiting to be attacked. Given the levels of mistrust and mutual hatred in the aftermath of civil war, accidents or incidents by soldiers not completely under control of their faction leaders, or by civilians who have been polarized by war can also escalate and drag the country back toward war.

The distinctions between outright aggression, fear and security dilemma spirals, and accidental escalation are more useful analytically than in practice. In reality civil wars are likely to resume through some combination of these overlapping pathways. Small incidents and clashes between civilians or individual soldiers are likely to escalate because neither side is sure of the other's intentions and is likely to fear the worst. The beliefs that drive the security dilemma that the other side is inherently hostile are fostered by the fact that both sides probably would, if unconstrained by the prospect of retaliation and another war, like to do harm to each other. Combatant's fears of each other are not unreasonable. But thinking about aggression, fear, and accident as three potential causal pathways to war suggests ways in which peacekeepers might be able to interfere and block renewed hostilities.

Enforcement missions, mandated to fight if necessary, can make deliberate aggression much more costly. Rather than fighting only the enemy faction, an aggressor will have to take on both the enemy and the intervening force. Because Chapter VI peacekeeping missions (i.e. those not heavily armed nor authorized to use substantial force) operate with the consent of the belligerents, their ability to stop deliberate aggression is severely limited. But that does not mean that consent-based peacekeepers can have no effect. The presence and actions of peacekeepers can make aggression more costly, and/or maintaining peace more lucrative. The presence of peacekeepers, standing in the way of an attack can make that attack more difficult

[59] Jervis 1978.

logistically. Peacekeepers' monitoring of demobilization and troop movements can make a surprise attack much more difficult. If combatants rely on international aid or support, blatantly flouting peacekeepers as representatives of the international community can entail large political and financial costs. By shining "the spotlight of international attention" on recent combatants' actions, peacekeepers can increase the potential cost of deliberate aggression. Developing Last's argument about social learning, we might expect peacekeepers to play a potential role in socializing recent combatants, conveying lessons about "appropriate" behavior during the peace process.[60]

In the fog of civil conflicts it may be quite difficult to tell "who started it" when conflict flares up. Both sides have an incentive to charge the other with aggression, so that neither side's claims are necessarily credible. The presence of neutral monitors can help differentiate between aggression and legitimate retaliation, making it less likely that an aggressor can get away with it by claiming that the other side shot first. The operation of international costs to violating a cease-fire thus depend to some degree on the monitoring and verification role of peacekeepers. International peacekeepers can also bring substantial resources into a war-torn country. If a faction or its constituents benefits from peacekeepers' civil engineering projects such as schools or roads, humanitarian aid such as food or medicine, or jobs, this can give peacekeepers leverage over would-be "spoilers."[61] This is not to say that the presence of peacekeepers will stop all decisions to attack, no student of peacekeeping would make such a claim. If the status quo is sufficiently unpalatable, one side may decide that an attack is worth it despite the presence of peacekeepers. But if peacekeeping changes the cost/benefit ratio of decisions about war and peace at the margin, it can make peace more likely to hold.

---

60 Thanks to Lise Howard for suggesting this possibility. Note that this does not change the cost/benefit calculation so much as change underlying preferences.

61 Stedman 1997 coined the phrase "spoilers" to label actors who intend to disrupt the peace process.

Peacekeepers can disrupt spirals of fear and misperception by verifying whether both sides are complying with the terms of the peace. As noted above, this monitoring makes surprise attack more difficult, but it also provides assurances about all sides' intentions. The presence of peacekeepers can thus play a direct role disrupting the security dilemma as a potential pathway to war. It can also play an indirect role as willingness to accept intrusive monitoring by peacekeepers sends a credible signal of commitment to peace. An actor that is just biding its time waiting for an opportunity to attack again will be less willing to accept monitors to verify that it is demobilizing on schedule. So giving consent to peacekeeping can serve as a costly signal that separates spoilers from those desiring peace. This signaling function continues after peacekeepers arrive. Those parties who cooperate willingly with inspections and monitoring are signaling benign intent, while those who become obstructionist can not help but signal more malign aims.

Both spirals of fear and the danger of accidents can be ameliorated somewhat by improved communication. Talk is cheap, and denials of responsibility for incidents or reports of violations may not be believed, but there is a better chance of clearing up misunderstandings that would otherwise escalate if the parties can communicate than if they cannot. The political animosities between recently warring factions, and the fact that there can be high political costs even to expressing a willingness to meet and negotiate with the enemy mean that a third party can play an important mediation role, allowing communication where it would not otherwise exist. The day-to-day low level mediation and arbitration of peacekeepers can also nip problems in the bud, before clashes or incidents escalate to more politically charged problems that all sides will have a harder time backing down from.

By taking on some responsibility for law and order (what Last refers to as "constabulary intervention"[62]) peacekeepers can help control and minimize incidents such as rock throwing or mob behavior that might otherwise escalate and spark renewed conflict. The reciprocity inherent

[62] Last 1997, p.30.

in cease-fires makes them vulnerable to escalation. Violations of the cease-fire are met in kind, so that even small perceived lapses can quickly unravel the peace process. Peacekeepers can interfere in this cycle by providing an alternative mechanism for responding to perceived violations. When no peacekeepers are present each side has only two choices in the face of violations by the other: retaliate and risk escalation, or do nothing and risk looking weak, and thereby invite further encroachment by the enemy. If peacekeepers are present, however, there is a third option: report the violation to the peacekeeping mission for an investigation. This can provide a politically acceptable response that avoids retaliatory spirals.

Peacekeepers can thus help nip accidental escalation in the bud, provide credible information and opportunities for signaling that ameliorate the security dilemma, and at the margin at least, make deliberate aggression less palatable. These mechanisms for interfering in a process that might otherwise lead to war are mostly military in nature. But much more so than in interstate wars, maintaining peace in civil conflicts entails a political process. States can and often do, agree to live with their differences in the aftermath of war, but ending internal war requires setting up a governance structure that both sides can tolerate. Former combatants will return to war if they feel they are losing the peace politically. If a power-sharing agreement that induced them to end hostilities is not complied with, if police forces are abusing their members, if elections are not free and fair (or if a side that expected to win the election fails to) war is likely to resume. The transition from a state of divided sovereignty with each side in control of military forces and territory to a unified country is particularly dangerous because all sides have a strong incentive to make a power grab that shuts the other out.

If this problem is very severe and an indigenous transitional government cannot be created, the UN or another third party can provide a neutral administration to govern during the transition so that the powers of the state cannot be used against either side. Election monitoring can help deter fraud, and at least as important, help convince both sides that the elections are

fair.[63] Likewise police monitoring can both deter abuse and help the population overcome mistrust of police forces. Police training and military training for a unified army can help create forces less biased than their predecessors. The presence of a peacekeeping mission and the political efforts of a Special Representative to the Secretary General (or the equivalent position in non-UN missions) can help cajole parties into complying with the political aspects of a peace deal. More important, such a representative of the international community may be able to wield carrots and sticks in the form of international aid. The combination of persuasion and inducements may help socialize the parties politically.[64] If the peacekeeping mission controls the timetable of the peace process, it can make some stages of the transition contingent on compliance with others. For example, the peacekeeping mission might insist that elections not be held until troops have been demobilized, so that groups that hope to win legitimacy through elections must first give up their guns.

In sum, peacekeepers can operate, at least hypothetically, through multiple causal mechanisms. These include:

- Making aggression more costly, by:
  - using force (chapter VII missions),
  - being physically in the way,
  - bringing international attention to bear,
  - serving as a trip-wire
  - threatening to cut humanitarian aid, public works, etc.
  - socializing ex combatants

- Disrupting security dilemma spirals, by:
  - monitoring compliance
  - serving as credible signal of commitment
  - easing communication

[63] This is not foolproof of course. Nothing short of winning the vote would have convinced Jonas Savimbi that the elections in Angola were free and fair.

64 Augustinho Zacarias notes that the UN mission in Mozambique played a crucial role in "coaching" the politically unsophisticated RENAMO rebel group on becoming a viable political party. Interview, UN Dept. of Peacekeeping Operations, October 21, 2002.

- Preventing or controlling accidents, by:
  - easing communication
  - on-the-spot mediation
  - providing law and order
  - providing an alternative response to violations

- Limiting political abuse of state powers and creating confidence in unified government, by:
  - deterring/monitoring electoral fraud
  - deterring/monitoring abuse by police/army
  - providing neutral administration
  - socializing combatants into political parties

This is not to say that peacekeepers always have all or even any of these effects. But it does help us identify ways in which peacekeepers might have a causal impact. It remains for qualitative study, both of civil wars that ended with peacekeepers and those in which combatants are left to their own devices, to test whether these hypothetical causal mechanisms in fact operate.

Conclusion

If peacekeeping missions were applied at random to cases of civil war, like treatments in a laboratory experiment, then a quick look at peacekeeping's record would tell us all that we needed to know. And we would conclude that the efforts of the international community would be better spent on other endeavors. But as in medicine, where the seriousness of the disease affects the level of treatment, peacekeepers tend to be sent to more difficult cases. They rarely go where war has ended in a decisive outcome, but rather try to maintain peace where both sides have the capacity to disrupt it. Nor is peacekeeping more likely where a peace treaty has been signed indicating the combatants' commitment to peace, rather the opposite is true.

Controlling as much as possible for factors that might influence the degree of difficulty of a particular case, it is clear that intervention by the international community helps maintain peace. Peacekeeping works, particularly after the Cold War when most of the attempts to keep peace after civil wars have been made. The presence of international personnel is not a silver bullet, of course, it does not guarantee lasting peace in every case, but it does tend to make peace

more likely to last, and to last longer. The efforts of the international community to help war-torn states avoid a slide back to civil war are well worth it.

How peacekeepers make peace more stable requires further qualitative investigation. I hypothesize that peacekeeping works by changing the cost/benefit analysis of recent combatants in their decisions about whether to maintain peace or return to war, by ameliorating the security dilemma and providing credible information on intent, by controlling accidents and disrupting escalatory spiral, and by limiting abuse of state powers during the transition to peace.

Much of the literature on peacekeeping argues that the success of peacekeeping depends on the belligerents themselves, but then focuses largely on the perspective of the international personnel. Theorizing about the causal mechanisms through which peacekeepers work puts the emphasis on the incentives facing combatants, why they might return to fighting, and how peacekeepers might change these incentives. Understanding how peacekeeping works requires understanding how the situation facing the belligerents is changed by the presence or absence of international personnel.

APPENDIX A. THE CASES

Country Name	cease-fire date	date war resumes	highest pk operation* (time constant)
Afghanistan	24apr1992	10aug1992	0
Algeria	01jul1962	.	0
Angola	31may1991	11oct1992	2
Angola	20nov1994	04dec1998	3
Argentina	16sep1955	.	0
Azerbaijan	14may1994	.	2
Bangladesh--Hill	18jan1994	.	0
Bolivia	12apr1952	.	0
Burma	01jan1952	01jan1968	0
Burma	15jun1982	01jul1983	0
Burma	15jun1995	.	0
Burundi	18dec1969	29apr1972	0
Burundi	17jun1972	10aug1988	0
Burundi	20aug1988	02may1991	0
Cambodia	17apr1975	25dec1978	0
Cambodia	23oct1991	06jul1997	4
Cambodia	30nov1998	.	0
Central Africa	25jan1997	.	4
Chad	21aug1979	15mar1980	0
Chad	11aug1994	.	3
China-Taiwan	08dec1949	.	0
China-Tibet	09jan1951	.	0
China	15apr1969	.	0
Colombia	01jan1963	.	0
Congo Brazzaville	24mar1996	05jun1997	0
Congo/Zaire	24nov1965	05jul1967	5
Congo-Kisanguni	05nov1967	08mar1977	0
Congo-Shabba I&II	01jul1979	.	0
Congo/Zaire	19may1997	15aug1998	0
Costa Rica	28apr1948	.	0
Cuba	01jan1959	.	0
Cyprus	10aug1964	15jul1974	3
Cyprus	16aug1974	.	3

continued...

* Peacekeeping includes both UN and non-UN missions
0 = none
2 = observer mission
3 = traditional pk
4 = multidimensional pk
5 = enforcement mission

Appendix A (cont.)

Djibouti	26dec1994	.	0
Dominican Rep.	01may1965	.	3
El Salvador	15dec1992	.	4
Eritrean	21may1991	.	0
Ethiopia-Ogaden	01jan1985	.	0
Ethiopia-ideol	21may1991	.	0
Georgia-Abkhazia	27jul1993	16sep1993	5
Georgia-Abkhazia	14may1994	.	5
Georgia-Ossetia	04apr1994	.	3
Greece-Communists	16oct1949	.	0
Guatemala	02jun1954	02nov1966	0
Guatemala	23jun1994	.	4
Haiti	18sep1994	.	5
India-partition	01jan1948	05aug1965	2
India-Sikh	01jan1994	.	0
Indonesia-Mol.	01jan1951	.	0
Indonesia-Dar.	23nov1953	20dec1956	0
Indonesia	31jul1961	.	0
Indonesia	15dec1986	01may1999	0
Iran-Revol.	11feb1979	20jun1981	0
Iran	23sep1982	.	0
Iraq-Shammar	07apr1959	.	0
Iraq-Kurds	11mar1970	11mar1974	0
Iraq-Kurds	06mar1975	03mar1987	0
Iraq-Kurds	16apr1991	.	5
Iraq-Shiites	.	.	5
Israel-Palest.	13sep1993	28sep2000	0
Jordan	05dec1971	.	0
Laos	23aug1975	.	0
Lebanon	24sep1958	13apr1975	3
Lebanon	16jul1978	14sep1982	0
Lebanon	02may1991	.	3
Liberia	25jul1993	15sep1993	5
Liberia	24sep1996	.	2
Malaysia	08mar1959	.	0
Mali	13jan1995	.	0
Mexico	29jan1994	.	0
Moldova	21oct1994	.	0
Morocco/WestSah	06sep1991	.	2
Mozambique	04oct1992	.	4
Namibia	09apr1989	.	4
Nicaragua	19jul1979	27nov1981	0
Nicaragua	04aug1989	.	2

Appendix A (cont.)

Nigeria-Biafra	15jan1970	.	0
Nigeria-Muslim	26apr1985	.	0
Northern Ireland	31aug1994	.	0
Pakistan-Bngl.	17dec1971	.	0
Pakistan-Blch	31dec1976	.	0
Papua NG	01nov1997	.	3
Paraguay	15aug1947	.	0
Philippines	27dec1952	.	0
Philip.-NPA	15dec1993	31dec1999	0
Philip.-MNLF/MILF	02sep1996	31dec1999	0
Romania	22dec1989	.	0
Russia-Chechnya	27may1996	15aug1999	0
Rwanda	28jan1964	01oct1990	0
Rwanda	04aug1993	06apr1994	5
Rwanda	18jul1994	01jan1998	5
Sierra Leone	30nov1996	15may1997	0
Sierra Leone	07jul1999	02may2000	5
Somalia	26jan1991	05sep1991	0
South Africa	10may1994	.	2
Sri Lanka (JVP I)	30apr1971	18aug1987	0
Sri Lanka (Tamil)	29jul1987	10oct1987	3
Sri Lanka (JVP II)	13nov1989	.	3
Sudan	28feb1972	05jun1983	0
Tajikistan	18sep1994	.	5
Thailand-Commun.	03jul1984	.	0
Uganda	26may1966	.	0
Uganda	10apr1979	10dec1980	0
Uganda	26jan1986	.	0
Vietnam Rep of	30apr1975	.	0
Yemen	15dec1948	26sep1962	0
Yemen-N/Arab Rep	23may1970	27apr1994	0
Yemen-S/Peoples R	25mar1986	.	0
Yemen	10jul1994	.	2
Yugoslavia-Bosnia	14dec1995	.	5
Yugoslavia-Croatia	02jan1992	22jan1993	3
Yugoslavia-Croatia	29mar1994	04aug1995	4
Yugoslavia-Croatia	14dec1995	.	5
Zimbabwe/Rhodesia	21dec1979	08mar1983	3
Zimbabwe/Rhodesia	01aug1984	.	0

APPENDIX B. CHANGES FROM D&S DATA

Changes to list of cases:

Doyle and Sambanis list 124 civil wars, 8 of which were ongoing as of the end of 1999. Of these 124, I drop 3: Korea and India-Pakistan in 1965 because they were interstate wars,[65] and Kenya because it involved rioting between ethnic groups rather than the state.[66] I recode 4 cases as ongoing because there was no significant break in the fighting in the year D&S list for the end of the war: Peru (1996), Algeria (1997), India-Kashmir (1994), and Indonesia-East Timor (1982).

I combined two episodes in each of two cases: Haiti because there was no resumption of the fighting in 1995, and Guatemala because there was no break in 1972.

I added 8 cases of cease-fires within the wars listed by D&S, or because of failures of the peace not listed by them: Angola 1994, Cambodia 1998, Rwanda 1993, Sierra Leone 1999, Sri Lanka-Tamil 1987, Croatia 1993, Georgia-Abkhazia 1993, and Iraq 1970.

Duration of peace:

Congo-Brazzaville: peace fails on 5 June 1997.
India (partition): peace fails in 1965 with interstate war between India and Pakistant.
Iraq (Kurds) 1975: peace fails in May 1976.[67]
Israel (Palestine): peace fails on 28 September 2000 with start of Al Aksa Intifada
Rwanda 1993: peace fails 6 April 1994 when genocide starts
Sierra Leone 1996: peace fails 15 May 1997
Sierra Leone 1999: peace fails 2 May 2000
Sri Lanka-Tamil 1987: peace fails in October 1987
Indonesia Aceh 1986: peace fails with escalation of violence in May 1999[68]
Philippines NPA, 1993: peace fails at end of 1999
Philippines-MNLF 1996: peace fails at end of 1999

In a number of cases, cease-fire dates, from Dubey, differ from D&S war end year (e.g. Azerbaijan, China-Taiwan, Morocco, Papua New Guinea)

---

[65] Though note that I treat peace after the India-Pakistan partition of 1948 as failing in 1965 with the outbreak of the Second Kashmir War.

[66] D&S list this war as "ending" in 1993 with continued war as the "outcome." SIPRI makes no mention of this case.

[67] This differs from Dubey who lists peace as lasting until 1987. See Bercovitch and Jackson 1997 pp.170-71.

[68] Exact date unclear. See. for example Minorities at Risk chronology, www.bsos.umd.edu/cidcm/mar/idsaceh.htm, p. 10. SIPRI notes 50-200 deaths in 1999.

Peacekeeping:
time-varying variables from Dubey

changes in UN peacekeeping coding:
Greece: coded 0 – UNSCOB there to monitor arms flows across the northern border not to keep peace in civil war, following Gilligan & Stedman
Dominican Republic: UN peacekeeping coded as 0 – no real UN operation, only 2 observers attached to DR army, but non-UN peacekeeping coded 3 because OAS sent a force (albeit one dominated by the US and not exactly impartial), following Gilligan & Stedman
Chad 1994 coded 0 – UN observers monitored Libyan w/drawal from Aozou, not civil war, following Gilligan & Stedman
Cambodia 1998 coded 0 – UNTAC was gone by 9/93
Central Africa coded 4 – MINURCA was multidimensional
Haiti 1994 coded 4 – once Haiti obs merged, highest untype value is 4
Liberia 1993 coded 0 – questionable, because of UNOMIL, but it didn't deploy until after this peace failed (though an advance team seems to have been sent)
Sierra Leone 1999 coded 5 – UNAMSIL given chapter 7 mandate in Feb 2000
Yemen 1970 coded 0 – following Gilligan & Stedman, UNYOM monitored Egyptian incursions
Croatia 1994 coded 4 – judgement call whether UNCRO was multidimensional, I follow Dubey
Croatia 1995 coded 4 – questionable because UNTAES was an administration, which D&S include in criteria for coding as "enforcement" but this was closer to a multidimensional pk mission

Outcome variables (victory, treaty) changes from outcome2 in D&S:
Angola 1994 coded 4 treaty Lusaka Protocol Nov 20 1994
Iraq Kurds 1970 coded 4 "15 article peace plan" armistice and autonomy[69]
Iraq Kurds 1975 coded 1 government victory, because rebellion quelled, though Iraq and Kurds sign an agreement giving the Kurds limited autonomy.[70]
Iraq Kurds 1991 coded 2 victory for rebels, following D&S (though they date it differently)
Sri Lanka 1987 coded 4 peace treaty between India and Sri Lanka which failed w/ India and LTTE fighting
Cambodia 1998 left as settlement – [could arguably be truce since restoration of peace accompanied by a cease-fire that maybe wasn't full-fledged settlement]
Rwanda 1993 coded 4 Arusha Accords; Rwanda 1994 coded 2 victory for rebels

[69] Thanks to Megan Gilroy for research on this case. See also Bercovitch and Jackson 1997 p.137.

[70] Bercovitch and Jackson 1997 pp.152 and 170.

Sierra Leone 1999 coded 4 Lome Peace Agreement 7 July 1999
Croatia 1994 coded 3 reached a cease-fire, not clear how formal
Georgia-Abkhazia both cases coded 3 truce.
coded as missing for ongoing cases

Table 1. Peacekeeping and the Resumption of War: A First Glance

	Post WWII			Post Cold War		
	No More War	More War	Total	No More War	More War	Total
No Peacekeeping	43 58.11%	31 41.89%	74	12 57.14%	9 42.86%	21
Peacekeeping	25 60.98%	16 39.02%	41	23 67.65%	11 32.35%	34
Total	68 59.13%	47 40.87%	115	35 63.64%	20 36.36%	55
		$Pr(\chi^2)= 0.76$			$Pr(\chi^2)= 0.43$	

	Post WWII			Post Cold War		
	No More War	More War	Total	No More War	More War	Total
No UN Peacekeeping	51 60.00%	34 40.00%	85	19 63.33%	11 36.67%	30
UN Peacekeeping	17 56.67%	13 43.33%	30	16 64.00%	9 36.00%	25
Total	68 59.13%	47 40.87%	115	35 63.64%	20 36.36%	55
		$Pr(\chi^2)= 0.75$			$Pr(\chi^2)= 0.96$	

Table 2. Types of Peacekeeping and the Resumption of War: A First Glance

	Post WWII			Post Cold War		
	No More War	More War	Total	No More War	More War	Total
No Peacekeeping	43 58.11%	31 41.89%	74	12 57.14%	9 42.86%	21
Observer Mission	6 75.00%	2 25.00%	8	6 85.71%	1 14.29%	7
Traditional Peacekeeping	7 53.85%	6 46.15%	13	5 62.5%	3 37.5%	8
Multidimensional Peacekeeping	5 71.43%	2 28.57%	7	5 71.43%	2 28.57%	7
Peace Enforcement	7 53.85%	6 46.15%	13	7 58.33%	5 41.67%	12
Total	68 59.13%	47 40.87%	115	35 63.64%	20 36.36%	55
			$Pr(\chi^2)= 0.81$			$Pr(\chi^2)= 0.70$

Table 3. Where do Peacekeepers Go?

Logistic Regressions (Robust Standard Errors: Clustered by Country)

	Post WWII All Peacekeeping	Post Cold War All Peacekeeping	Post Cold War UN Peacekeeping	Post Cold War Non-UN Peacekeeping
Victory	-3.57 *** (1.00)	-2.44 ** (1.14)	-2.26 * (1.32)	1.32 (1.66)
Treaty	-1.00 (1.06)	-1.44 * (0.83)	1.15 (1.24)	0.25 (1.62)
Identity War	0.50 (0.42)	0.69 (0.86)	0.65 (0.82)	0.51 (0.69)
Cost of War	0.08 (0.17)	0.13 (0.19)	0.12 (0.19)	0.06 (0.19)
Duration of War	-0.003 (0.00)	-0.003 (0.003)	-0.003 (0.005)	-0.009 ** (0.004)
Many Factions	0.47 (0.56)	0.93 (0.82)	1.67 * (1.00)	0.60 (0.78)
Primary Commodity Exports	1.42 (3.72)	1.27 (5.40)	-9.35 ** (4.40)	2.31 (4.53)
Development	0.001* (0.00)	0.0004 (0.0003)	0.0002 (0.001)	0.0005 (0.0004)
Prior Democracy	-0.04 (0.06)	0.05 (0.09)	0.04 (0.13)	0.22 ** (0.10)
Government Army Size	-0.003 ** (0.001)	-0.003 ** (0.001)	-0.01 ** (0.002)	-0.003 * (0.002)
constant	0.67 (1.98)	0.37 (2.18)	-0.87 (2.54)	-2.89 (2.55)
N	110	52	52	52
Pseudo R^2	0.40	0.31	0.44	0.26
Log Likelihood	-43.81	-23.07	-20.19	-25.91

* Statistically significant at the .10 level.
** Statistically significant at the .05 level.
*** Statistically significant at the .01 level.

Table 4.Where do Peacekeepers Go? Consent-Based vs. Enforcement Missions
Post Cold War (Includes UN and Non-UN Missions)

Multinomial Logistic Regression (Robust Standard Errors: Clustered by Country)

	Consent-Based Peacekeeping	Enforcement Missions
Victory	-4.211 ***	-1.304
	(1.530)	(2.001)
Treaty	-3.214 ***	-1.183
	(1.051)	(1.602)
Identity War	-0.398	0.125
	(0.898)	(0.991)
Cost of War	-0.085	0.501 *
	(0.207)	(0.268)
Duration of War	0.009 (see note below)	-0.026 ***
	(0.006)	(0.007)
Primary Commodity Exports	0.978	2.746
	(7.534)	(7.028)
Development	0.0004	0.0009
	(0.0005)	(0.0007)
Prior Democracy	0.031	0.119
	(0.092)	(0.176)
Government Army Size	-0.008 ***	-0.002
	(0.003)	(0.002)
Constant	4.129	-4.187
	(2.469)	(3.831)
N 52	Pseudo R^2 0.407	Log Likelihood -32.970

* Statistically significant at the .10 level.
** Statistically significant at the .05 level.
*** Statistically significant at the .01 level.

Note: Enforcement missions always involved wars with more than two factions, but the number of factions has no significant effect on the likelihood of consent-based missions. However, when the number of factions is controlled for in a logit of consent-based missions, the duration of war has a significant positive effect (coef = 0.16, RSE = 0.007, p=0.015).

Table 5. Effects on the Duration of Peace: Post World War II
Time-Varying Peacekeeping

Cox Proportional Hazards Model (Robust Standard Errors: Clustered by Country)

	All Peacekeeping	UN Peacekeeping	Non-UN Peacekeeping
Peacekeeping	0.72 (0.33)	0.71 (0.26)	0.97 (0.55)
Victory	0.17 ** (0.12)	0.18 *** (0.11)	0.22 ** (0.13)
Treaty	0.467 (0.30)	0.50 (0.30)	0.53 (0.34)
Identity War	1.57 (0.59)	1.62 (0.60)	1.58 (0.59)
Cost of War	1.23 ** (0.12)	1.23 ** (0.11)	1.21 ** (0.11)
Duration of War	0.997 (0.00)	0.997 (0.003)	0.997 (0.003)
Many Factions	0.87 (0.33)	0.88 (0.31)	0.92 (0.33)
Primary Commodity Exports	34.96 * (66.35)	33.33 * (63.58)	37.53 * (71.77)
Development	0.999 ** (0.0004)	0.999 ** (0.0003)	0.999 ** (0.0004)
Prior Democracy	0.98 (0.03)	0.97 (0.03)	0.98 (0.03)
Government Army Size	0.999 * (0.0005)	0.999 (0.0005)	0.999 (0.0005)
Number of Subjects	109	109	109
N	357	357	357
Log Likelihood	-170.35	-170.34	-170.61

* Statistically significant at the .10 level.
** Statistically significant at the .05 level.
*** Statistically significant at the .01 level.

Table 6. Effects on the Duration of Peace: Post Cold War
Time-Varying Peacekeeping

Cox Proportional Hazards Model (Robust Standard Errors: Clustered by Country)

	All Peacekeeping	UN Peacekeeping	Non-UN Peacekeeping
Peacekeeping	0.32 ** (0.18)	0.51 * (0.19)	0.34 (0.23)
Victory	0.15 (0.20)	0.23 (0.29)	0.31 (0.35)
Treaty	0.54 (0.64)	0.87 (0.93)	0.78 (0.80)
Identity War	2.34 (1.91)	2.36 (1.80)	2.05 (1.54)
Cost of War	1.43 * (0.29)	1.37 * (0.23)	1.36 * (0.24)
Duration of War	0.99 * (0.005)	0.99 * (0.005)	0.99 (0.01)
Many Factions	0.93 (0.60)	1.04 (0.60)	1.11 (0.66)
Primary Commodity Exports	8.95 (30.40)	5.47 (17.90)	7.61 (26.43)
Development	0.999 * (0.0006)	0.998 * (0.001)	0.999 (0.001)
Prior Democracy	1.02 (0.08)	1.01 (0.08)	1.07 (0.07)
Government Army Size	1.001 (0.001)	1.001 (0.001)	1.001 (0.002)
Number of Subjects	51	51	51
N	122	122	122
Log Likelihood	-58.98	-60.08	-59.14

* Statistically significant at the .10 level.
** Statistically significant at the .05 level.
*** Statistically significant at the .01 level.

Table 7. Effects on the Duration of Peace by Mission Type: Post Cold War Time-Varying Peacekeeping

Cox Proportional Hazards Model (Robust Standard Errors: Clustered by Country)

	Post WWII		Post Cold War	
Observer Missions	0.22 **	js*	0.19	js**
	(0.14)		(0.22)	
Traditional Peacekeeping	0.51	js*	0.13 *	js**
	(0.31)		(0.15)	
Multidimensional Peacekeeping	0.74	js*	0.46	js**
	(0.49)		(0.33)	
Enforcement	2.09		0.56	
	(1.41)		(0.57)	
Victory	0.10 ***		0.11	
	(0.08)		(0.15)	
Treaty	0.36		0.35	
	(0.25)		(0.42)	
Identity War	1.37		1.59	
	(0.55)		(1.78)	
Cost of War	1.22 **		1.38	
	(0.12)		(0.32)	
Duration of War	0.998		0.99 *	
	(0.003)		(0.01)	
Many Factions	0.65		0.60	
	(0.25)		(0.56)	
Primary Commodity Exports	29.03 *		7.01	
	(52.09)		(22.75)	
Development	0.999 **		0.999 **	
	(0.0004)		(0.001)	
Prior Democracy	0.96		1.008	
	(0.03)		(0.11)	
Government Army Size	0.999 *		1.000	
	(0.0004)		(0.001)	
Number of Subjects	109		51	
N	357		122	
Log Likelihood	-166.62		-57.78	

* Statistically significant at the .10 level.
** Statistically significant at the .05 level.
*** Statistically significant at the .01 level.
js denotes joint significance.

Table 8. Effects on the Duration of Peace: Time-Constant Peacekeeping

Cox Proportional Hazards Model (Robust Standard Errors: Clustered by Country)

	Post WWII		Post Cold War	
	Any Peacekeeping	By Mission Type	Any Peacekeeping	By Mission Type
Peacekeeping	0.44 * (0.19)		0.16 *** (0.11)	
Observer Missions		0.13 *** js** (0.09)		0.06 * js* (0.10)
Traditional Peacekeeping		0.43 * js** (0.21)		0.16 * js* (0.16)
Multidimensional Peacekeeping		0.31 js** (0.23)		0.16 ** js* (0.13)
Enforcement		1.55 (1.09)		0.27 (0.28)
Victory	0.12 *** (0.08)	0.08 *** (0.06)	0.11 (0.16)	0.08 (0.14)
Treaty	0.46 (0.27)	0.40 (0.28)	0.49 (0.61)	0.37 (0.51)
Identity War	1.49 (0.59)	1.25 (0.52)	2.32 (2.31)	1.83 (2.20)
Cost of War	1.25 ** (0.12)	1.26 ** (0.12)	1.53 * (0.38)	1.47 (0.39)
Duration of War	0.996 (0.003)	0.997 (0.003)	0.99 (0.01)	0.99 (0.01)
Many Factions	0.87 (0.32)	0.67 (0.24)	1.18 (0.72)	1.17 (1.12)
Primary Commodity Exports	44.62 ** (80.80)	67.01 ** (111.27)	32.94 (137.13)	69.67 (240.21)
Development	0.999 ** (0.000)	0.999 ** (0.000)	0.999 * (0.001)	0.999 (0.001)
Prior Democracy	0.97 (0.027)	0.95 (0.03)	1.03 (0.10)	0.99 (0.14)
Government Army Size	0.999 * (0.000)	0.999 * (0.000)	1.000 (0.001)	1.001 (0.002)
N	109	109	51	51
Log Likelihood	-169.05	-164.74	-57.29	-56.56

* Statistically significant at the .10 level.
** Statistically significant at the .05 level.
*** Statistically significant at the .01 level.
js denotes joint significance.

REFERENCES

Bercovitch, Jacob, and Robert Jackson. 1997. *International Conflict: A Chronological Encyclopedia of Conflicts and Their Management 1945-1995*. Washington DC: Congressional Quarterly.

Blechman, B., W. Durch, Eaton W., and T. Stanley. 1997. Effective Transitions to Sustainable Peace. Washington DC: DFI International.

Box-Steffensmeier, Janet M., and Bradford S. Jones. 1997. Time is of the Essence: Event History Models in Political Science. *American Journal of Political Science* 41 (4):1414-1461.

Clapham, Christopher. 1998. Being Peacekept. In *Peacekeeping in Africa*, edited by O. Furley and R. May. Aldershot, England: Ashgate.

Collier, Paul, and Anke Hoeffler. 2000. Greed and Grievance in Civil War. *World Bank Policy Research Working Paper 2355*.

Collier, Paul, and Anke Hoeffler. 2002. On the Incidence of Civil War in Africa. *Journal of Conflict Resolution* 46 (1):13-28.

Dawson, Pauline. 1994. *The Peacekeepers of Kashmir*. London: Hurst & Co.

Diehl, Paul F., Jennifer Reifschneider, and Paul R. Hensel. 1996. UN Intervention and Recurring Conflict. *International Organization* 50 (4):683-700.

Doyle, Michael W. 1995. *UN Peacekeeping in Cambodia: UNTAC's Civil Mandate, International Peace Academy Occasional Papers*. Boulder: Lynne Riener.

Doyle, Michael W., and Nicholas Sambanis. 2000. International Peacebuilding: A Theoretical and Quantitative Analysis. *American Political Science Review* 94 (4):779-802.

Dubey, Amitabh. 2002. Domestic Institutions and the Duration of Civil War Settlements. Paper read at International Studies Association, March 24-27, 2002, at New Orleans.

Durch, William J., ed. 1993. *The Evolution of UN Peacekeeping*. New York: St. Martin's Press.

Durch, William J., ed. 1996. *UN Peacekeeping, American Politics and the Uncivil Wars of the 1990s*. New York: St. Martin's Press.

Fetherston, A.B. 1994. *Towards a Theory of United Nations Peacekeeping*. New York: St. Martin's Press.

Fortna, Virginia Page. Forthcoming, 2003. *Peace Time: Cease-Fire Agreements and the Durability of Peace*. Princeton: Princeton University Press.

Gilligan, Michael, and Stephen John Stedman. 2001. Where do the Peacekeepers Go?: Paper presented at the Workshop on "Civil Wars and Post-Conflict Transitions".

Hampson, Fen Osler. 1996. *Nurturing Peace: Why Peace Settlements Succeed or Fail*. Washington, DC: United States Institute of Peace Press.

Hartzell, Caroline, Mathew Hoddie, and Donald Rothchild. 2001. Stabilizing the Peace After Civil War. *International Organization* 55 (1):183-208.

Holiday, David, and William Stanley. 1992. Building the Peace: Preliminary Lessons from El Salvador". *Journal of International Affairs* 46 (2).

Howard, Lise Morjé. 2001. Learning to Keep the Peace? United Nations Multidimensional Peacekeeping in Civil Wars. PhD Dissertation, Political Science, University of California, Berkeley, Berkeley.

James, Alan. 1994. Internal Peacekeeping. In *Peacekeeping and the Challenge of Civil Conflict Resolution*, edited by D. A. Charters: University of New Brunswick, Centre for Conflict Studies.

Jervis, Robert. 1978. Cooperation Under the Security Dilemma. *World Politics* 30 (2):167-186.

Kalyvas, Stathis N. 2001. "New" and "Old" Civil Wars: A Valid Distinction? *World Politics* 54 (1):99-118.

Kaufmann, Chaim. 1996. Possible and Impossible Solutions to Ethnic Civil Wars. *International Security* 20 (4):136-75.

Last, David M. 1997. *Theory, Doctrine and Practice of Conflict De-Escalation in Peacekeeping Operations*. Clementsport, NS: Canadian Peacekeeping Press of the Lester B. Pearson Canadian International Peacekeeping Training Centre.

Licklider, Roy. 1995. The Consequences of Negotiated Settlements in Civil Wars, 1945-1993. *American Political Science Review* 89 (3):681-687.

Luttwak, Edward N. 1999. Give War a Chance. *Foreign Affairs* 78 (4):36--44.

Mearsheimer, John J., and Robert A Pape. 1993. The Answer. *The New Republic*, June 14, 22-29.

Rikhye, Indar Jit. 1984. *The Theory and Practice of Peacekeeping*. London: C. Hurst & Co.

Ryan, Stephen. 1998. The Theory of Conflict Resolution and the Practice of Peacekeeping. In *A Future for Peacekeeping?*, edited by E. Moxon-Browne. New York: St. Martin's Press.

Stedman, Stephen John. 1997. Spoiler Problems in Peace Processes. *International Security* 22 (2):5-53.

Tharoor, Shashi. 1995/96. Should UN Peacekeeping Go 'Back to Basics'? *Survival* 37 (4):52-64.

Walter, Barbara. 1997. The Critical Barrier to Civil War Settlement. *International Organization* 51 (3):335-364.

Walter, Barbara. 2001. *Committing to Peace: The Successful Settlement of Civil Wars*. Princeton: Princeton University Press.