Refugee Policy as Foreign Policy: Third Party Intervention in Civil War*

Kara Ross Camarena

August 2015

---

*This version was prepared for presentation at the Annual Meeting of the American Political Science Association, San Francisco, CA, 2015. The paper reports some early analysis and refining is still in progress. Comments are most welcome: karaross-AT-fas.harvard.edu. The author wishes to thank scholars at the Institute of Development Studies at the University of Nairobi and advocates at the Refugee Consortium of Kenya for their initial assistance in East Africa as well as the numerous practitioners in government, non-governmental organizations, and international organizations who lent their expertise in the field. The fieldwork, which provided a foundation for this paper, was partially funded by the Harvard University Committee on African Studies and the Weatherhead Center for International Affairs.
Abstract

Attacks on border refugee camps are not uncommon. Many of these attacks are by external governments claiming to pursue rebels across borders. Asylum countries are often viewed as passive victims of these cross border incursions. Instead, international relations scholars have focused on the rebels groups and their material supporters as agents in spreading civil war, with little attention to the agency of the refugee recipient country. Meanwhile studies of United States refugee policy argue that the US uses refugee policy to assist in meeting foreign policy objectives in other countries. I investigate the agency of the asylum countries more generally. I argue asylum countries can and do strategically use refugee policy to intervene in neighboring countries’ disputes. Drawing on case evidence from East Africa, I develop a strategic model of refugee policy selection that takes into account the foreign policy objectives of a refugee receiving state. In the model, the refugee recipient country can choose from allowing refugees to disperse, placing them in a border camp, or placing them in an inland camp. The model predicts that holding all else equal, changes in (1) the regional policy preferences of the parties in the civil war and (2) the usefulness of a refugee border camp to the rebels can explain the refugee policy selection of an asylum country. Furthermore, when refugee recipient countries choose border camps, the model predicts conditions under which this exacerbates the civil war. Border camps do not always make civil wars worse. Rather only when the rebels and government are well matched, or the border camp is particularly useful to the rebels, do border camps prompt greater strategic investment in the civil war, and thus, the civil war lasts longer or is more brutal.
Introduction

Twice in 1973 Burundian government forces crossed into Tanzania. At the time, Burundi claimed that its forces were attempting to counter an incursion by an organized Burundian Hutu group in Tanzania. The Burundian forces’ target was a group of approximately 40,000 refugees in Tanzania. These two attacks in Tanzania resulted in more than 75 people being killed, some of them Tanzanians. At first, the Tanzania government responded by refusing Burundi access to its ocean ports. Later, however, the cross border military activity was returned by Tanzanian mobilization along the Burundian border and the exchange of artillery fire (Radford 1973).

Attacking refugee camps is not an uncommon occurrence. During the 1980s and 1990s, both the Lord’s Resistance Army (LRA) and the Sudanese government in Khartoum attacked South Sudanese refugee camps along the Ugandan border with Sudan. In the mid 1990s, attacks in refugee camps on the Zaire–Rwanda border were particularly common. More recently the Sudanese government in Khartoum engaged in aerial bombing of a temporary refugee camp near the Sudan – South Sudan border (UNHCR 2011). Cross border military attacks on refugee camps occur not just in Africa, but in other civil war contexts as well. For example, in 1984 during the Guatemalan civil war, Mexico was forced to reestablish refugee settlements for Guatemalan refugees miles inland after the Guatemalan military crossed into Mexico to attack refugees who were settled not far from the border.

News reports of these attacks on refugee camps often portray them as unprovoked acts against innocent civilians. However, upon further examination, these incidents may be viewed as predictable responses to asylum country foreign policy. Like the claims made by the Burundian government in the 1970s suggests, many of these attacks on refugee camps are done because the attacker believes that rebel forces are operating in the refugee camp. Following the Rwandan genocide and the subsequent militarized refugee problems in the Great Lakes region of Africa, the United Nations High Commissioner for Refugees (UNHCR) reflected on the problem of rebels mixed in with refugees, concluding that border camps are often unsafe, if too close to the border, and will be used by militants for funds, food, and recruitment (Cutts 2000). Yet asylum countries, even those with some capacity, choose to set up camps that support militants in civil wars.

It is not as if asylum countries have no other option but a border camp. The country has

\(^1\)Now the Democratic Republic of the Congo
two other distinct options, allowing refugees to disperse and selecting a camp location far inland. Either one of these options will have little implications for the rebels fighting the civil war. By allowing refugees to disperse, there is not a ready and waiting mass for rebels to recruit or hide among. By placing camps far enough inland, the long distance to the border, and therefore the place where the civil war is being fought, seriously curtails the usefulness of the camp to the rebels. In 1984, Mexico successfully secured its territory by moving the refugee settlements further inland (Worby 1999). Similarly, from 1972 to 1978, Tanzania incrementally set up settlements hundreds of kilometers from the Burundian border, helping to end interstate violence over the 1972 refugee crisis.

Why then do refugee recipient countries so often set up border camps? This choice means they are potentially helping the rebels, and the country of asylum may face retaliation from its neighbor. Such civil war spillover is dangerous for the country’s citizens as well as the refugees it is supposed to be protecting. I argue asylum countries set up refugee camps along the border as a strategic choice to intervene in their neighboring countries’ civil war.

Refugee recipient countries are acting in their own best interest when selecting a refugee policy. Fundamentally, they make a foreign policy decision when placing a refugee camp along the border. By placing a refugee camp along the border, a country of asylum knowingly provides help to a rebel group. Providing assistance to the rebel group is part of the asylum country’s calculus. I develop a strategic model of the refugee policy selection of an asylum country. Specifically, the refugee recipient country weighs its international obligation to provide asylum, the domestic costs of doing so, and its ability to influence the outcome of the civil war through its refugee policy selection. The decision making model of the country of asylum is embedded in an economic model of civil war.

The embedded model yields predictions for how the policy selection of the asylum country, or refugee receiving country, impacts the civil war. Holding domestic and aid considerations constant, interstate relations and the usefulness of the border refugee camps to rebels together can determine refugee policy selection. The model predicts the nature of interstate relations that yield specific types of refugee policy. In particular the more similar the warring parties’ regional policy positions are, the more easily asylum countries choose to allow refugees to disperse. Furthermore, when refugee recipient countries choose border camps, the model predicts conditions under which this exacerbates the civil war. Border camps do not always make civil wars worse. Rather only when the rebels and government are well matched, or the
border camp is particularly useful to the rebels, do border camps prompt greater strategic investment in the civil war, and thus, the civil war lasts longer or is more brutal.

This paper proceeds as follows. First is an overview of the state of research in international relations as it pertains to civil war and refugees, with particular reference to East Africa. The second section develops a model of refugee policy selection. The third section states the equilibria, and examines how it works. The fourth section explores the international dynamics in equilibrium and highlights implications of the model. The fourth section discusses five cases from East Africa with references to the model. The paper concludes with suggestions on data and operationalization for empirically testing the model more generally.

1 The International Relations of Civil War

Recent international security literature has explored refugees as a potential transnational force for spreading civil war (Weiner 1996; Salehyan and Gleditsch 2006; Gleditsch 2007), as well as, how exiles may instigate or support third party intervention in civil war or interstate war (Gleditsch 2007; Salehyan 2009; Gleditsch et al. 2008). These articles suggest that at least some refugees are in fact rebels themselves or become militarized in exile, spreading the violent conflict across international borders. Even though asylum countries may be giving material support to rebels amongst the refugees, this is seldom touched upon in the predominantly empirical literature on intervention in civil war (see Regan 1996; Elbadawi and Sambanis 2000). Collectively, the current international security literature has developed several channels through which civil wars are international affairs, however they have largely left unexamined, the international objectives and foreign policy decisions of refugee recipient countries.

By contrast, early research into intervention in civil war was framed by the Cold War and various proxy wars fought across the globe. In the midst of this research, scholars of political history observed the strategic use of refugee policy. Zolberg and co-authors anchor the inquiry of strategic use of refugees in international relations. Zolberg (1988) argues that the divergence of US policy from international refugee regime is motivated by strategic interest in first fighting the Cold War, and later the war in Vietnam and intervention in civil wars in Latin America. Moving beyond the Cold War era, Zolberg et al. (1986; 1992) explore broad trends and the systemic conditions under which countries in Latin America, Africa and Asia have faced so much refugee generating civil war, and observe that refugee receiving countries necessarily play a role in this.
Research into refugee policy decisions have typically compared each country to a standard in an international treaty like the 1951 United Nations Convention on Refugees or the Organization of African Unity 1969 Convention Governing the Specific Aspects of Refugee Problems in Africa (see Crisp 2000, for an overview). In reviews that focus on Africa, some recognition is given to the notion that countries may have been supporting broader pan-African goals like decolonization. Scholars on African refugee policy also recognize that some negotiation takes place between host countries and international organizations or donors. Fundamentally though, the literature searches for reasons in the domestic context of a crisis for the refugee policy selected and notes trends over time. It cites domestic constituency who grow tired of hosting refugees or who are overwhelmed in numbers and issues like local security and environmental degradation as the reasons for changes in policy. This literature clearly views refugee policy as domestic policy, not foreign policy (Crisp 2000; Rutinwa 2002a;b; Kamanga 2002).

The explanations for refugee policy selection so far have largely focused on domestic costs and international donor aid. Meanwhile the literature on transnational civil war has focused on rebels in exile rather than the countries hosting the exiles as primary agents in spreading civil war. This is an incomplete view of the crises. Asylum countries are not passive conditions for refugees, rather refugee recipient countries have preferences over which parties win the civil war. The country of asylum may even be courted by the government or rebel group for the sake of financial or material assistance in the war. Just as civil wars have transnational causes and implications, refugee policy has interstate causes and implications. This piece of scholarly research introduces transnational consideration to refugee policy selection and, in doing so, highlights new implications for the study of transnational dimensions of civil war. In particular, asylum countries may opt to intervene on the side of the rebels by strategic placement of a refugee camp. Like traditional military intervention, the border camp intervention can make the civil war worse.

2  A Model of Refugee Policy as Foreign Policy

I model the refugee recipient country as an agent who must weigh domestic costs and benefits of refugee policy with a range of foreign policy goals and implications. Drawing on the international context of refugee crises the model incorporates three critical insights. First, a refugee recipient country has preferences over what regime is in power in a neighboring country based on how well the countries will be able to coordinate on regional policy matters. Second, a refugee camp along the border is an intervention in the civil war which enhances a
rebel group’s ability to fight, but it is unlike a traditional military intervention in which one party to the civil war is given additional resources. Finally, the border camp may be more or less useful to rebels in the civil war. Because the refugee recipient country is intervening in a civil war, I insert the potential border refugee camp into a strategic civil war. By joining the refugee decision and civil war, I am able to analyze how the refugee policy effects the civil war and how the civil war effects the refugee policy.

Briefly, there are three players in this model, the refugee receiving (or asylum) country (A), the rebel group in the country of origin (R), and the government of the country of origin (O). The refugee receiving country makes a decision about refugee policy. The rebel group and the government of the country of origin interact in an economic model of civil war, drawn from the rent seeking literature. I embed the decision making of the refugee recipient country in the civil war model. The three players interact because the refugee policy selected can alter the civil war game, and in turn, the refugee recipient country takes into account preferences over the outcome of the civil war in selecting a refugee policy. I will refer to the three player interaction as the embedded model.

In this exposition of the model, I will first develop the decision making of the refugee recipient country. Then, I will outline the economic model of civil war that I use for the embedded model. Last, I will explain the interaction of the three players in the embedded model.

2.1 Decision Making Model for Refugee Policy Selection

The choice set of refugee policy is one of three options, allowing refugees to disperse (D), containing refugees in a border camp (B), or containing refugees in an inland camp, a good distance from the border (I). The refugee recipient country takes into account four factors when deciding which refugee policy to choose: (1) the benefits from the international community, $H$; (2) the fixed cost of setting up the policy $s$; (3) the incremental cost of expanding the policy, a function of the number of refugees who arrive, $c(F)$; and (4) the country’s preferences over who wins the civil war in the country of origin, an expected value function $p_{RW}$. I first discuss three components of $A$’s utility $H$, $s$ and $c(F)$, then I develop the expected value of the civil war, $p_{RW}$. Finally, I summarize $A$’s entire decision making model.

2.1.1 Costs and Benefits of Refugee Policy

The first three components of player $A$’s utility, $H$, $s$ and $c(F)$ address the cost benefit analysis of the refugee recipient country as it is typically conceived of in refugee literature. As
I develop the decision making model, I highlight a series of 12 assumptions regarding these components. These assumptions are sufficient conditions to allow unique ordering of player A’s choices as the population of refugees gets larger. This is useful in the analysis because it allows me to identify clear trends in the refugee recipient’s policy selection in equilibrium.

**Choosing Dispersal (D)**

Allowing refugees to disperse can take a few forms. First, the state could do nothing. People would then be free to move across the border and spontaneously settle where it was convenient for them to do so. In some places, this might also involve formal recognition of the migrants as refugees. However, in other places, people may just move across the border without any formal recognition. This is often referred to as spontaneous settlement in the relief literature.

I make three assumptions regarding A’s utility of D.

**Assumption 1.** There is no set up cost to implementing a dispersal policy, \( s_D = 0 \).

**Assumption 2.** The incremental cost of dispersal is increasing in refugee population, \( c'_D(F) > 0 \).

**Assumption 3.** The incremental cost of dispersal is convex in refugee population, \( c''_D(F) > 0 \).

If player A chooses D then he accrues some benefit, \( H_D \), from the international community. This can be thought of as the international reputational benefit of having complied with treaties on refugee protection. A country can effectively do nothing and still implement the dispersal policy, therefore I assume there need not be setup costs.

The cost of hosting refugees by allowing them to disperse gets greater as there are more refugees. The incremental cost of hosting refugees in this model is intended to encompass at least three kinds of costs. First, the strain additional population may put on the delivery of public goods in the communities where the refugees settle, be it use of roads, education or healthcare. The second cost is the domestic discontent associated with the arrival of refugees, 

\[^2\]The assumptions are actually overly restrictive. More generally what needs to be assumed is in the absence of the international considerations encapsulated in \( p_{RW} \), preferences over refugee policy are well behaved in the following sense: (1) for some small enough populations, dispersal is optimal and as population increases, (2) the utility of dispersal crosses once with the utility of border camps and once with the utility of inland camps, (3) the utility of dispersal crosses with the utility of border camps first and with the utility of inland camps second, and finally (4) the utility of border camps and utility of inland camps never cross. I argue these twelve assumptions are the best set of assumptions, though, because they are qualitatively realistic.

\[^3\]Alternatively, this could be understood as simply normalizing the fixed cost to those above the bureaucracy required to admit refugees and allow them to disperse.
their use of public goods and resources. Third, \( c(F) \) includes the cost associated with the potential that any of these individual refugees may be pursued by the government of their country of origin in the community where they are settled.

Last, the marginal cost of a dispersal policy is increasing in the population that arrives. The qualitative reason for the convexity is the domestic discontent associated with the arrival of refugees. A few refugees in any community likely would not cause much of an uproar. When many communities find their public buildings – schools, churches, hospitals – filled with refugees rather than their own village members, their discontent at the situation is compounded and shared and can become a problem of national attention.\(^4\)

**Choosing Containment in a Border Camp (B)**

The other option the asylum country has is to contain the refugees. Containing refugees requires recognizing refugees formally, so they can be identified as refugees, and then restricting their movements to some degree. I will refer to this as setting up a camp, but in practice movement may just be restricted to a particular province or region, not necessarily to a single camp. The location of a camp has different implications for the costs and interstate dynamics in the model. If the state chooses a camp along the border, it is easier for the persons in the camp to leave for their country of origin and return to the camp. It is also easier for the government of the country of origin to pursue the refugees in the country of asylum; they do not have to travel very far. By contrast, if the camps are further inland, people who reside in the camp have less easy access to their country of origin, and similarly, the government of the country of origin, has less access to the refugees.

I make three assumptions regarding \( \alpha \)'s utility over \( \beta \).

**Assumption 4.** The international benefit of containment along the border is greater than that of dispersal because of donor aid, \( H_B > H_D \).

**Assumption 5.** The cost of expanding borders camp is increasing in population, \( c_B'(F) > 0 \).

**Assumption 6.** The cost of expanding border camps is concave in population, \( c_B''(F) < 0 \).

\(^4\)The assumption here is that these domestic political costs are concave, not that there is a tipping point. One might think about this as a combination of two things, repeated exposure to refugee, increasing the domestic cost, and then sharing that exposure with others, which also increases the domestic cost. Each refugee who arrives exposes more people, and they in turn share their discontent, with an even larger group of people. These cost dynamics are similar to how we model contagion or network growth, both of which are concave. This by comparison is truncated by confining refugees to a camp, because that limits exposure.
The benefits of setting up a border camp are, $H_B$, which includes the reputational benefit of complying with refugee treaties. The benefits from the international community may also include some assistance because of the refugees. The assistance is not intended to encompass assistance like food aid that accrues to the individual refugees but rather benefits to the asylum country, like hiring of the asylum country’s nationals and local NGOs to facilitate services at a camp or rebuilding an airport or road to bring in supplies and services to the camp.

As for camp costs, there are large fixed upfront costs and smaller incremental costs for expanding. The fixed cost of setting up a boarder camp are $s_B$. This should be thought of as the actual cost of constructing the camp, choosing a place, and allocating land. I assume cost of expanding the border camp, $c_B(F)$, is increasing in population, but takes advantage of economies of scale.

**Containment in an Inland Camp (I)**

The incremental cost of expanding inland camps are just like those of border camps, increasing in the number of people who live there but takes advantage of economies of scale. Therefore I make the same two assumptions about expanding inland camps.

**Assumption 7.** The cost of expanding an inland camp is increasing in population, $c'_I(F) > 0$.

**Assumption 8.** The cost of expanding an inland is concave in population, $c''_I(F) < 0$.

Finally, to order the choices, I make four assumptions that compare components of $A$’s utility across the choices set.

**Assumption 9.** The benefits of containment along the border and inland does not differ, $H_B = H_I = H_C$. Then, for simplicity, I define $\hat{H} = H_C - H_D$

**Assumption 10.** The fixed setup cost of an inland camp is greater than that of a camp along the border, $0 < s_B < s_I$

**Assumption 11.** The cost of expanding an inland camp is always greater than that of expanding a border camp, $c_I(\hat{F}) > c_B(\hat{F}) \forall \hat{F}$

**Assumption 12.** There exists a small enough $F$ such that $c_D(F) < s_B + c_B(F) - \hat{H}$. 
Similar to the border camp, when \( A \) chooses an inland camp, \( A \) receives the international reputational benefits and assistance from the international community. There does not appear to be any systematic reason for these benefits to vary by location. Regardless of location, the asylum country benefits some from the investment of and economy driven by the international aid presence. The initial fixed cost of an inland camp are higher than that of a border camp because more citizens of the recipient country are being affected by the refugees, that is, higher domestic costs. In addition, this could be because a transit system to the inland camp must also be set up. As more people arrive, more people will have to be transported to an inland camp. Therefore, I assume that the absolute cost of expanding an inland camp is always at least as high as the absolute cost of expanding a border camp.

The final assumption simply asserts there is always a small enough population of refugees that if that number were to arrive, the country of asylum would not pay the fixed cost of setting up a border camp and placing the refugees in the camp because the cost of allowing them to disperse is less.\(^5\) Realistically, if only 10 or 15 people were to arrive, wanting to claim refugee status, the cost of setting up a camp or whole settlement for them does not make sense. For a few refugees, it is simply always more cost effective to allow them to choose where to settle and work during their period of asylum.

\[2.1.2 \text{ Regional Policy Coordination and the Outcome of the Civil War}\]

The last component of the refugee recipient country’s utility is the country’s preferences over who wins the civil war in the country of origin, an expected value function \( p_R w \). The refugee recipient country cares about what regime they will have to coordinate with over regional issues like trade and migration when the civil war is over. This is what \( w \) captures.

More specifically, \( w \) can be thought of as a preference for convergence on regional policy. If two countries agree on how to coordinate trade, migration, and other region matters, there will be gains to the countries in the long run. To model this, I use a linear policy space, from -1 to 1, where each party, the refugee recipient country, \( A \), the rebel group \( R \), and the government of the country of origin, \( O \), have an optimal policy, \( \ell \in [-1, 1] \). \( A \)’s utility over these positions is a quadratic loss function, where the deviation of interest is the preferred policy of the party who wins the war, and how that compares to the status quo (with the government of the country of origin). Formally, in expectation, the value of a regime change is

\[
p_R w = p_R [(\ell_R - \ell_A)^2 - (\ell_O - \ell_A)^2].
\]

\(^5\)To avoid confusion it is useful to note this assumption does not incorporate any of the regional politics that might influence \( A \)’s decision.
In summary, the refugee recipient country, player $A$ has utility function based on its three end policy choices: Dispersal ($D$), containment along the Border ($B$), and containment Inland ($I$).

$$U_x = H_x - s_x - c_x(F) + p_{RW}$$

where $x$ is the policy i.e. $x \in \{D, B, I\}$. Simply when $U_D > \max\{U_I, U_B\}$, then $A$ will chose $D$, and similarly when $U_B$ or $U_I$ are the largest, $A$ will choose $B$ and $I$, respectively.

### 2.2 An Economic Model of Civil War

Now that there is a clear decision making model for the refugee recipient country, I turn to the civil war in the country of origin. Since the goal is to integrate this model with the refugee policy decision model, its worth noting qualitatively what refugee camps do for a rebel group in a civil war. None of the resources provided by the refugee camp directly help the rebel group fight its war, refugee camps do not provide arms, military training or soldiers directly. However refugee camps do provide a source of assistance that enhances the rebel group’s ability to fight the war. When rebels have access to refugee camps, they gain access to humanitarian aid and to the refugees themselves. They get food and other relief supplies. In some cases when rebels have considerable power in a refugee camp, they even “tax” refugees by seizing a portion of rations or salaries (Lischer 2003). Rebels also gain access to a concentrated recruitment pool. This is particularly the case when civil wars persist for a long period of time, and cohorts of young men come of age in a refugee camp or when a rebel group is willing to recruit child soldiers. Finally, and more generally, the refugee camp provides a citizenry in exile to which the rebel group can politicize its cause.

Formalizing the refugee camp as a technology of war maps directly onto how scholars and practitioners understand the rebels use of refugee camps qualitatively. Therefore, I select a model of civil war that incorporates the differential technology of war. I borrow from the economic rent seeking literature a model of civil war. The model is a particular case of what is reviewed in Garfinkel and Skaperdas 2007 and earlier developed in Tullock 1980, Hirshleifer 1989, and Neary 1997.

I have selected this model for the substantive reason of being able to incorporate a refugee border camp as technology, as well as, a technical reason of the model itself. The model is relatively simple. Unlike bargaining models of war, there is complete information and no commitment problems. This makes the three player game more tractable. This model also

---

6As intervention, border refugee camps can be compared to traditional military intervention in a civil war, which often includes military aid, military training, arms and even soldiers.
precludes the possibility of no war. This is a problem to the extent that we might believe that anticipation of refugee related intervention in a civil war could prevent the civil war to begin with. On the other hand, if a rebel group—even strategically anticipating losing the war—chooses not to engage in violence or investment in war, they would probably not be considered a rebel group at all, but political opposition. For this reason, the assumption that there has to be some violence seems sufficiently reasonable.

In brief in the economic model of civil war, both the rebel group and government of the country of origin have resources they can choose to invest in either production (like butter) or appropriation (like guns). The probability that each party wins the war is based on a contest success function of their investments in the civil war. Each party’s value function is the expected value of winning the war, that is, the product of the probability of winning the war and the total remaining resources, those devoted to production rather than appropriation. The parties simultaneously select the level of resources devoted to guns and butter. The war occurs, and the winner takes all the spoils.

Specifically, each warring party—the government of the country of origin (O) and the rebel group (R)—has resources \( R \) that they can devote to appropriation or guns \( G \) and production or butter \( X \), where \( R_i = G_i + \frac{X_i}{\beta_i} \). \( \beta_i > 0 \) is a parameter of how relatively efficient production is to appropriation. Their payoff \( V_i \) is the expected value of having all the production at the end, that is

\[
V_i = p_i(G_i, G_{-i}) [\beta_O(R_O - G_O) + \beta_R(R_R - G_R)].
\]

I make two assumptions about the general economic model of civil war to simplify my analysis.

**Assumption 13.** The government of the country of origin, \( O \), is equally efficient in production and appropriation \( \beta_O = 1 \).

This assumption is mostly for convenience. It allows easy comparison of the relative war technology of the rebel group to the government of the country of origin.

**Assumption 14.** I choose the ratio contest success function, \( p_i = \frac{G_i^m}{G_i^m + G_{-i}^m} \) with \( m = 1 \).

This is just a fairly standard way of determining the probability of winning the war based on investments in guns.\(^7\)

\(^7\)Hirshleifer 1989 and Skaperdas 1996 discuss the merits of this choice extensively.
The civil war model I have just delineated is a subgame of the model of ultimate interest, the embedded model. In the embedded model, there will be two varieties of the civil war model, one where the rebel groups technology is given because there is no border camp intervention, and one where it is altered because there is a border camp intervention. To distinguish these cases from the general model described above, I will refer to the rebel group’s war technology as $\hat{\beta}$.

The equilibrium of the subgame is when each of the parties – the government of the country of origin and the rebel group – choose to invest in guns so that it maximizes the expected value of the war. In the interior, the equilibrium gun investment is given by

$$G_O = \hat{\beta}^{1/2}G_R.$$  

(1)

Essentially, in equilibrium each party to the civil war will invest as much as the other party to fight the war, adjusting for their efficiency in using their investment in guns. So for example when the two parties are equally efficient ($\hat{\beta} = 1$), they will each invest the same amount in guns. When the technology of war is better for the government, the government invest less in guns and takes advantage of the relatively weaker rebel group. Meanwhile, the rebel group invests more in guns to make up for their deficit in technology.

### 2.3 International Interaction in the Embedded Model

In the model of the international interaction, there are three actors. First, the refugee recipient country, $A$, which chooses a refugee policy according to the decision making model above. Second, the government of the country of origin, $O$, who engages in the civil war game above. Third, the rebel group, $R$, who also engages in the civil war game.

The refugee policy decision of the refugee recipient country has implications for the war between $R$ and $O$ because it influences how efficiently the rebels can fight. I model this as a discrete change in the relative efficiency of investing in guns for the rebels. Recall, when a refugee recipient country sets up a camp close to the border, it provides the rebels with a safe haven of sorts. Refugee camps close to the border provide easy, protected access to a place for rebels to retreat to regroup, heal and organize themselves. The camp also provides

---

8This equilibrium is just of special case of the review in Garfinkel and Skaperdas (2007). I focus on the interior solution here. The corner solutions do change some of the analysis.
a large group of potential recruits for the rebels and a place where they can politicize their cause to civilians in exile.

More formally, the model needs to capture that in one case, when there is a border camp, the relative war technology of the rebels improves, but in the other case, when there is no border camp – dispersal or inland camps – the civil war is not impacted. Thus, I define the international interaction as a mapping, $S : \{D, B, I\} \rightarrow \tilde{\tau}$ with $\tilde{\tau} \in \{1, \tau\}$ where $\tau > 1$. Furthermore, $\tilde{\tau}$ is a scaler on $\beta_R$ so that $\hat{\beta} = \tilde{\tau}\beta_R$.

More specifically,

$$S(x) = \begin{cases} 1 & \text{if } D \text{ or } I \\ \tau & \text{if } B \end{cases}$$

Finally, the sequence of play for the embedded model is first, $R$ and $O$ choose gun levels. Second, $A$ chooses a refugee policy. Then the war occurs (either $R$ or $O$ wins), and payoffs are realized.

3 Equilibria of the Embedded Model

Now that the model is fully developed, in this section, I proceed to solve the embedded model for subgame perfect equilibria. I do this by backward induction. First, I consider the equilibria of the subgame in the two possible cases of the economic civil war model, the one in which there is no intervention through a border camp and the one in which there is intervention through a border camp. Given these subgame equilibria, I consider the decision of the asylum country. Then, I state the subgame perfect equilibria in a series of four propositions. Last, I explore how the equilibria work graphically with particular reference to the extent to which a border camp affords the rebel additional technology ($\tau$).

3.1 Equilibria of the Civil War

Since in the subgame perfect equilibrium, $R$ and $O$ will anticipate the policy choice of $A$, there are two versions of the civil war model of interest. First, the civil war model where $\hat{\beta} = \beta_R$ (when there is no intervention), and second where $\hat{\beta} = \tau\beta_R$ (when there is intervention). The equilibrium conditions from Equation 1 can be written in terms of resources and technology.

In the first case, $O$’s equilibrium investment in guns and the probability that $O$ wins are:

$$G^*_O = \frac{\frac{1}{2}[R_O + \beta_R R_R]}{1 + (\beta_R)^{\frac{1}{2}}} \quad (2)$$
\[ p^*_O = \frac{1}{1 + \left(\frac{1}{\beta_R}\right)^{\frac{1}{2}}}, \]  
\[ \text{and } R\text{'s equilibrium investment in guns and the probability that } R \text{ wins are:} \]
\[ G^*_R = \frac{\frac{1}{2} [R_O + \beta_R R_R]}{\beta_R \left(1 + \left(\frac{1}{\beta_R}\right)^{\frac{1}{2}}\right)} \]  
\[ p^*_R = \frac{1}{1 + \left(\frac{1}{\beta_R}\right)^{\frac{1}{2}}}. \]  

In the second case, O’s equilibrium investment in guns and the probability that O wins are:
\[ G^{**}_O = \frac{\frac{1}{2} [R_O + \tau \beta_R R_R]}{1 + (\tau \beta_R)^{\frac{1}{2}}} \]  
\[ p^{**}_O = \frac{1}{1 + \left(\frac{1}{\tau \beta_R}\right)^{\frac{1}{2}}}, \]  
\[ \text{and } R\text{'s equilibrium investment in guns and the probability that } R \text{ wins are:} \]
\[ G^{**}_R = \frac{\frac{1}{2} [R_O + \tau \beta_R R_R]}{\tau \beta_R \left(1 + \left(\frac{1}{\tau \beta_R}\right)^{\frac{1}{2}}\right)} \]  
\[ p^{**}_R = \frac{1}{1 + (\tau \beta_R)^{\frac{1}{2}}}. \]  

In the embedded model, this means that O’s best response strategy is always to invest \( G^*_O \) if A chooses D or I and to invest \( G^{**}_O \) if A chooses B. Similarly, it is always R’s best response strategy to invest \( G^*_R \) if A chooses D or I and to invest \( G^{**}_R \) if A chooses B.

### 3.2 Best Response of the Asylum Country

As noted in the section on Player A’s utility, the refugee recipient country has a simple maximization problem with three discrete choices. Essentially, which ever utility is the largest, \( U_D, U_B \) or \( U_I \), Player A’s best response is to choose the corresponding policy Dispersal, Border Camps, Inland Camps, respectively. However because the border camp will impact the civil war in favor of the rebels, the probability of the rebels winning changes in this
case. Anticipating the refugee policy choice of Player A, Player O and Player R, adjust the resources devoted to guns according to whether or not Player R receives the additional technology of a refugee camp for fighting.

There are conditions on two exogenous features of the asylum country’s decision that determine the equilibria, (1) the populations arriving, $F$ and (2) the divergence in preferences over regional coordination, $w$. Therefore the subgame perfect equilibria can be defined in terms of a few cutoff points. The first cutoff points are for population, the point at which the asylum country’s cost for dispersal are just less than border camps and the point at which the asylum country’s cost of dispersal are just less than inland camps. Assumptions 1 through 12 ensure that these points are unique and their order well defined.

**Definition 1.** Let $\tilde{F}$ be the largest $F$ such that $c_D(F) < s_B + c_B(F) - \hat{H}$.

**Definition 2.** Let $\bar{F}$ be the largest $F$ such that $c_D(F) < s_I + c_I(F) - \hat{H}$.

There are few relationships within these first two definitions worth noting. First, since $s_B + c_B(F) < s_I + c_I(F)$ (Assumptions 4 and 10), $c_D(\bar{F}) < s_I + c_I(\bar{F}) - \hat{H}$. Second since $s_I + c_I(F) - \hat{H} > s_B + c_B(F) - \hat{H}$, $\bar{F} > \tilde{F}$. Finally, When $F < \tilde{F}$, A will prefer D to I. When $F > \bar{F}$, A will prefer I to D. $\bar{F}$ will be used to define the equilibria. I will return to $\tilde{F}$ later in the analysis of some comparative statics.

The second set of cutoff points are for region policy preference diversion, captured in $w$. In particular, A will prefer D to B when $U_D > U_B$, that is, $p^*_Rw - c_D(F) > \hat{H} - s_B - c_B(F) + p^*_Rw$. This allows me to define the point of policy diversion when the asylum country is just indifferent between dispersal and border camps.

**Definition 3.** Let $\bar{w}_D = \frac{\hat{H} + c_D(F) - s_B - c_B(F)}{p^*_R - p^{**}_R}$.

Similarly, A prefers I to B when $p^*_Rw - s_I - c_I(F) > p^{**}_Rw - s_B - c_B(F)$. This allows me to define the point of policy diversion when the asylum country is just indifferent between border camps and inland camps.

**Definition 4.** Let $\bar{w}_I = \frac{s_I - c_I(F) - s_B - c_B(F)}{p^*_R - p^{**}_R}$.

Finally, noting that when $F < \bar{F}$, $\bar{w}_D < \bar{w}_I$, makes clear why there are only four equilibria in the next subsection.
3.3 The Subgame Perfect Equilibria

Now I put together the insights regarding the subgame equilibria of the civil war and the best response of the asylum country to identify the subgame perfect equilibria of the model. The cutoff points $\bar{F}$, $\bar{w}_D$, and $\bar{w}_I$ will identify which of refugee policies the asylum country will choose. The government of the country of origin and the rebel group’s best response strategy will be to play one civil war game if there is no border camp and the other if there is a border camp.

**Proposition 1.** If $F \leq \bar{F}$ and $w > \bar{w}_D$ then there is a unique subgame perfect equilibrium in which $O$ will invests $G^*_O$ if $A$ chooses $D$ or $I$ and $G^{**}_O$ if $A$ chooses $B$, $R$ will invest $G^*_R$ if $A$ chooses $D$ or $I$ and $G^{**}_R$ if $A$ chooses $B$ and $A$ will choose $D$. Note that $G^*_O$ and $G^*_R$ will be $O$ and $R$’s respective investments.

**Proposition 2.** If $F \leq \bar{F}$ and $w < \bar{w}_D$ then there is a unique subgame perfect equilibrium in which $O$ will invests $G^*_O$ if $A$ chooses $D$ or $I$ and $G^{**}_O$ if $A$ chooses $B$, $R$ will invest $G^*_R$ if $A$ chooses $D$ or $I$ and $G^{**}_R$ if $A$ chooses $B$ and $A$ will choose $B$. Note that $G^{**}_O$ and $G^{**}_R$ will be $O$ and $R$’s respective investments.

**Proposition 3.** If $F > \bar{F}$ and $w > \bar{w}_I$ then there is a unique subgame perfect equilibrium in which $O$ will invests $G^*_O$ if $A$ chooses $D$ or $I$ and $G^{**}_O$ if $A$ chooses $B$, $R$ will invest $G^*_R$ if $A$ chooses $D$ or $I$ and $G^{**}_R$ if $A$ chooses $B$ and $A$ will choose $I$. Note that $G^*_O$ and $G^*_R$ will be $O$ and $R$’s respective investments.

**Proposition 4.** If $F > \bar{F}$ and $w < \bar{w}_I$ then there is a unique subgame perfect equilibrium in which $O$ will invests $G^*_O$ if $A$ chooses $D$ or $I$ and $G^{**}_O$ if $A$ chooses $B$, $R$ will invest $G^*_R$ if $A$ chooses $D$ or $I$ and $G^{**}_R$ if $A$ chooses $B$ and $A$ will choose $B$. Note that $G^{**}_O$ and $G^{**}_R$ will be $O$ and $R$’s respective investments.

Essentially, if the population of refugees is sufficiently small ($F \leq \bar{F}$) and the divergence in regional policy is sufficiently large ($w > \bar{w}_D$), the refugee recipient country will allow the refugees to disperse, and the war will occur without a refugee policy intervention. The country of origin government and the rebel group will choose investment in guns according to the initial relative technology of the rebels ($\beta_R$).

Similarly, when the refugee population is large ($F > \bar{F}$) and the divergence in regional policy is sufficiently large ($w > \bar{w}_I$), the refugee recipient country will choose inland camps, and the
war will occur without a refugee policy intervention. The country of origin government and the rebel group will choose investment in guns according to the initial relative technology of the rebels ($\beta_R$).

However, when the divergence in regional policy is too small ($w < \bar{w}_D$ when $F \leq \bar{F}$ or $w < \bar{w}_I$ when $F > \bar{F}$) the refugee recipient country will select border camps and in doing so intervene in the civil war. The government of the country of origin and the rebel group will choose investment in guns according to a higher relative technology of the rebels ($\tau\beta_R$).

The role that $\bar{F}$ is serving in defining the equilibria of the embedded model is relatively intuitive. Since a dispersal policy and an inland camp policy are non-interventionist policies, the choice between the two maps onto general framework that scholars and practitioners have for understanding refugee policy selection as domestic policy. When refugee populations are small, countries allow the refugees to disperse. When refugee populations are large, countries place them in camps. $\bar{F}$ captures this trade off by determining whether dispersal $D$ or inland camps $I$ is the relevant alternative to border camps $B$.

The role of $\bar{w}_D$ or $\bar{w}_I$ is more complex and in some ways counter-intuitive. This is because in equilibrium what is optimal for the rebel group is not necessarily the same as what is optimal for the asylum country.\footnote{This discussion pertains only to the equilibrium in the interior of the economic model of civil war, that is, only when both the government of the country of origin and the rebel group have sufficient resources to devote an efficient amount to guns.} This hinges on the understanding that a border refugee camp intervention improves the rebel group’s efficiency in fighting a war, but is unlike the commonly studied intervention where the rebel group gets soldiers or guns from a third party. The rebel group doesn’t get more resources, they just are able to use their resources more efficiently.

As such, a border camp can improve the outlook for the rebel group, the expected value of the war is greater, but the border camp decreases the probability that the rebel group will win the war. This is because when the rebel group is more efficient at war, they strategically invest less in guns. Since the asylum country’s utility takes into account the probability the rebel group wins the war, but not the rebel group’s expected value of the war, providing a border camp to the rebels can make the rebel group better off, but it may not be optimal for the asylum country, even when they prefer the rebel group’s regional policy preference to that of the government of the country of origin. The technology that the border camp affords the rebels, $\tau$ is critical in understanding when border camps are optimal for the asylum country.
country, and the impact the border camps has on the civil war more generally. I explore these dynamics throughout the rest of the paper.

3.4 Understanding the Equilibria Pictorially

In this subsection, I examine the interplay between the refugee policy selection of the asylum country and the investment in the guns in the civil war. The point of this subsection is to understand the possible equilibria, while focusing the analysis on \( \tau \). In the model, \( \tau \) is a scaler on the relative efficiency of investing in guns (technology of war) for the rebel group. The idea of \( \tau \) is that depending on the situation, a refugee camp along the border may be more or less useful to the rebels. This has implications for the expected value of the regime change in the asylum country’s utility. It also has implications for how much the rebel group and the government of the country of origin will invest in guns in the civil war.

Figure 1 presents graphically the difference equilibria described in Propositions 3 and 4, that is when refugee populations are large \((F > \bar{F})\).\(^{10}\)

![Insert Figure 1 about here.]

The graphs in Figure 1 present a realistic situation in which the rebel group is at a disadvantage in the civil war. Their resources are 70% of the government’s of the country of origin and the rebels are less efficient in fighting the war \((\beta_R=0.8)\).\(^{11}\) The graph on the left shows the equilibrium refugee policy as (along the y-axis) the technology offered by a border refugee camp improves \((\tau \text{ increases})\), and (along the x-axis) as the regional policy preferences of the rebel group diverge from the asylum country. The graph on the right presents the equilibrium gun investment of the government of the country of origin and the rebel group, as well as the total, as the technology offered by a border refugee camp improves \((\tau \text{ increases})\).

More specifically, the graphs in Figure 1 display the transition between the equilibrium in Proposition 3 and 4. When the refugee population is large, border camps are often the chosen policy. However, when the asylum country and the government of the country of origin have more similar regional policy preferences than do the asylum country and the rebel group, the equilibrium refugee policy can change. The change in optimal refugee policy from border camps to inland camps occurs if \( \tau \) is large enough, making the extra domestic cost of inland

\(^{10}\)The graphs for Propositions 1 and 2, that is when refugee populations are small \((F < \bar{F})\), are substantially analogous.

\(^{11}\)Even though the rebel group is disadvantaged, their equilibrium gun investment is still in the interior, meaning they are not sufficiently constrained to be inefficient in their gun investment.
camps less than the regional political costs of supporting the rebels. Note that $\tau$ enters into the conditions of the equilibrium because the denominator of $\bar{w}_D, p^*_R - p^{**}_R$, is a function of $\tau$.

On the right side of Figure 1, $\ell_R = 0.5$, so the asylum country prefers the regional policy of the government of the country of origin to that of the rebel group. The graph shows the equilibrium investment in guns of the government of the country of origin and the rebel group as $\tau$ increases. As $\tau$ gets larger, the equilibrium policy of the refugee recipient country changes from $B$ to $I$. In the civil war, when $\tau$ is small enough, the asylum country chooses border camps because they do not influence the civil war sufficiently to offset the extra cost of inland camps. As such, the rebel group has better war technology than the government of the country of origin. The rebel group strategically invests less in guns, and the government of the country of origin must invest more in guns.

However, when $\tau$ gets sufficiently large, the border camps are influencing the civil war too much for the asylum country and it is less costly to have inland camps. When the asylum country chooses inland camps, there is no intervention in the civil war. Since the rebel group originally had less good technology than the government of the country of origin, they invest more in guns, and the government of the country of origin invests less.

In summary, the previous section and this current section have developed a theoretical framework for including transnational features in an understanding of refugee policy selection. Critically, the model incorporates three insights from an international perspective. First, a refugee recipient country has preferences over what regime is in a neighboring country based on how well the countries can coordinate on regional policy matters ($w$). Second, a refugee camp along the border is an intervention in the civil war which enhances a rebel group’s ability to fight, thus improving the rebel’s technology of war (the mapping $S(x)$). Finally, the border camp may be more or less useful to rebels in the civil war ($\tau$). Using this framework it becomes clear international relations can inform refugee policy, and refugee policy can alter civil wars. In the next section, I explore implications from the model, developing more of the comparative statics and identifying conditions under which outcomes of interest occur. This analysis yields five hypotheses with which the model can be tested.

4 International Dynamics in Equilibrium

There are two interstate dimensions to the situation modeled. The first is the asylum country’s preference for a regime in their neighboring country with which they are best able
to coordinate on regional issues. The second is the government of the country of origin and rebel group’s anticipation of intervention by the asylum country in the civil war. The government of the country of origin and the rebel group anticipate if there will be a border camp, and optimize their gun investment accordingly. This means the prospect for regional coordination impacts the refugee policy selection and the refugee policy selection impacts the civil war. Analyzing $w$, the cutoffs $\bar{w}_D$ and $\bar{w}_I$, and their components in more detail yields hypotheses for how international relations impact refugee policy and how refugee policy impacts civil war.

What becomes clear in the analysis is that when a border refugee camp offers remarkably improved technology of war to the rebel group, understanding the border camp as only a domestic policy choice is potentially misunderstanding what the asylum country is choosing. First, unlike what is posited in the literature on refugee policy selection, the model predicts the asylum country may choose border camps, regardless of the size of the refugee population arriving. Second, holding all else equal, changes in (1) the regional policy preferences of the parties in the civil war ($\ell_R$ and $\ell_O$) and (2) the usefulness of a refugee border camp to the rebels ($\tau$) can explain the refugee policy selection of an asylum country. Third, border camps do not always make civil wars worse. Rather only when the rebels and government are well matched, or the border camp is particularly useful to the rebels, do border camps prompt greater strategic investment in the civil war, and thus, the civil war lasts longer or is more brutal.

This section of the paper explores implications of the model as they pertain to international relations in two subsections. The first part of the section examines the international dynamics and refugee policy selection in more depth, focusing on changes in $w$ and how $\tau$ changes $\bar{w}_D$ and $\bar{w}_I$. The second part of the section examines the international dynamics and the civil war in more depth, focusing on how $\tau$ changes the civil war. This analysis yields a series of testable hypotheses from the model.

### 4.1 Regional Coordination and Refugee Policy

The first set of analysis focuses on three components of the equilibrium (1) the regional policy preferences of players in the model, encapsulated in $w$, (2) for small populations of refugees, the point at which the asylum country is indifferent between dispersal and border camps, $\bar{w}_D$, and (3) for large populations of refugees, the point at which the asylum country is indifferent between inland and border camps, $\bar{w}_I$. The analysis yields conditions under which border
camps are likely to be chosen. First, regardless of the number of refugees arriving, asylum countries are more likely to choose border camps when the regional policy preferences of the rebel group and the asylum country are similar at one extreme while the policy preference of the government of the country of origin is at the other extreme. Second, with smaller and larger refugee populations ($F > \bar{F}$) border camps are more likely as the border camp avails less technology to the rebels. Finally, with very small populations ($F \leq \bar{F}$) border camps are more likely as the technology the border camp represents to the rebels improves.

I first explore some of the comparative statics graphically. Then, in three parts, I take each of the components $w$, $\bar{w}_I$, and $\bar{w}_D$ and draw out implications for when border camps are more likely. Figure 2 shows equilibrium policy selection of the asylum country depending on the technology provided by a border refugee camp to the rebels and the policy preferences of the rebel group. As before, the rebel group’s resources ($R_R$) are set to 70% of the government’s, and their relative efficiency for war is, $\beta_R$, is 0.8. To highlight the role of foreign policy preferences, the asylum country’s preferred policy ($\ell_A$) is set to $-1$ and the government of the country of origin preferred policy ($\ell_O$) is set to 0. Therefore on the horizontal axis when $\ell_R = -1$, the asylum country and rebel groups regional foreign policy converge. At 0 there is no difference between the government of the country of origin and the rebel group policy preference. Finally, $\ell_R = 1$ is where the status quo between the asylum country and the government of the country of origin is most preferred to the rebel group option. While the scale is linear for $\ell_R$, it is worth remembering that the change in regional policy preferences does not enter into $A$’s utility linearly. Rather as $\ell_R$ changes from $-1$ to 1, $w$ moves from $-1$ to 3.

[Insert Figure 2 about here.]

The graphs in Figure 2 have a number of similarities. Viewing these graphs in terms of three parts: the top extreme left, top extreme right and the bottom center, brings to the forefront how they are similar. First, the top left is where the technology afforded to the rebel group by a border camp is greatest and where the asylum country and the rebel group’s regional policy preferences are closest. This results in the asylum country choosing a border camp because they prefer the rebel policy and the international relations matter sufficiently. Second, the top right is where the technology afforded to the rebel group by a border camp is greatest and where the asylum country and the government’s of the country of origin regional policy preferences are closest, relative to the rebel group. This results in the asylum country choosing an alternative to a border camp because they prefer the government’s of the country
of origin regional policy and the international relations matter sufficiently. Finally, at the bottom center the policy chosen is the one that is most cost effective given the size of the refugee population. This is because the international relationships do not matter enough to make the refugee policy a foreign policy. At the bottom this is because $\tau$ is small enough that a border camp will not constitute much of an intervention. At the center, this is because the regional policy preferences of the government of the country of origin and the rebel group are not sufficiently different to offset domestic concerns.

In the graphs in Figure 2, there are only two reasons the optimal refugee policy is changing, the technology the border camp represents, $\tau$, and the regional policy position of the rebel group, $\ell_R$. These are just two components of the international situation that determines the equilibrium refugee policy. More generally, the equilibrium refugee policy is determined by $w$ and the relevant cutoff for population $\bar{w}_D$ or $\bar{w}_I$. When $w$ is sufficiently small or when $\bar{w}_D$ or $\bar{w}_I$ is sufficiently large, then there will be border camps. This is because when $w < \bar{w}_D$ or $w < \bar{w}_I$, the asylum country will choose border camps.

Since $w$, $\bar{w}_D$ and $\bar{w}_I$, are functions, comparative statics on these functions will help elucidate when border camps will be more likely. I will take each of these in turn. The analysis of $w$ reveals implications for border camps are likely to occur that are independent of population. Starkly put, border camps are likely when the the regional policy preferences of the rebel group and the country of origin are at opposite extremes and the asylum country’s preferences are similar to that of the rebels. The analysis of $\bar{w}_I$ and $\bar{w}_D$ sheds light on implications for border camps when refugee populations are various sizes.

### 4.1.1 Regional Policy Preferences and Border Camps

Since border camps are more likely when $w$ is small, this discussion looks for ways to minimize $w$. Recall $w = (\ell_R - \ell_A)^2 - (\ell_O - \ell_A)^2$. $w$ gets smaller when all else equal, $\ell_R$ gets closer to $\ell_A$, that is $\ell_R - \ell_A$ decreases in magnitude. Alternatively, $w$ gets smaller when all else equal, $\ell_O$ gets further from $\ell_A$, that is $\ell_O - \ell_A$ increases in magnitude. Substantively, being closer in the policy space does not necessarily mean being aligned. For example in a policy space that at one extreme is isolationism and the other extreme is complete integration, a rebel group may be extremely isolationist ($\ell_R = -1$) where as the government of the country of origin is moderately for integration ($\ell_O = 0.3$). If the asylum country were centrist leaning toward isolationism ($\ell_A = -0.1$), the asylum country would prefer the government of the country of origin to the rebel group, even though we might describe both the country of
asylum and the rebel group as isolationist. Finally, \( w \) is smallest (negative but with large magnitude) when \( \ell_R \) and \( \ell_A \) are very close together and both at one extreme, while \( \ell_O \) is far at the other extreme. This leads to the first testable hypothesis:

**Hypothesis 1.** Border camps are more likely (1) as the regional policy preferences of the rebel group and the asylum country get close together, (2) as the regional policy preferences of the government of the country of origin and the asylum country get further apart, and (3) with the interaction of these two, when the regional policy preferences of the rebel group and the asylum country are similar at one extreme while the policy preference of the government of the country of origin is at the other extreme.

### 4.1.2 Large, Small and Very Small Refugee Populations

Border camps are more likely when \( \bar{w}_I \) or \( \bar{w}_D \) is large. This is because as \( \bar{w}_I \) (or \( \bar{w}_D \)) increase, a wider range of \( w \) results in border camps. There are two conceptual components of interest that are changing \( \bar{w}_I \) and \( \bar{w}_D \). First, the numerator is the difference in net costs of border camps as compared to the alternative, inland camps for \( \bar{w}_I \) and dispersal for \( \bar{w}_D \). The second is the technology of war given to the rebels by a refugee camp, which enters into the denominator of \( \bar{w}_I \) and \( \bar{w}_D \).

The inland analysis is most straight forward, and yields two results. First, border camps will be more likely when the cost of inland camps are high. Second, border camps will be more likely when \( \tau \) is small. By way of explanation in equilibrium, \( \bar{w}_I \) can be written explicitly in terms of \( \beta_R \) and \( \tau \),

\[
\bar{w}_I = \frac{s_I - c_I(F) - s_B - c_B(F)}{1 + (\beta_R)^2} - \frac{1}{\left(1 + (r\beta_R)^2\right)}.
\]

First, \( \bar{w}_I \) increase when the numerator increases and when the denominator decreases. This is because \( \bar{w}_I \) is always positive. The numerator, \( s_I - c_I(F) - s_B - c_B(F) > 0 \) because of Assumptions 10 and 11. In the denominator, since \( \beta_R > 0 \) and \( \tau > 1 \), \( \frac{1}{1 + (\beta_R)^2} > \frac{1}{1 + (r\beta_R)^2} \).

Thus, border camps are more likely when \( s_I - c_I(F) - s_B - c_B(F) \) increases, that is when inland camps are particularly costly. By the same logic as noting the denominator of \( \bar{w}_I \) is positive, the denominator is increasing in \( \tau \), which means \( \bar{w}_I \) is decreasing \( \tau \). Therefore, border camps are more likely when the technology availed to the rebel group through a border refugee camp is small. \(^{12}\)

\(^{12}\)Because of Assumptions 10 and 11, this dynamic can only occur when the asylum country prefers the regional policy of the government of the country of origin over the rebel group. However when these assumption are relaxed, the analysis below for when \( \bar{w}_D \) is negative can be applied to \( \bar{w}_I \).
To understand why border camps will be more likely when $\tau$ is small requires noting the difference between what the asylum country is optimizing and what the rebel group wants. When there is a border camp in equilibrium, what the rebel group is doing is trading off between the additional benefit the rebel group gets from having better technology which increases the total left over at the end of the war with a lower probability that the rebels will actually win the war. As the $\tau$ gets higher, the optimal probability of winning the war for the rebels gets lower. This is a problem for the asylum country because the asylum country cares about the probability that the rebels will win the war, not the expected value of the war. Thus, as $\tau$ gets higher, the expected value of the regime changes with a border camps ($p^*_R w$) gets smaller and smaller, decreasing the asylum country’s utility of a border camp. This is precisely what is happening on the right most graph in Figure 2.

When refugee populations are small, the international dynamics differ depending how small the refugee population is. There are two relevant ranges of population $\bar{F} < F < \tilde{F}$, which I will refer to as small, and $F \approx \tilde{F}$, which I will refer too as very small. When the refugee population is small, the international dynamics are very much like those of large populations, only rather than inland camps being the relevant alternative, dispersal is. When the refugee population is very small, the dynamics are reversed. The reason for this difference is the sign of $\bar{w}_D$. When $\bar{F} < F < \tilde{F}$, $\bar{w}_D$ is positive. Since $F > \bar{F}$, by definition the numerator of $\bar{w}_D$, $\hat{H} + c_D(F) - s_B - c_B(F) > 0$, and the denominator, $p^*_R - p^{**}_R > 0$. However, when $F < \bar{F}$, $\bar{w}_D$ is negative because $\hat{H} + c_D(F) - s_B - c_B(F) > 0$ is negative.

Thus when refugee populations are small, $\bar{F} < F < \tilde{F}$, $\bar{w}_D$ increases as dispersal becomes more costly and as $\tau$ gets small. For very small populations, $F > \tilde{F}$, $\bar{w}_D$ increases as dispersal becomes less costly and as $\tau$ increases. This is precisely the difference between the left and center graphs in Figure 2. From the analysis of $\bar{w}_I$ and $\bar{w}_D$ I identify two more hypotheses.

**Hypothesis 2.** With small (but not very small) and large refugee populations ($F > \bar{F}$) border camps are more likely as the border camp avails less technology to the rebels.

**Hypothesis 3.** With very small populations ($F \leq \tilde{F}$) border camps are more likely as the border camp avails more technology to the rebels.

### 4.2 Worsening the Civil War

While scholars’ qualitative accounts of border refugee camps suggest that the border camps do in fact help the rebel groups, it is not clear to what extent they change the civil war.
Certainly descriptive accounts of the SPLA in Kenya and Ethiopia as well as FRELIMO in Tanzania suggest that rear bases of operation in refugee camps within friendly countries can be useful to the rebel group. From the perspective of the asylum country or even the parties fighting the civil war, the decision to intervene in the neighboring countries civil war through placement of a border refugee camp changes the war because it changes the expected outcome of the war. However, the expected outcome of the war is not observed, only the actual outcome of the war is observed.

The model though has a clear implication for the nature of the civil war. When the resources and initial available technology of the rebel group are relatively well balanced with the government of the country of origin, the anticipation of a border refugee camp prompts extra investment in war. Qualitatively this should correspond to a longer or more brutal civil war. What does it mean, then, for the parties to be relatively well balanced? In the context of the model, this means that the combination of resources and technology available to the rebels \((R_R, \beta_R, \tau)\) is comparable to that of the government of the country of origin \((R_O, \beta_O = 1)\).

The next series of figures compares the best response of the government of the country of origin and the rebel group when there is a border camp and when there is not, focusing on the total investment in guns in each case. Figure 3 compares total gun investment with a border camp and without a border camp as the rebel resources change in the situation discussed thus far, where the rebel group’s technology is relatively worse than the government’s \((\beta_R = 0.8)\) and the border refugee camp makes the technology twice as good \((\tau = 2, \hat{\beta} = 1.6)\). The nature of the civil war changes only when the rebel’s resources are approaching the same as the government’s (when \(R_R\) approaches 1). When this happens, the total investment in guns with a border camp exceeds the total investment without the border camp. This leads to a fourth hypothesis.

**Hypothesis 4.** When the government of the country of origin and the rebel group are well matched, anticipation of a border camp prompts an increase in the total investment in guns.

[Insert Figure 3 about here.]

[Insert Figure 4 about here.]

Figure 4 explores in more detail how \(\tau\) (the technology that the border refugee camp avails the rebels to) effects investment in war. In this figure, the rebel group and the government of the country of origin have the equal resources and technology before the introduction of the
border refugee camp. In this situation, even when $\tau$ is very close to 1, meaning the border camp affords very little improvement in technology for the rebels, it spurs an increase in investment in guns. This implies that we should see worse civil wars not only when the rebel group and the government of the country of origin are well balanced in the absence of the border camp, but the effect of the border camp is exacerbated when $\tau$ increases. This is the fifth hypothesis.

**Hypothesis 5.** *As the technology of war provided by border camps improves, the total investment in guns increase.*

If the asylum country knows how much the border camp will change the probability that the rebels win the war, the asylum country may want to intervene in the civil war by building the border camp. Alternatively, the asylum country may recognize that a border camp avails little additional help to the rebels and therefore choose a border camp because it is less costly than an inland camp. The comparative statics on $\tau$ highlight these trade offs. Furthermore, in the civil war itself, $\tau$ matters because it informs how much more the government of the country of origin has to invest in guns to make up for the extra technology that the rebel group gets from a border camp, and whether the total investment in guns is especially high.

Fortunately for the outlook of civil wars, what is driving the civil war to get worse, $\tau$, is also one of the reasons an asylum country may choose not to establish border camps. This prompts two questions: When is $\tau$ high? and When are there likely to be border camps when $\tau$ is high? The first question is about exogenous factors that for the rebels make access to the border camp particularly useful. The second question is about the strategic situation in which $\tau$ is high enough to make the civil war worse, but such that the asylum country will still choose border camps.

A few observable characteristics seem to suggest that $\tau$ should be greater. First, since refugee camps often are populated by women and children, rebel groups that make use of women and child soldiers are likely to differentially benefit from border refugee camps. Second, the easier the travel between the frontlines and the refugee camp, the more useful appropriating food and supplies may be. Shorter distances, flatter terrain and the absence of bodies of water should increase $\tau$. If refugee populations in the camp are large, the border refugee camp will provides access to recruits. Therefore, the border camps should be more useful to the rebels when they are fighting a war that is dependent on high volumes of people, that is $\tau$ is greater when rebel groups depending on fighters with small arms, like the SPLA or the Rwandan
Patriotic Front. If refugee populations are small, then the camp is more useful to groups that make use of tactics that require they quickly escape – like the tactics of the inyenzi Rwandan fighters in the 1960s or those of the South West Africa People’s Organization (SWAPO) in Angola and Zambia as they fought against the South African Apartheid regime.

The strategic dynamics require looking at the interest of the asylum country in tandem with the civil war model. If the refugees numbers are very small and the asylum country prefers the regional policy of the rebels rather than the government of the country of origin, then border camp are more likely as \( \tau \) increases. It will also be the case that the civil war will be worse as \( \tau \) increases, so long as the rebels and the government of the country of origin are well matched. The small population of refugees (and therefore, the rebels hiding among them) suggest that the rebel’s resources may be low, requiring \( \tau \) to be especially high.

Among small (but not very small) and large populations, the explanation for how \( \tau \) can be high enough to make the civil war worse, but low enough that the asylum country will still choose border camps may be one of at least three. (1) The asylum country and the rebel group share regional policy preferences, and the border camp is essentially a foreign policy choice, to intervene and support the rebels. (2) The government of the country of origin and the rebel group are very well matched, comparable resources and comparable technology of war prior to a border camp, then a border camp regardless of the reason should make the civil war remarkably worse. (3) When the decision to place border camps is driven by high domestic cost, that in their absence would result in the alternative policy, precisely because \( \tau \) is high. If the alternative is dispersal, the cost may be high because of particular religion or ethnic animosity between the group arriving and the native population, or because of particularly poor economic situation where unemployment is high and any additional people integrating would be politically costly. If the alternative is inland camps, very high cost of allocating land could account for high \( \tau \) and the presence of border camps.

Having developed the framework for thinking about refugee policy as foreign policy and a choice to intervene in a neighboring country’s civil war, I now turn to refugee crises in East Africa to explore how the model reflects historical events and policy choices in Kenya and Tanzania.

5 Refugee Policy in East Africa

In the penultimate section of the paper, I explore five refugee crises in East Africa. The cases provide an empirical foundation for the assumptions in the model. As discussed more
in the conclusion, they also provide particular instances for examining the implications of the model and suggest how some of the variables in the model might be operationalized for testing the implications. The section proceeds by first looking at two cases where a dispersal policy was selected and second, three cases where an encampment policy was selected. I review the details of these crises with particular attention to variables in the model and the international dynamics of the situations. I use the equilibrium policy selection to discuss the tradeoffs in the cases and comment on where there might be evidence for the implications of the model in these cases.

In development of the model I draw on the details of 24 refugee crises in East Africa.\textsuperscript{13} I focus on two countries of asylum, Tanzania and Kenya, and crises from independence to the most recent few years. The crises are observationally distinct because of the country the refugees are fleeing, the origin of the violence they are fleeing, and the country to which they are fleeing. The following section discusses details from five of these crises: (1) Ugandans arriving in Kenya from the late 1970s through the 1980s, (2) the Congolese refugees arriving in Tanzania due to intermittent violence up until 1996, (3) the Burundian refugees arriving in Tanzania in 1972, (4) the Sudanese refugees arriving in Kenya beginning in the early 1990s, and finally, (5) the Somali refugees arriving in the early 1990s in Kenya. The crises were chosen because they span a variety of policy decisions and contexts.\textsuperscript{14}

To understand refugee policy not only as domestic policy but also as foreign policy, requires understanding the domestic conditions under which the policy was selected as well as understanding the interstate, transnational context. In other words it requires examining who the refugees are and how they relate to the civil unrest they are fleeing as well as the relationship between the refugees country of origin and country of asylum. The following case descriptions provide an overview of the refugee crisis with particular attention to the interstate relations between the countries.

5.1 Dispersal

The first two cases of interest, the arrival of Ugandans in Kenya and the early arrival of Congolese in Tanzania, have a number of similarities, which provide context in which dispersal is feasible. In particular these cases ground the assumption that low absolute populations are associated with dispersal. Besides the absolute numbers though, shared ethnic origins

\textsuperscript{13}A map of the region is included at the end of the paper for reference.

\textsuperscript{14}These also are crises where the availability of multiple sources to corroborate explanations and generally more complete information on points of interest were available.
between people in Kenya and Uganda made the costs of hosting refugees in a dispersed fashion low. In the case of the Congolese in Tanzania, even in the absence of ethnic ties, shared isolation from their respective capitals created a common way of life on both sides of the border, keeping cost of hosting low. Finally, in both cases relations between the countries were not particularly remarkable. This is consistent with the implication of the model, when the absolute interest of the asylum county in the neighboring countries’ civil war is small, dispersed policies may be more likely.

**Ugandans in Kenya**

In 1971 Idi Amin took power in Uganda from President Obote in a coup. The Ugandans who fled to Kenya during this period were fleeing mostly state sponsored persecution at the hands of the Amin regime. Refugees continued to flee into Kenya through the Tanzanian sponsored toppling of Idi Amin and the civil war from which Museveni ultimately took power. When registration of Ugandan refugees was at its highest, there were nearly 10,000 in Kenya.\(^{15}\)

At the time he lost power, Obote was leaning toward greater alignment with socialist policies like those in Tanzania and away from more capitalist policies like those in Kenya. Since Obote had been a Tanzanian ally, Uganda-Tanzania relations quickly devolved into hostilities (Roberts 2014). Kenyan relations remained mostly cordial as Kenyatta did little to actively engage Amin (Hornsby 2012, 417). Relations remained subdued following the fall of the Amin regime and the civil war from which Museveni ultimately took power.

Museveni’s early period at the helm created some tensions between Kenya and Uganda because of Museveni’s clear support of a domestic political faction in Western Kenya. Despite this, relations oscillated between cordial and tense, but trade interest largely prevented any hostilities (Hornsby 2012, 550). Since Uganda is a landlocked country, all of its shipping trade must travel through an alternate country. The most direct route to the ocean from Uganda is through Kenya to the Port of Mombasa. A US International Development Cooperation Agency commissioned report from the early 1980s identifies Uganda as the largest foreign user of Kenya’s largest ocean port, accounting for approximately 58% of all foreign import/export traffic through the port. This transit is facilitated by road and railroad networks linking Uganda to Mombasa through Western and Southern Kenya. Furthermore, part of ocean trade from Rwanda and Zaire travels through Uganda to the Port of Mombasa in Kenya.

\(^{15}\)For counts of refugees from before the 1990s, I use the data analyzed in Davenport et al. 2003. This is a compilation of data from multiple sources including UNHCR.
Maintaining the trade route is essential for Uganda and very important for Kenya (CE Maguire nd).

It is difficult to find clear documentation of how refugees were handled in the 1970s. However, by 1981, the Kenyan government had set up a reception center in Thika, not far from Nairobi. A committee heard claims for asylum, gave people refugee status, and alien permits in accordance with Kenyan immigration law. From there, most Ugandans settled in communities throughout Western Kenya (Parker 2002, 57). While there are reports of Ugandans being pursued by Ugandan government agents in Kenya, the general perception was that persons with seditious intentions were harbored by Tanzania. At the time they were dispersed little international aid was provided to Kenya to host Ugandans. The Ugandans settled in Western Kenya, where there are long supported ties–economic and extended ethnic affinity–suggesting the domestic cost of hosting these refugees was relatively low.

Congolese in Tanzania:

In 1991 Western troops withdrew from Zaire and the Mobutu regime over the next few years lost control over the eastern portion of the country. During this time there were widespread incidents of violence from a variety of sources in the provinces that border Tanzania (OHCHR 2010). Refugees arrived in Tanzania intermittently through the early 1990s. Most of the refugees fled a variety of violence including incidents of state repression at the hands of the Mobutu regime as well as ethnic clashes and ethnically targeted violence. Estimates from 1993 and 1994 suggest about 15,000 Congolese were living in Tanzania as refugees.

Tanzania has managed to keep cordial foreign relations with the succession of governments from the Mobutu regime and throughout the Congolese civil war. Tanzania and the DRC negotiated repatriation agreements multiple times beginning in 1997. Rather than being an ally, though, in the war, Tanzania took a more neutral position. Tanzania, along with Zambia and South Africa, were instrumental in the Lusaka Agreement which paved the way for two UN peacekeeping missions, the second of which is still on going (United Nations Security Council 2015).

16 During the relevant period, these refugees are among the refugees UNHCR Statistics report as not assisted by UNHCR.
17 In 1996, a civil war broke out, at least partially instigated by Rwanda and Uganda. The refugees fleeing the civil war represent a separate case. These refugees were fleeing mostly from the Kivu provinces, which are more densely populated than the provinces from which the earlier refugees fled. In the midst of the civil war refugees arriving from the Congo topped hundreds of thousands.
18 Lack of stability in the Congo has largely prevented the agreements from being implemented.
Little international aid was provided to Tanzania to host Congolese, at the time they were dispersed. The Congolese settled in fishing villages along the shores of Lake Tanganyika. Since the region around the lake is rather isolated from both the rest of Tanzania and the rest of the Congo, residents on both sides of the lake have developed close cross border ties around a common way of life.

In both the Uganda-Kenya case and the DR Congo-Tanzania case, the equilibrium policy decision for dispersal was brought about by smaller numbers of refugees on the whole, situations in which the cost of hosting the refugees within communities were particularly low. Both Kenya and Tanzania elected these policies even in the absence of any international donor aid. With these policy selections, Kenya and Tanzania successfully stayed on the sidelines of the violence in Uganda and the DR Congo. While both Uganda and the DR Congo continued their civil wars for some time, there has been no suggestion that Ugandans in Kenya or Congolese in Tanzania have had any overt role in the continuation of these crises.

5.2 Containment

The three cases of containment reveal that camps are selected for a variety of reasons. In each of these cases, the peak numbers of refugees in the crises are quite large, and vary from just over 70,000 in the case of Sudanese in Kenya, to hundreds of thousands in the case of the 1972 Burundians in Tanzania and the Somali refugees in Kenya. The cases in comparison highlight the tradeoffs between domestic cost and foreign policy implications, in the refugee policy choice. The case of the 1972 Burundians demonstrates that countries can choose to contain refugees while removing themselves from the affairs of the neighboring countries conflict, when domestic costs are low enough. On the other hand, the cases in Kenya highlight how domestic issues of land and land acquisition led Kenya to place refugee camp on the borders with Somalia, a choice that did not align with the foreign policy interests. At the same time, the border camp near the Sudanese border was quite advantageous. Allowing Kenya to both keep the cost of hosting refugees low while also supporting South Sudan’s fight for autonomy and independence. By contrast to the dispersal cases, these are all cases where Tanzania and Kenya, respectively, have a clear preference for one of the two parties in the civil war.

Inland Camps in Tanzania

In 1972 in the midst of some government infighting, there was a Hutu promulgated insurgency to which the Tutsi dominated government responded by targeting Hutus, massacring more

---

19During the relevant period, these refugees are among the refugees UNHCR Statistics report as not assisted by UNHCR.
than a hundred thousand. As the campaign wore on, nearly two hundred thousand Burundians fled to Tanzania, most of them Hutu.

There was at least a vocal group within the refugees who were politically opposed to the Micombero administration. It is less clear whether these refugees represented a coherent rebel movement, however the Burundian government pursued them as rebels. While Tanzanian and Burundian foreign relations had been pleasant in the early part of the post-colonial period, Tanzania’s broader geopolitical agenda in Africa was at odds with the minority rule of the Tutsi government in Burundi. This however is likely a case of when alignment does not necessarily mean proximity. Over the course of their time in Tanzania, the 1972 refugees organized and became increasingly politically radical (with respect to Burundian politics). From this political movement, splinter rebel groups formed, and decades later these splinter groups participated in the civil war beginning in 1995.20

In this case, the Tanzanian government found three sites where there was available land in Western Tanzania, but not near the border with Burundi. It opened these settlements in 1972, 1973 and the last in 1978. While one of the settlements was near Tanzanians with common ethnic traits as Burundians, the other two were in areas with little ethnic commonality (Sommers 2001). These settlements, while contained and managed by UNHCR with NGO assistance, were large enough for the refugees to farm and these refugees largely became self-sufficient.

The domestic cost of setting up inland sites for the Burundians was certainly not negligible. However, especially at that time, the Western part of Tanzania was not particularly densely populated, and Tanzania has ample land for agriculture. Following the setup of these inland camps in Tanzania, Burundi did experience relative stability. The relative peace, while certainly not explained by the model, is consistent with the implications of the model.

2 Cases of Border Camps in Kenya

At the end of the 1980s and 1990s, political events in countries all around Kenya would throw the Horn of Africa into chaos. The Sudanese People’s Liberation Army (SPLA) was fighting a war against the government in Khartoum for South Sudan autonomy. Initially, the SPLA operated a rear base of operations from Ethiopia (ICG 2010). Shortly into the decade, the Ethiopian regime was toppled, and Sudanese who had sought asylum in Ethiopia poured

20These events may also suggest that a refugee camp on the border would have been particularly useful to a 1972 Burundian rebel movement.
into Kenya. At the same time, the Siad Barre regime in Somalia was ousted and without real leadership the country broke into various factions fighting for control. The political violence in Somalia combined with worsening food conditions, pushed hundreds of thousands of Somalis into Kenya.

Kenya was overwhelmed by refugees arriving from Somali and the Sudan, so much so that the reception center in Thika could not deal with the influx. The government gave *prima facie* refugee status to Somali and Sudanese and ultimately delegated nearly all the administration of refugee matters to UNHCR, who in turn parceled out responsibilities to a host of NGOs. There was an explicit encampment policy of Sudanese and Somali refugees and initially a proliferation of small camps. By 1994, Kenya began consolidating all the Sudanese refugees into Kakuma camp near the Uganda and Sudan borders with Kenya and a set of camps, known as Dadaab, near the border with Somalia. Kenya’s encampment policy for Sudanese and Somali refugees has since been written into law, and while the legality of the policy is still being adjudicated, Kenya officials regularly target Somali refugees to be returned to the camps.

Well before the fall of the Ethiopian government, Kenya had strained ties with the government in Khartoum and had provided some support to the SPLA. The leaders of SPLA had enjoyed time in exile in Nairobi (Hornsby 2012, 418). While Kenya was less forward about supporting a base of operation than Ethiopia had been, the SPLA made plenty of use of Kakuma, recruiting and regrouping there (Perlez 1992). Without Kakuma, the open border and support of Kenya, the SPLA likely would have not been as successful in their fight against Khartoum (ICG 2010). It is difficult to identify the relevant Somali factions for interstate relations with Kenya. However, Kenya did have alliances with some of the groups, which led to a friendly relationship with the later established transitional and federal governments. More recent activity makes clear that Kenya opposes an Al-Shabaab led Somalia, and has taken a variety of actions to demonstrate its support of the recognized government in Mogadishu.

The twin decision of Kenya to place both the Sudanese and the Somali camps along the border given the different foreign relationships could be puzzling. But an analysis of the equilibrium conditions provides a reasonable answer. In the Sudanese case, Kenya derives more utility from a border camp than an inland camp that is, $p^*_{R}w - s_I - c_I(F) < p^*_{R}w - s_B - c_B(F)$. The result is a camp along the border. Similarly, in the Somali case, Kenya prefers the border camp to the inland camp (again, $p^*_{R}w - s_I - c_I(F) < p^*_{R}w - s_B - c_B(F)$). Kenya chooses to place a camp along the border. It is rather intuitive that the expected value of supporting
the SPLA made the placement of Kakuma near the Sudanese border worthwhile (meaning that $w > 0$). However, Kenya’s support of the Transitional Federal Government of Somalia and now, the Federal Government of Somalia has certainly been costly, suggesting that the prospect of an Al Shabaab led Somalia is indeed a net negative for Kenya (that is, $w < 0$).

At first glance, this might appear like a failure of the model. Especially so because, Kenya once had camps for Somali’s much further from the Somali border along the coast, but it closed these ‘inland’ camps in the early and mid 1990s in favor of the collection of camps along Somali border. This is all the more puzzling since the fixed cost of those inland camps had already been paid. What remains in the model as a possible driving force behind this equilibrium selection is the higher cost of expanding the inland camp as compared to expanding the border camp, as more Somalis arrived or as camps were consolidated. Indeed, given the domestic politics over land in Kenya, it is not surprising that the cost of expanding coastal camps in the South far exceeded the cost of expanding a camp in the semi-desert hinterlands near the Somali border. Qualitatively, this reveals that domestic costs can dominate in the refugee policy decision. A government will choose border camps and pay a cost of supporting unfriendly rebels only when the cost of an inland camp is especially high.

**Conclusion**

Like civil war more generally, the policy selected to deal with refugees from civil war is changed by interstate relations. In turn refugee policy in countries of asylum has implications for civil war. Explicitly modeling the agency of the asylum country and the international considerations of refugee policy yield insight into when refugee receiving states choose border camps, and under what conditions those border camps worsen a civil war. More specifically, when a country of asylum has clear preferences for the policies of a rebel group in a neighboring country, they choose to strategically intervene in the civil war by providing additional technology to the rebel group in the form of a border refugee camp. The better aligned the asylum country and rebel group are, the more likely the asylum country will choose border camps. When the rebel group and the government of the country of origin are initially well matched, the presence of a border camp will spur more investment in war. This is exacerbated when the border refugee camp represents particularly good technology to the rebel group. Finally, while the volume of refugees and the domestic costs of hosting them play a role in the decision making of the asylum country, the high incidence of border camps is driven in no small part by the foreign policy advantages or disadvantages of border camps.
Cases of refugee crisis from East Africa provide an empirical foundation for the model. They also serve as a first check on some of the implications derived from the model. One of the useful features of the formal model is clear predictions. In this article I highlighted five.

1. Border camps are more likely (1) as the regional policy preferences of the rebel group and the asylum country get close together, (2) as the regional policy preferences of the government of the country of origin and the asylum country get further apart, and (3) with the interaction of these two, when the regional policy preferences of the rebel group and the asylum country are similar at one extreme while the policy preference of the government of the country of origin is at the other extreme.

2. With small (but not very small) and large refugee populations ($F > \tilde{F}$) border camps are more likely as the border camp avails less technology to the rebels.

3. With very small populations ($F \leq \tilde{F}$) border camps are more likely as the border camp avails more technology to the rebels.

4. When the government of the country of origin and the rebel group are well matched, anticipation of a border camp prompts an increase in the total investment in guns, and thus a worse civil war.

5. As the technology of war provided by border camps improves, the total investment in guns increase, and thus civil war worsens.

The next step in considering this model is more generalized testing of these implications. While the model is clear about what variables need to be considered, the case evidence points to ways in which the data should be operationalized. I conclude with a brief discussion about the kinds of data available to test this theory, and some of the challenges. First, the cases from East Africa help suggest the scale of refugee population and considerations for domestic costs. The dispersal cases suggest that tens of thousands of refugees can be absorbed even in countries with low capacity in a dispersed fashion. Meanwhile containment cases suggest that as the number of refugees approach 50,000, for low capacity countries, dispersal may be cost prohibitive.

Second the dispersal cases point to another feature that decreases the cost of hosting refugees in a dispersed fashion: close ethnic and close economic local cross border ties. These could be operationalized along the lines of the ethnic and economic measures in Michalopoulos and
Papaioannou 2013. The containment cases suggest proxies for the fixed cost of camps. In the case of Tanzania, these costs are relatively low. In the case of Kenya, the cost of land is high. Where there is lower availability of farmable land because of climate or population density, camps set up cost will be higher. Furthermore, when land politics have been particularly contentious, the cost of setting up a camp on farmable land may be prohibitively high, whether on the border or inland. The World Bank and the Food and Agriculture Organization (FAO) have data that can capture population density, land quality and some information on land tenure issues.

From a host of scholarly work in the area, data on civil war and political violence is readily available. UNHCR publishes data on refugee populations, though there are challenges of working with these data. International aid for refugees is also available. With respect to the countries’ policy preferences, some work would need to be done to determine the relevant region for each crisis, but cold war alignment, trade data and interest or participation in regional economic communities could address these variables. The refugee policy of countries would need to be compiled. While there is information about refugee policies, camp locations, and relevant refugee cohorts, it must be collected across sources and likely supplemented with additional data collection and archival work. The data collection would be an undertaking, and careful thought would need to be given to selection problems in missing data.

The greater challenge in testing the theory is in capturing relevant data about the rebel group. While there is growing data on non-state actors, testing this model would require having information about their resource capacity, their policy positions regarding the region, and details regarding their fighting strategy. In particular, to capture the extent to which a border camp represents war technology for the group would require, for example, determining their recruitment needs, the distance to the front from the border, and their use of women or children in their operations.

As it stands though, the model and qualitative evidence make a number of contributions to thinking about refugees in civil war. First, it establishes a framework for understanding refugee policy in countries of asylum not just as domestic policy, but as foreign policy. Fundamentally, countries take into account regional politics in making a determination about a refugee policy. Given the right international context, countries of asylum may choose to use their refugee policy to intervene in a neighboring country’s civil war, by setting up a border camp. Furthermore, even though border camps may often present an advantage to the rebels, the extent to which this is the case will vary depending on geography and the
approach to fighting the rebels employed. Finally, whether the border camp itself alters the nature of the civil war, extending it or making it more deadly, will depend on whether the rebel and government capacity are well balanced from the onset.
<table>
<thead>
<tr>
<th>Description</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Player A</strong></td>
<td>Refugee Recipient Country</td>
</tr>
<tr>
<td>$F$</td>
<td>Refugee Population</td>
</tr>
<tr>
<td>$p_R$</td>
<td>Probability the Rebel Group Wins the Civil War</td>
</tr>
<tr>
<td>$w$</td>
<td>The Value of Rebels Winning the War ($w = (\ell_R - \ell_A)^2 - (\ell_O - \ell_A)^2$)</td>
</tr>
<tr>
<td>$\ell_A$</td>
<td>Ideal Regional Coordination Policy of Refugee Recipient Country</td>
</tr>
<tr>
<td>$\ell_R$</td>
<td>Ideal Regional Coordination Policy of Rebel Group</td>
</tr>
<tr>
<td>$\ell_O$</td>
<td>Ideal Regional Coordination Policy of Government of Country of Origin</td>
</tr>
<tr>
<td><strong>Policy D</strong></td>
<td>Allow Refugees to Disperse</td>
</tr>
<tr>
<td>$H_D$</td>
<td>Benefit of Hosting Dispersed Refugees</td>
</tr>
<tr>
<td>$s_D$</td>
<td>Fixed Setup Cost of Dispersed Policy</td>
</tr>
<tr>
<td>$c_D$</td>
<td>Incremental Cost of Additional Refugees</td>
</tr>
<tr>
<td><strong>Policy B</strong></td>
<td>Setup Refugee Camp along Border</td>
</tr>
<tr>
<td>$H_C$</td>
<td>Benefit of Hosting Refugees in Camp</td>
</tr>
<tr>
<td>$H_B$</td>
<td>Benefit of Hosting Refugees in Camp along Border</td>
</tr>
<tr>
<td>$s_B$</td>
<td>Fixed Setup Cost of Border Camp</td>
</tr>
<tr>
<td>$c_B$</td>
<td>Incremental Cost of Expanding Border Camp</td>
</tr>
<tr>
<td><strong>Policy I</strong></td>
<td>Setup Refugee Camps Inland</td>
</tr>
<tr>
<td>$H_I$</td>
<td>Benefit of Hosting Refugees in Inland Camp</td>
</tr>
<tr>
<td>$s_I$</td>
<td>Fixed Setup Cost of Inland Camp</td>
</tr>
<tr>
<td>$c_I$</td>
<td>Incremental Cost of Expanding Inland Camp</td>
</tr>
<tr>
<td><strong>Player O</strong></td>
<td>Government of Country of Origin</td>
</tr>
<tr>
<td>$G_O$</td>
<td>Resources Devoted to Guns/Appropriation</td>
</tr>
<tr>
<td>$X_O$</td>
<td>Resources Devoted to Production</td>
</tr>
<tr>
<td>$\beta_O$</td>
<td>Relative Efficiency of Production for Government</td>
</tr>
<tr>
<td>$p_O$</td>
<td>Probability the Government of the Country of Origin Wins the War</td>
</tr>
<tr>
<td><strong>Player R</strong></td>
<td>Rebel Group (Fighting in Country of Origin)</td>
</tr>
<tr>
<td>$R_R$</td>
<td>Resource Endowment of Rebel Group</td>
</tr>
<tr>
<td>$G_R$</td>
<td>Resources Devoted to Guns/Appropriation</td>
</tr>
<tr>
<td>$X_R$</td>
<td>Resources Devoted to Production</td>
</tr>
<tr>
<td>$\beta_R$</td>
<td>Relative Efficiency of Production for Rebel Group</td>
</tr>
<tr>
<td>$\tau$</td>
<td>Additional Technology Border Camp Represents ($\hat{\beta} = \tau \beta_R$)</td>
</tr>
<tr>
<td>$p_R$</td>
<td>Probability the Rebel Group Wins the War</td>
</tr>
</tbody>
</table>
References


UNHCR (2011). UNHCR condemns bombing of refugee camp in South Sudan. Briefing Note.


Figure 1: Comparative Statics on Regional Policy Preference Diversion and Border Camp Technology when Refugee Population is Large

Note: $R = 0.7$, $\beta = 0.8$, $F = 0.75$, $\ell_A = -1$, $\ell_O = 0$. Left: Equilibrium Refugee Policy as rebel regional policy preference $\ell_R$ changes, and border camp technology, $\tau$, increase. Right: Equilibrium Gun Investment when $\ell_R = 0.5$ as $\tau$ increases.
Figure 2: Equilibrium Refugee Policy as Technology of Border Camp and Policy Diversion Increase at Three Refugee Populations

Note: $R_R = 0.7$, $\beta_R = 0.8$, $\ell_A = -1$, $\ell_O = 0$. Equilibrium refugee policy as the Rebel’s Regional Policy Preference Change and as Technology of afforded by Border Camp Increase. Left: Very Small Population $F = 0.25$, Middle: Smaller Population $F = 0.33$ and Right: Larger Population $F = 0.75$
Figure 3: Best Response Gun Investment with and without Border Camps
Figure 4: Best Response Gun Investment when Rebels and Government are Well Balanced
Figure 5: Eastern Africa in 2010