Diasporas and Conflict

Fabio Mariani, Marion Mercier, Thierry Verdier

Abstract

In this paper, we study the relation between emigration and conflict in developing countries, which has been overlooked by the economic literature. We build a model of conflict in which two (ethnic) groups contest a given resource that can be consumed as a (group-specific) public good. Open conflict requires labor, and involves the destruction of resources. Within each group, agents collectively decide on the optimal allocation of labor between conflict and productive activities. In this setting, we introduce a diaspora emanating from one of the two groups of origin, which can decide to get actively involved in the conflict by transferring financial resources to its group of origin. The diaspora thus affects the intensity and outcome of the war. Finally, given the characteristics of the conflict equilibrium, the two groups of residents may choose to negotiate a pacific settlement if there exists a sharing rule that makes both of them better off than conflict. Again, we show that the peace–war tradeoff is affected by the diaspora, and identify the characteristics of the economy that determine whether the diaspora ends up acting as a peace-wrecker or as a peace-builder for its country of origin. Last, we develop a dynamic version of the model that accounts for the endogeneity of migration with respect to conflict in the home country. Simulations allow to derive predictions about the joint dynamics of migration and violence at home which policy implications, notably toward refugees in host countries, are eventually discussed.
1 Introduction

This paper investigates the role that diasporas can play in the dynamics of conflict in the homeland. We build a theoretical framework to characterize the conditions under which, and the direction in which, diasporas may affect civil conflict in the home country. Anecdotal evidence, notably concerning the African East Horn, Eastern Europe or Israel, attests to the role that some diasporic groups have played from abroad in conflicts in their homeland.

One of the probably most talkative examples of this phenomenon is related to the Sri Lankan civil war, that has claimed around 100,000 lives from 1983 to 2009 according to the United Nations. The Tamil diaspora has been a decisive actor in the evolution of this conflict. It first contributed to the escalation of violence, by financially sustaining the main Tamil armed group, the *Liberation Tigers of Tamil Eelam* (LTTE). Described by Joshi (1996) as the “economic backbone of the militant campaign”, the Tamil diaspora built a well-organized global network of offices and cells covering at least 40 countries, able to channel funds on a very large scale (Fair, 2007). Gunaratna (2003) estimates that the LTTE had an annual income close to 100 million dollars, of which the diaspora had contributed at least 60 million per year. A large amount of voluntary remittances from the diaspora members thus reached the coffers of the LTTE. The worldwide network of the LTTE also relied on force or on intimidation to gather donations collected like a tax (Fair, 2007; Orjuela, 2008). In addition to its financial involvement, the Tamil diaspora brought important political contributions that influenced the evolution of the conflict in Sri Lanka. It notably developed lobbying and publicity efforts, directed toward the host countries’ governments as well as civil societies, to mobilize international support and seek political sympathy for its cause.\(^1\) At the end of the nineties, the main migrants’ host countries (following the US in 1997) designated the LTTE as a Foreign Terrorist Organization. In the aftermath of September 11, the suspicion over the funds channeled by the Tamil diaspora became even stronger. This reduced the LTTE’s ability to raise revenue from the diaspora (Fair, 2007). It also reduced the diaspora members’ willingness to be

---

\(^1\)The message propagated by the Tamil diaspora during the conflict, according to Fair (2007), was three-fold. It first conveyed the image of the Sri Lankan Tamils as victims of discrimination and military repression coming from the Sinhalese regime. Second, it presented the LTTE as the single legitimate voice of the Sri Lankan Tamils. It finally emphasized the impossibility of achieving peace in the absence of an independent Tamil state.
considered as associated with the LTTE, an organisation labeled as terrorist, and gave space to individuals and organisations that advocated for non-violent conflict resolution and power-sharing settlements (Orjuela, 2008). The Tamil diaspora eventually started to push for peace from the beginning of the 2000s, and provided important competence in the peace process.  

The Sri Lankan Tamil example provides interesting instances of the diverse forms of diasporas' potential involvement in the evolution of conflict in the homeland. Anecdotal evidence can also be found in very different contexts. Croatian emigrants for instance largely intervened in the war for independence. The diaspora brought strong support and financial assistance to Tudjman’s Croatian Democratic Union (HDZ), which led the secession from the former Yugoslavia and the transition to a market-led economy. During the escalatory phase of the conflict (1987 – 1991), most diaspora funds were used to finance the political activities of the opposition with whom the diaspora shared its willingness to oust the communist government and take concrete steps toward independence (Skrbiš, 2007). Through a donation of 4 million dollars, the diaspora funded most of the 1990 election campaign won by the HDZ (Glenny, 1996). Following this victory, 12 seats over 127 in the parliament were reserved for diaspora representatives, and diaspora members were elevated to positions of significance in the new government (Skrbiš, 2007). After the declaration of independence of Croatia in June 1991, the focus of the diaspora shifted toward the country’s defense. According to Hockenos (2003), more than 50 million dollars flowed from the diaspora toward the HDZ between 1991 and 1995, during the hot conflict stage. As in the Tamil case, Skrbiš (2000) notes that financial participation was nearly mandatory for the Croatian diaspora members. Finally, he underlines that many diaspora resources were also used for campaigning in the host countries, lobbying the host governments for recognition of the new state, and seeking support from the international community.

In a different context, lobbying activities were particularly developed by the Cuban diaspora in the United States. Thus, the Cuban-American National Foundation, according to Grugel and Kippin (2007), “established near-hegemonic control over Cuban-American politics in the 1980s”. The diaspora was notably strongly involved in the Bay of Pigs counter-revolution attempt in 1961.

---

2Orjuela (2008) notably underlines the strong involvement of the diaspora in the proposal for an interim governance structure for the northeast region that the LTTE formulated in 2003.
Following the end of the Cold War, the Cuban diaspora succeeded in keeping Cuba at the top of the US foreign policy agenda, notably thanks to its electoral weight in the swinging state of Florida (Eckstein, 2009; Haney and Vanderbush, 1999). Although the lobbying activities of the Cubans in the US which aimed at overthrowing Castro were de facto not successful, it is clear that the diaspora strongly affected the US foreign policy and the ability of the political regime in the homeland to carry on. Since the recent waves of migrants contributed to making the diaspora more eclectic and less radical, it is now potentially able to play a bridging role between Cuba and the US and to become a peace-builder actor if a negotiated transition to democracy is achieved (Grugel and Kippin, 2007).

Eritrean migrants have also played an active role from abroad in the homeland struggles. From the beginning of the 1960s, the diaspora has maintained links with the Eritrean People’s Liberation Front (EPLF) and financially supported its struggle for independence (Bernal, 2004). The involvement of the diaspora did not cease after the independence. From 1991, the Eritrean state notably asked the diaspora to contribute two per cent of their monthly income to the Eritrean government (Fessehatzion, 2005). This contribution was not compulsory but different qualitative surveys show that most abroad-living Eritrean considered it as a duty (Koser, 2007). The diaspora also played a direct political role after the independence and was largely involved in the process of drafting the constitution, which culminated with the ratification of 1997. Pirkkalainen and Abdile (2009) thus emphasize the contributions of the diaspora toward peace and reconstruction in the post-conflict period.

The four examples that we have briefly developed show that, through various means, diasporas have been able to support the escalation of violence or to contribute to peace-building in different circumstances. A rich literature in political sciences documents diverse channels through which different diasporas have influenced the dynamics of conflict at home.\(^3\) It derives two main dimensions of diasporas’ involvement in conflict in the homeland. First, migrants send money. These financial flows, if targeting migrants’ family, are likely to redefine the recipient households’ budget constraint and hence to affect non-migrants’ ability to engage in conflict as well as the opportunity

\(^3\)See notably Smith and Stares (2007).
cost associated with their involvement in the conflict. Remittances can also be directly targeted toward insurgent groups: in this case the capacity of migrants to affect the dynamics of conflict appears even more clearly. Second, the political sciences literature underlines that diasporas rely on the available political opportunity structures to intervene in the conflict in the homeland. Political opportunity structures are defined by Smith (2007) as the set of power relations (within a diaspora and between diaspora, home and host countries) that are determinant of the ability of diasporas to intervene and of the nature of diasporas’ input to the conflict. Relying on the existing transnational political opportunity structures, a diaspora can mobilize different soft power tools to influence the evolution of the conflict, such as lobbying toward the host governments or spreading information in the international media. Transnational political opportunity structures also shape the nature of migrants’ intervention in the conflict. In the frame of the Sri Lankan Tamil example we presented above, the evolution of the available political opportunity structures in the aftermath of September 11 contributed to the switch in the nature of the diaspora’s involvement.

In spite of this much documented anecdotal evidence, the economic literature does not provide a framework to analyze the implication of diasporas in conflict dynamics. Numerous papers document the effects of migration on migrants’ origin country but none of them, to our knowledge, considers the onset and intensity of civil conflict as outcomes potentially affected by migration. However, a recent strand of this literature provides – mostly empirical – evidence that migrants affect politics at home. In particular, Spilimbergo (2009) shows that foreign students have a positive impact on democracy in their home country. In the same vein, Docquier et al. (2013), emphasize a positive effect of openness to emigration on home-country institutional development. Consistently with these macro results, a few micro-oriented papers document the impact of migration on political behaviors or opinions in the origin communities. Batista and Vicente (2011) notably find that Cape-Verdean non-migrants living in more migration-intensive localities exhibit higher demand for political accountability. Relying on electoral results, Chauvet and Mercier (2014) suggest that Malian return migrants transfer electoral norms to their origin communities, in particular in terms of participation. Finally, Pfutze (2012) and Omar Mahmoud et al. (2013) respectively put forward a positive impact of migration intensity on the probability that an opposition party wins a municipal
ballot in Mexico, and a negative impact of migration intensity on the support for the Communist party in the parliamentary elections in Moldova. These papers thus provide evidence, both at the macro and at the micro level, that migrants affect political institutions and behaviors at home. Such results, combined with anecdotal evidence attesting to the role that some diasporic groups have played from abroad in conflicts in their homeland, pave the way for the research question we ask in this paper.

On the other hand, the rich economic literature on conflict fails at taking into account the existence of the potential third actor that migrants represent, and thus does not provide a theoretical framework to analyze their influence on the evolution of conflicts. On the empirical side, Collier and Hoeffler (2004) put forward a positive correlation between the proportion of natives living in the US and the probability of conflict onset in the home country. They argue that migrants’ funding can spark conflict, and that diasporas represent a significant risk factor in the re-ignition of wars once they have abated. Although the methodology implemented as well as the measure of diaspora used in their estimations do not allow to derive sharp conclusions on causality, the result that they provide calls for further investigation, both empirical and theoretical. This paper is a first step in the latter direction.

We present a simple game-theoretic model of conflict between two (ethnic) groups contesting a given resource that can be consumed as a (group-specific) public good. Open conflict requires labor, and involves the destruction of some of the resource of the economy. Within each group, agents collectively decide on the optimal allocation of labor (i.e. of ex-ante identical group members) between participation in the conflict and productive activities. In this setting, we introduce a diaspora emanating from one of the two groups of origin, which can decide to get actively involved in the conflict by transferring financial resources to its group of origin. The diaspora thus affects the intensity and outcome of the war. Given the characteristics of the implied conflict equilibrium, the two groups of residents may choose to negotiate a pacific settlement if there exists a sharing rule that makes both of them better off than conflict.

4In their survey of the civil war literature in economics, Blattman and Miguel (2010), after highlighting the “major role” that diasporas often play in rebel finance, point out “an important limitation of the existing theoretical work on armed conflict causes, namely its almost exclusive focus on the internal armed groups’ decision of whether or not to fight”.

6
We show that the peace–war tradeoff is affected by the diaspora, and identify the characteristics of the economy that determine whether a pre-existing diaspora behaves as a peace-wrecker or as a peace-builder for its country of origin. By pre-existing diaspora, we mean that we first consider the size of the diaspora as exogenous to the conflict. This approach is consistent with cases of diasporas that mostly gather economic migrants. Although it is very difficult to disentangle economic migration from conflict-generated migration in the case of countries at war (economic downturn being also both a potential cause and an outcome of conflict), the qualitative literature that we referred to in the first part of this introduction enlightens the motives of the different migration waves that built each diaspora. For instance, Skrbiš (2007) recalls that a long-lasting Croatian tradition of emigration preceded the constitution of the diasporic shared political identity. After the flows of refugees that were triggered by the birth of the Yugoslav state at the end of World War II, he underlines that most of those who then joined the ranks of the Croatian diaspora were economic migrants. Symmetrically, after the exile of politically active Cubans after the revolution of 1959 and during the Mariel boatlift in the 1980s, the end of the Cold War coincided with the first migration agreement between Cuba and the United States, and gave birth to what Molyneux (1999) refers to as a “purely economic diaspora”.

However, it is clear that migration intensity is also affected by conflict, notably because it triggers flows of refugees trying to escape from violence. To account for this dimension, the second part of the paper develops a dynamic version of the model that accounts for the endogeneity of migration with respect to conflict in the home country. Simulations allow to derive predictions about the joint dynamics of migration and violence at home.

The rest of the paper is organized as follows. The static model, in which we consider a pre-existing diaspora of exogenous size, is presented in the next section, and then put in relation with various case studies. Section 3 then investigates the dynamic version of the model, in which the size of the diaspora, the peace–war tradeoff, and the intensity of war in case of conflict are endogenously and jointly evolving, and discusses its policy implications. Section 4 finally summarizes the results and concludes.
2 The static model

We start by presenting the static version of the model, in which migration concerns one of the two groups at play, and each group is led by a social planner who maximizes the average utility of the group’s members.

2.1 The economic environment

Consider a country whose population is divided into two groups: the elite (E) and the oppressed group (O). Group E counts $\epsilon_E$ members, who are all assumed to reside in the homeland, and who are characterized by a productivity $y_E$. Group O has $\epsilon_O$ members, among which $m$ are living abroad. The $\epsilon_O - m$ resident members of group O are characterized by a productivity $y_O$, and the $m$ members of the diaspora are characterized by a productivity $(1 + \mu)y_O$, with $\mu > 0$. There is thus a strictly positive migration premium for members of group $O$.

Without loss of generality we can assume $y_E = \kappa y_O = \kappa y$, with $\kappa > 0$, so that $y$ can be interpreted as the overall level of development of the economy while $\kappa$ is a measure of between-group inequality. Note that if we do not additionally assume that $\kappa$ is smaller or greater than 1, we cannot know whether an increase in $\kappa$ corresponds to an increase or a decrease of the between-group inequality. In the end, three groups interact in the model: group $E$, residents of group $O$, and migrants of group $O$. For sake of clarity, we refer to residents of group $O$ as “group $O$”, and to migrants of group $O$ as “group $M$”.

Each of the three groups is led by a social planner who aims at maximizing the group’s average utility. As in Esteban and Ray (2008) and Esteban and Ray (2011), individual utility is derived from private consumption $c$, and from a public good $Q$ that depends on the appropriation of a given resource $R$. The average utility functions maximized by the three social planners are the following:

\begin{align*}
    u_E &= c_E + \chi Q_E, \\
    u_O &= c_O + \chi Q_O,
\end{align*}

5The case of two diasporas (from groups $O$ and $E$) will be analyzed in Appendix 4.
and

\[ u_M = c_M + \eta \chi Q_O, \quad (3) \]

where \( \chi \) denotes the preference for the public good, which is altered by \( \eta > 0 \) in the case of migrants. Hereby we are suggesting that migrants are interested in the access of their group of origin to the public good, but may allocate a relatively lower weight to it in their utility function.\(^6\) We also assume that the preference for the public good, \( \chi \), is the same for both groups’ residents.

The quantity \( Q_i \) \((i = E, O)\) of public good that groups \( O \) and \( E \) can have access to depends on the appropriation of a contested resource \( R \). It can be either subject to violent conflict or shared through a process of negotiation.

In the first case, group \( E \) (respectively, \( O \)) obtains a share \( s \) (respectively, \( 1 - s \)) of \( R \), where \( s \) is given by the following contest function:

\[ s(A_E, A_O) = \frac{\gamma A_E}{\gamma A_E + (1 - \gamma) A_O}. \quad (4) \]

\( A_i \) \((i = E, O)\) denotes the number of soldiers (or activists) that group \( i \) allocates to conflict, and \( \gamma \) represents the relative (dis)advantage of group \( E \) in conflict. It reflects the idea that, prior to conflict, the two groups may have a different access to conflict-related information or technology, for instance.\(^7\) \( s \) can be alternatively interpreted as the probability that group \( E \) will capture the whole amount of resource \( R \). Open conflict is costly: it entrains the destruction of a share \( \delta \) of the total resources located or produced in the economy, i.e. residents’ private production and \( R \). Migrants are thus not concerned by the destructive effect of war on private production. Note also that individuals who are employed as soldiers are removed from productive activities so that, for instance, group \( E \) gives up a total quantity of private consumption equal to \( A_E c_E \). Finally, migrants can decide to get actively involved in the conflict in their homeland by subsidizing soldiers from

---

\(^6\)Assuming that migrants are interested in the public good contested in the homeland is consistent with examples of diasporas being highly involved in the political situation in their home country. Public goods in their origin country may also be decisive for their ability to migrate back home. Migrants are also able to vote from abroad in a growing number of countries, namely 134 over 225 countries/territories in the world in 2016 (Source: comparative data from the ACE Electoral Knowledge Network project, data available at http://aceproject.org/epic-en/CDTable?question=VO004.).

\(^7\)Note that we do not assume \( \gamma \) larger or smaller than 1/2 so there is no prior on which group should have a relative advantage or disadvantage in the conflict.
their group \((O)\) in the homeland.

In the second case, the two groups of residents engage in a process of negotiation and must ultimately agree on shares \(s\) and \(1 - s\). Negotiation does not entrain any destruction, but it costs the amount \(Z\) to each group. The justification for \(Z\) is that negotiation might be time- or resource-consuming, or that past conflicts (hatred) make, to some extent, the two groups prefer war over pacific settlement. It can also encapsulate the idea that there is no perfect commitment technology associated with the peaceful settlement of the conflict.

### 2.2 The model with conflict

#### 2.2.1 Optimal choices

Suppose now that \(R\) is contested through violent conflict. The leaders of the two resident groups must decide on the share of the labor force that they allocate to conflict. More precisely, the leader of group \(E\) chooses \(\theta_E\) such that \(A_E = \theta_E \epsilon_E\) and the leader of group \(O\) chooses \(\theta_O\) such that \(A_O = \theta_O (\epsilon_O - m)\). On the other hand, the leader of group \(M\) must decide on an amount \(a\) to be transferred to each soldier of group \(O\). This transfer represents an extra resource that will be shared equally among the resident members of group \(O\), and that as such reduces the opportunity cost of war suffered by group \(O\).

Assuming that all the productive income is transformed into private consumption, \(u_E\) and \(u_O\) in case of war can be written as:

\[
\begin{align*}
    u_{E,w} &= (1 - \delta)((1 - \theta_E)\kappa y + \chi s(A_E, A_O)R), \\
    u_{O,w} &= (1 - \delta)((1 - \theta_O)y + a\theta_O + \chi(1 - s(A_E, A_O))R),
\end{align*}
\]

The first order conditions \(\partial u_{E,w}/\partial \theta_E = 0\) and \(\partial u_{O,w}/\partial \theta_O = 0\) yield the following reaction functions, for a given \(a\):

\[
\begin{align*}
    \theta_E(\theta_O) &= \frac{\sqrt{\gamma \epsilon_E (1 - \gamma)(\epsilon_O - m)\kappa y \theta_O R - \kappa y (1 - \gamma)(\epsilon_O - m)\theta_O}}{\kappa y \gamma \epsilon_E},
\end{align*}
\]
and

\[
\theta_O(\theta_E) = \frac{\sqrt{\gamma \epsilon E(1 - \gamma)(\epsilon_O - m)(y - a)\theta_E\chi R - (y - a)\gamma \epsilon E\theta_E}}{(y - a)(1 - \gamma)(\epsilon_O - m)}. \tag{8}
\]

The graphical representations of these two reaction functions are displayed in Figure 1.

![Figure 1: Reaction functions of groups E and O.](image)

The intersection between the two reaction functions leads to the following equilibrium values, for a given \(a\):

\[
\theta^*_{E}(a) = \frac{\chi R(1 - \gamma)(\epsilon_O - m)\gamma \epsilon E(y - a)}{((y - a)\gamma \epsilon E + \kappa y(1 - \gamma)(\epsilon_O - m))^2}, \tag{9}
\]

and

\[
\theta^*_{O}(a) = \frac{\chi R(1 - \gamma)(\epsilon_O - m)\gamma \epsilon E\kappa y}{((y - a)\gamma \epsilon E + \kappa y(1 - \gamma)(\epsilon_O - m))^2}, \tag{10}
\]

from which we obtain \(A^*_E(a)\) and \(A^*_O(a)\), the equilibrium sizes of the two armies, in function of \(a\).

In case of conflict, \(u_M\) can be written:

\[
u_{M,w} = (1 + \mu)y - a\frac{\theta^*_O(a)(\epsilon_O - m)}{m} + (1 - \delta)\eta\chi(1 - s(A^*_E(a), A^*_O(a)))R. \tag{11}\]

Knowing \(\theta^*_E(a)\), \(\theta^*_O(a)\), \(A^*_E(a)\) and \(A^*_O(a)\), this utility is maximized by the leader of group \(M\) with respect to \(a\), the amount transferred by the diaspora to each soldier of group \(O\). From \(\partial u_{M,w}/\partial a = 0\), we can retrieve \(a^*\) as a function of \(m\).
In particular, there exists $m_1$ and $m_2$ such that:

$$a^*(m) = \begin{cases} 
0 & \text{if } m \leq m_1 \\
\frac{y[\gamma \epsilon_E + (1 - \gamma)\kappa(\epsilon_O - m)][(1 - \delta)\eta m - (\epsilon_O - m)]}{\gamma \epsilon_E[(1 - \delta)\eta m + (\epsilon_O - m)]} & \text{if } m_1 < m < m_2 \\
\frac{y[\gamma \epsilon_E + (1 - \gamma)\kappa(\epsilon_O - m)] - \sqrt{\gamma \epsilon_E(1 - \gamma)(\epsilon_O - m)\kappa y \chi R}}{\gamma \epsilon_E} & \text{if } m \geq m_2
\end{cases}$$

(12)

Moreover,

$$m_1 = \frac{\epsilon_O}{1 + (1 - \delta)\eta}. \quad (13)$$

If $m \leq m_1$, the optimization program of group $M$ leads to negative values for $a^*$. We assume that the diaspora can only provide a positive contribution. Nonetheless, theoretically, negative values for $a$ could also be considered to illustrate, for instance, the diaspora retrieving capital from the home country.\(^8\) When $m$ reaches $m_1$, the diaspora becomes big enough for a strictly positive involvement in the conflict to be optimal. The size of this contribution increases with the number of migrants $m$. Finally, when $m$ equals $m_2$, the contribution of the diaspora is such that $\theta_O$ reaches one. The constraint that $\theta_O$ cannot be larger than one induces the expression of $a^*(m)$ when $m \geq m_2$.

The graphical representation of $a^*(m)$ is displayed in Figure 2.

![Figure 2: Equilibrium response of group M.](image)

---

\(^8\)This possibility of negative $a$ will be considered in Appendix 2
2.2.2 Equilibrium

**Assumption 1** Before describing the conflict equilibrium, and in order to have shorter expressions, we impose a few restrictions on the parameters. In particular, we assume that:

- \( \gamma = 1/2 \), i.e. there is symmetry in conflict between groups \( E \) and \( O \),
- \( \kappa = 1 \), i.e. groups \( O \) and \( E \) have the same productivity, and
- \( \eta = 1 \), i.e. migrants value the public good as much as residents.

The model, however, can be fully solved in the general case of \( 0 < \gamma < 1 \), \( \kappa > 0 \) and \( \eta > 0 \) and yields qualitatively similar results (see Appendix 1).

Finally, we make the following assumption on the relative size of the two groups of residents:

\[
\frac{1-\delta}{2} < \frac{\epsilon_O}{\epsilon_E} < \frac{1-\delta}{\delta}.
\]

This assumption ensures simpler results but, again, is not necessary for the characterization of the model.

Accounting for Assumption 1, we can rewrite Equations (12) and (13) the following way:

There exists \( m_1 \) and \( m_2 \) such that:

\[
a^*(m) = \begin{cases} 
0 & \text{if } m \leq m_1 \\
\frac{y\epsilon_E + (\epsilon_O - m)((2 - \delta)m - \epsilon_O)}{\epsilon_E [\epsilon_O - \delta m]} & \text{if } m_1 < m < m_2 \\
\frac{y\epsilon_E + (\epsilon_O - m) - \sqrt{\epsilon_E (\epsilon_O - m) y \chi_R}}{\epsilon_E} & \text{if } m \geq m_2
\end{cases}
\]  \quad (14)

Moreover,

\[
m_1 = \frac{\epsilon_O}{2 - \delta}.
\]  \quad (15)

In the rest of the paper, we call regions A, B and C the regions where \( m \leq m_1 \), \( m_1 < m < m_2 \) and \( m \geq m_2 \) respectively.

The minimal size of the diaspora such that it starts intervening actively in the conflict is smaller when \( \epsilon_O \) is smaller, and larger when \( \delta \) is larger. Thus, when the diaspora emanates from a relatively smaller group, it gets more promptly involved in the conflict at home to support its (mechanically
relatively weaker) origin group. On the other hand, when the war is more destructive, the diaspora needs to be bigger before starting intervening.

**Proposition 1** The value of the diaspora’s contribution at equilibrium \( a^*(m) \) is equal to zero over region A and it is an increasing function of \( m \) over region B and a U-shaped function of \( m \) over region C.

**Proof.** Follows from the inspection of the partial derivatives of the expression of \( a^*(m) \) given by Equation (14).

When the size of the diaspora is smaller than \( m_1 \), there is no contribution from migrants. When \( m_1 < m < m_2 \), the diaspora intervenes actively in the conflict, and its contribution increases with its size. Finally, when \( m \) exceeds \( m_2 \), the contribution of the diaspora ensures that \( \theta_O \) remains constant and equal to one. In this setting, an additional increase of the size of the diaspora has a U-shaped effect on the diaspora’s involvement. [Interpretation to be verified:] First, when the diaspora becomes bigger, the contribution is dissolved between more migrants which allows the subsidy \( a^*(m) \) to diminish. At the same time, the shrink of the number of residents makes it more and more difficult to prevail in the conflict, and thus at one point the compensation from the diaspora that ensures that all the resident members remain soldiers needs to be bigger.

Finally, we obtain the conflict equilibrium by replacing \( a^*(m) \) in \( \theta_E^*(a) \) and \( \theta_O^*(a) \):

\[
\theta_E^*(m) = \begin{cases} \frac{(\epsilon_O - m)\epsilon_E}{y(\epsilon_E + (\epsilon_O - m))^2} \chi R & \text{if } m \leq m_1 \\ \frac{(\epsilon_O - \delta m)(2\epsilon_E + \epsilon_O - m(2 - \delta))}{4y(\epsilon_E + (\epsilon_O - m))^2} \chi R & \text{if } m_1 < m < m_2 \\ \frac{\sqrt{\epsilon_E(\epsilon_O - m)y\chi R - y\epsilon_E(\epsilon_O - m)}}{y\epsilon_E} & \text{if } m \geq m_2 \end{cases}
\]

(16)

and

\[
\theta_O^*(m) = \begin{cases} \frac{(\epsilon_O - m)\epsilon_E}{y(\epsilon_E + (\epsilon_O - m))^2} \chi R & \text{if } m \leq m_1 \\ \frac{(\epsilon_O - \delta m)^2 \epsilon_E}{4y(\epsilon_O - m)(\epsilon_E + (\epsilon_O - m))^2} \chi R & \text{if } m_1 < m < m_2 \\ 1 & \text{if } m \geq m_2 \end{cases}
\]

(17)
Proposition 2

- Over region A, the share of their labor force that groups E and O allocate to the conflict at equilibrium is a $\cap$-shaped function of $m$.

- Over region B, $\theta^*_O$ is a growing function of $m$ while $\theta^*_E$ is $\cap$-shaped.

- Over region C, $\theta^*_O$ is constant and $\theta^*_E$ is a $\cap$-shaped function of $m$.

Proof. Follows from the inspection of the partial derivatives of the expressions of $\theta^*_E(m)$ and $\theta^*_O(m)$ given by Equations (16) and (17).

Over region A, where there is no contribution from migrants, groups $O$ and $E$ have symmetric behaviors and allocate the same share of their labor force to the conflict. In both groups, the share of soldiers increases with the number of residents of group $i$ ($i = E, O$) if the number of residents of group $i$ is smaller than the number of residents of group $j$ ($j = E, O$ and $j \neq i$). This reflects the fact that an increase in the size of the group that is already dominant makes both group allocate less labor force to the conflict, while an increase in the size of the group that is initially smaller makes both group allocate a larger share of their labor force to the conflict. In this setting, although the diaspora does not contribute to the conflict, its existence affects the number of residents from group $O$ and thus the two groups’ decisions through a size effect. Namely, the share of soldiers in each group is a $\cap$-shaped function of $m$. When the number of migrants gets larger, group $O$ becomes relatively weaker than group $E$, and increases its share of soldiers to compensate which is imitated by group $E$ to keep a relative advantage in the conflict. At one point, when the diaspora grows, the pool of available soldiers becomes to small for group $O$ to be able to prevail in the conflict, group $O$ decreases its investment in the war which allows group $E$ to do the same.

Over region B, the fact that the diaspora intervenes in favor of group $O$ is internalized by both groups in their decision over the optimal share of soldiers. In this case, at equilibrium, the two groups do not have symmetric behaviours, as opposed to the case when the diaspora is passive (corner solution). In particular, the size of the diaspora positively affects the share of soldiers in group $O$, while its impact on $\theta^*_E(m)$ is of ambiguous sign (it is positive when $m < \frac{\delta_E}{1-\delta}$ and vice versa). An intuition for the latter result is that when the size of the diaspora is relatively small compared to the size of group $E$, the intervention of the diaspora to support group $O$ in the conflict...
does not represent a too big threat for the chances of group $E$ to prevail. Thus, when $m$ increases, making the contribution of the diaspora to group $O$ bigger, group $E$ will increase its share of soldiers to compensate. On the other hand, when the size of the diaspora is relatively big compared to the size of group $E$, migrants’ intervention might seriously affect group $E$’s expectations of victory. In this context, an additional increase in the size of the diaspora can become deterrent and make group $E$ allocate a smaller and smaller share of its labor force to a conflict in which its chances to prevail are tiny.

Last, when $m$ exceeds $m_2$ in region C, the amount that the diaspora transfers makes sure that the share of soldiers in group $O$ is equal to one. Over this region, the effect of $m$ on $\theta_E^*(m)$ is again of ambiguous sign: it is first positive (the decreasing number of soldiers in group $O$ increases the chances of group $E$ to prevail in the conflict), and then negative (at one point, the shrink of the size of the army of the opponent group is such that group $E$ can diminish its own share of soldiers without endangering its chances to prevail in the conflict).

Although interesting, regions A and C are less informative regarding the interactions between diaspora and conflict since they correspond respectively to a situation where the diaspora does not contribute to the conflict and only plays a role through a mechanical size effect, and to a situation where the involvement of the diaspora is such that the group of origin invests all its resources in the war. In what follows, we focus on region B, where we observe simultaneously the size effect and the contribution effect of the diaspora. We thus concentrate on the values of $m$ that are between $m_1$ and $m_2$. The two corner solutions are investigated in Appendix 3.

2.3 War versus peace

Given the equilibrium value $\theta_i^*(m)$ ($i = E, O$), the leader of group $i$ may prefer to engage in a negotiation, which implies a fixed cost for both groups, rather than initiating conflict, which destroys resources and requires labor force. For this to be the case, there must exist a non-empty set of values of $s$ such that the utility of group $i$ in case of war, $u_{i,w}$, is lower than its utility if a peaceful settlement is reached, $u_{i,p}$. However, for negotiation to actually take place, there must exist values of $s$ such that both groups are better off without war.
Replacing $a^*(m)$, $\theta'_E(m)$ and $\theta'_O(m)$ into Equations (5) and (6), the utilities of the two groups in case of conflict can be rewritten as:

$$u_{E,w}(m) = (1 - \delta) \left( y + \frac{(2\epsilon_E + \epsilon_0 - m(2 - \delta))^2\chi R}{4(\epsilon_E + (\epsilon_O - m))^2} \right),$$  \hspace{1cm} (18)

and

$$u_{O,w}(m) = (1 - \delta) \left( y + \frac{(\epsilon_O - \delta m)^2\chi R}{4(\epsilon_E + (\epsilon_O - m))^2} \right).$$  \hspace{1cm} (19)

Negotiating peace allows to avoid the destruction $\delta$ that is generated by conflict, and to keep all the labor force in the productive sector ($\theta_O$ and $\theta_E$ are set to zero). However, it is associated with the fixed cost $Z$ for each group. In case of peace, groups $E$ and $O$ thus respectively reach the following utilities:

$$u_{E,p} = y + s\chi R - Z,$$  \hspace{1cm} (20)

and

$$u_{O,p} = y + (1 - s)\chi R - Z,$$  \hspace{1cm} (21)

the sharing rule $s$ that the two group agree on in case of peace being assumed to be the outcome of a process of Nash-bargaining.

Solving $u_{i,p} = u_{i,w}$ (for $i = E, O$), we can determine two threshold functions $\tilde{s}_E(m)$ and $\tilde{s}_O(m)$ that are such that groups $E$ and $O$ are indifferent between conflict and peace. Equalizing utilities at war and at peace leads to the following thresholds of indifference between conflict and peaceful settlement:

$$\tilde{s}_E(m) = \frac{Z - \delta y}{\chi R} + (1 - \delta) \left( \frac{(2\epsilon_E + \epsilon_0 - m(2 - \delta))^2}{4(\epsilon_E + (\epsilon_O - m))^2} \right),$$  \hspace{1cm} (22)

and

$$\tilde{s}_O(m) = 1 - \left( \frac{Z - \delta y}{\chi R} + (1 - \delta) \left( \frac{(\epsilon_O - \delta m)^2}{4(\epsilon_E + (\epsilon_O - m))^2} \right) \right).$$  \hspace{1cm} (23)
Proposition 3 There exists two threshold values of $s$, $\tilde{s}_E(m)$ and $\tilde{s}_O(m)$, such that a pacific settlement is viable only if $\tilde{s}_E(m) < \tilde{s}_O(m)$.

Proof. Solving $u_{E,w} = u_{E,p}$ allows us to determine the threshold level $\tilde{s}_E(m)$ such that group $E$ prefers pacific settlement if the peacefully negotiated $s$ is larger than $\tilde{s}_E(m)$. In the same fashion, from $u_{O,w} = u_{O,p}$ we can deduce $\tilde{s}_O(m)$ below which group $O$ prefers to negotiate peace. 

The functions $\tilde{s}_E(m)$ and $\tilde{s}_O(m)$ both decrease with $m$ over region B: a larger diaspora induces a higher propensity for group $O$ to engage in conflict, and a higher propensity for group $E$ to prefer a peaceful settlement. This reflects the fact that $m$ strengthens the bargaining power of group $O$ by increasing its conflict outcome $u_{O,w}$. To assess whether the groups choose to negotiate peace or to go to war in function of the value of $m$, we need to characterize under which conditions $\tilde{s}_E(m)$ is larger (respectively, smaller) than $\tilde{s}_O(m)$, in which case war (respectively, peace) will occur.

Solving $\tilde{s}_E(m) = \tilde{s}_O(m)$ yields two possible solutions, that we denote $\hat{m}$ and $\bar{m}$ (with $\hat{m} < \bar{m}$). These solutions correspond to switches from peace to war or from war to peace. Both of them exist only if $Z < Z_0$ with

$$Z_0 = \delta y + \frac{1}{4}(1 + \delta)\chi R. \quad (24)$$

Moreover, $\tilde{s}_E(m)$ is a convex decreasing function of $m$ over region B and is U-shaped over $[-\infty; \infty]$. Thus, if $Z > Z_0$, the curves $\tilde{s}_E(m)$ and $\tilde{s}_O(m)$ do not cross, $\tilde{s}_E(m)$ is always larger than $\tilde{s}_O(m)$, and the size of the diaspora does not affect the outcome which corresponds to a situation of war. On the other hand, if $Z < Z_0$, the curves cross twice, and whether the diaspora has a peace-wrecking or peace-building effect depends on: (1) the values of $\tilde{s}_O(m_1)$ and $\tilde{s}_E(m_1)$, and (2) whether $\hat{m}$ and $\bar{m}$ are in the $[m_1; m_2]$ interval.

Finally, we can identify:

$$Z_1 = \delta y + \left(\frac{1}{2}\delta + \frac{(2 - \delta)^2\epsilon_E\epsilon_O}{((2 - \delta)\epsilon_E + (1 - \delta)\epsilon_O)^2}\right), \quad (25)$$

with $Z_1 < Z_0$, which determines whether the difference between $\tilde{s}_E(m_1)$ and $\tilde{s}_O(m_1)$ is positive or negative. Specifically, $\tilde{s}_E(m_1) < \tilde{s}_O(m_1)$, i.e. the groups are initially at peace, if $Z < Z_1$.

Four cases are thus possible in function of the value of $Z$:
• Case (a): Peace

If $Z < Z_1 < Z_0$ and $\bar{m} > m_2$:

- $\tilde{s}_E(m_1) < \tilde{s}_O(m_1)$, and $\hat{m}$ and $\bar{m}$ both exist.
- At $m_1$, groups $E$ and $O$ negotiate a peaceful settlement.
- The peace region being between $\hat{m}$ and $\bar{m}$, $\hat{m}$ is located at the left of $m_1$.
- $\bar{m}$ being larger than $m_2$, the diaspora is neutral and peace is always observed.

Figure 3a illustrates this first configuration.

• Case (b): Peace-wrecking diaspora

If $Z < Z_1 < Z_0$ and $\bar{m} < m_2$:

- $\tilde{s}_E(m_1) < \tilde{s}_O(m_1)$, and $\hat{m}$ and $\bar{m}$ both exist.
- At $m_1$, groups $E$ and $O$ negotiate a peaceful settlement.
- The peace region being between $\hat{m}$ and $\bar{m}$, $\hat{m}$ is located at the left of $m_1$.
- Peace is broken at $\bar{m}$ and the diaspora is peace-wrecking.

Figure 3b illustrates this configuration.

• Case (c): Peace-building diaspora

If $Z_1 < Z < Z_0$ and $\epsilon_E > \frac{1-\delta}{2-\delta} \epsilon_O$:

- $\tilde{s}_E(m_1) > \tilde{s}_O(m_1)$, and $\hat{m}$ and $\bar{m}$ both exist.
- At $m_1$, groups $E$ and $O$ are at war.
- $\hat{m}$ and $\bar{m}$ are both inside region B.
- War lasts until $m$ reaches $\hat{m}$, when the diaspora triggers a switch to peace. For a high value of $m$ ($\bar{m}$), peace is again broken.

Figure 3c illustrates this case (in a situation where $\bar{m}$ is larger than $m_2$, i.e. outside region B).
• **Case (d): War**

The diaspora is neutral with an outcome of war if $\bar{s}_E(m)$ and $\bar{s}_O(m)$ never cross, i.e., if $Z > Z_0$.

It is also the case if $Z_1 < Z < Z_0$ and $\epsilon_E < \frac{1-\delta}{2-\delta} \epsilon_O$. Then:

- $\bar{s}_E(m_1) > \bar{s}_O(m_1)$, and $\bar{m}$ and $\bar{m}$ both exist.
- At $m_1$, groups $E$ and $O$ are at war.
- $\hat{m}$ and $\bar{m}$ are both smaller than $m_1$, i.e., outside region B.

Figure 3d illustrates this last possible case.

In each figure, in case of peace, the green line represents the negotiated sharing rule derived from the Nash bargaining process. Last, notice that $\bar{s}_E(m)$ and $\bar{s}_O(m)$ are always increasing in $m$ when $m \leq m_1$, i.e., over region A. Indeed, in region A, the diaspora does not contribute and only affects the equilibrium through a size effect which makes group $E$ more prone to conflict and group $O$ more prone to peace.

### 2.4 Case studies

The predictions emerging from the model can be put in relation with case studies documented by the qualitative literature. Some examples developed in Section 1 notably appear to be consistent with the configuration of a peace-wrecking diaspora as depicted by Figure 3b.

For instance, the case of Sri Lanka can be interpreted in the configuration depicted by Figure 3b. Initially at war, i.e., at the right of $\bar{m}$, and with a strong (peace-wrecking) involvement of the diaspora, the country started a peace process in the aftermath of 9/11. This exogenous event can be interpreted in our context as a decrease in $Z$, the cost of peace, while the international community was more and more pushing for a peaceful settlement. The decrease in $Z$ makes the threshold $\bar{m}$ increase in the model. Said differently, it makes the peace region extends toward the right: for the same diaspora size, it allowed Sri Lanka to reach peace, which was an impossible outcome before given the peace-wrecking involvement of the diaspora.

[To be completed]
Figure 3: The size of the diaspora and the peace/war trade-off.
3 Endogenous diaspora: a dynamic extension

The static model developed in Section 2 assumes an exogenous, pre-existing diaspora. This hypothesis is consistent with cases of diasporas that mostly gather economic migrants. Although it is very difficult to disentangle economic migration from conflict-generated migration in the cases of countries at war (economic downturn being both a potential cause and an outcome of conflict), the qualitative literature that we referred to in Section 1 enlightens the motives of the different migration waves that built each diaspora.\(^\text{9}\) However, one cannot ignore that migration intensity is also affected by conflict in the home country, which may generate for instance sizable flows of refugees.

3.1 The set up

To account for this possibility, we develop a dynamic version of our benchmark model in which the size of the diaspora evolves over time, with a new flow of migrants adding up, in each period, to the stock of migrants abroad \(m\). This flow of new migrants is supposed to be a positive function of the difference between a reference level of utility abroad \(\bar{u}\) and \(u_{O,t}(m_t)\). Although we do not model explicitly individual migration choices, our reduced-form interpretation of migration is compatible with backward-looking resident members of group \(O\) deciding whether to migrate by comparing the utility gain attached to migration \(u_{O,t}(m_t) - \bar{u}\) to an individual-specific migration cost. For a given distribution of migration costs, a larger utility gain will translate into a larger outflow of migrants. For simplicity, we assume \(\bar{u}\) to be constant, but we could easily extend our analysis so as to consider the utility of migrants at time \(t\), \(u_{M,t}(m_t)\), as the reference level.

The size of the diaspora thus evolves over time according to

\[
m_{t+1} = \zeta m_t + b[\bar{u} - u_{O,t}(m_t)],
\]

\(^9\)For instance, Skrbiš (2007) recalls that a long-lasting Croatian tradition of emigration preceded the constitution of the diasporic shared political identity. After the flows of refugees that were triggered by the birth of the Yugoslav state at the end of World War II, he underlines that most of those who then joined the ranks of the Croatian diaspora were economic migrants. Symmetrically, after the exile of politically active Cubans right after the revolution of 1959 and during the Mariel boatlift in the 1980s, the end of the Cold War coincided with the first migration agreement between Cuba and the United States, and gave birth to what Molyneux (1999) refers to as a “purely economic diaspora”.\(^\text{22}\)
where \( 0 < \zeta \leq 1 \) and \( b > 0 \). The parameter \( \zeta \) accounts for the erosion of the diaspora over time; in the absence of explicit demographic mechanism, such erosion may be due to the process of assimilation of some migrants, who become less and less involved in the collective decision of the diaspora. The parameter \( b \) reflects the degree of openness of frontiers: the higher \( b \), the larger the flow of migrants, for a given utility gain from migration. For the time being, \( b \) is taken as constant, but it may of course evolve over time and depend on the very existence of a violent conflict that, for instance, could push destination countries to adopt more welcoming policies, and make entry easier for refugees.

Consistent with the static model, migration affects only the size of group \( O \), which at every \( t \) is equal to \( \epsilon_O - m_t \). In this setting, conflict influences migration through \( u_{O,t}(m_t) \). In case of peaceful negotiation (which occurs if \( \bar{s}_E(m) < \bar{s}_O(m) \)), the sharing rule \( s \) that the two group agree on is assumed to be the outcome of a process of Nash-bargaining. The transition function in Equation (26) is piecewise, depending on whether \( s \) is the outcome of conflict or negotiation and on whether we have interior \( (m_1 < m < m_2) \) or corner solutions.

We can establish conditions under which a steady-state exists and/or is stable \([to be done]\), and call \( m_{SS} \) and \( s_{SS} \) the stationary values of the diaspora and \( s \), respectively.

### 3.2 Simulations

Section 2 puts forward the existence of four different cases, in which the diaspora may be peace-wrecking, peace-building or neutral. We now proceed to numerical simulations of the dynamic model, focusing on the first two cases. In particular, we keep unchanged the following set of parameter values: \( \{\epsilon_O = 0.4, y = 2, \kappa = 1, R = 2, \gamma = 0.5, \delta = 0.1, \chi = 0.6, \eta = 1, Z = 0.5, \zeta = 0.7, \bar{u} = 3\} \), as well as the initial condition \( m_0 = 0.1 \). The value of \( \epsilon_E \) is instead different in the peace-wrecking and peace-building examples. For each of these two cases, we will further generate two subcases, corresponding to a low and a high value of \( b \), so as to compare the joint evolution of migration and conflict when national borders are relatively closed or open, respectively.
3.2.1 Peace-wrecking diaspora

If $Z < Z_1 < Z_0$ and $\bar{m} < m_2$, $s$ is determined peacefully when $m < \bar{m}$, and through open conflict when the size of the diaspora exceeds $\bar{m}$.

Within this scenario, which is simulated by setting $\{\epsilon_E = 0.2\}$, we consider two different examples for $b = 0.15$ (easier migration) and $b = 0.1$ (more difficult migration). Figure 4 describes the dynamics of the model with a high $b$. In particular, panel (a) depicts the transition function $m_{t+1} = f(m_t)$ and the stationarity condition $m_{t+1} = m_t$, whose intersection corresponds to $m_{SS}$, the steady-state value of $m$. Panel (b) depicts the joint evolution of $m$ and $s$, each black point corresponding to the combination of these two values at a specific instant of time. Panels (c) and (d) display the trajectories of $m$ and $s$, respectively, as a function of time. Figure 5 presents the same graphs, when migration is more difficult (smaller $b$).

Unsurprisingly, the steady-state value of $m$ is larger when migration is easier (higher $b$). By construction, in both cases the diaspora reaches a stationary size comprised between $m_1$ and $m_2$, so that the equilibrium is located within region B. If $b$ is high, the dynamics of migration drives the system to open conflict, at the steady-state. This corresponds to the case of an actually peace-wrecking diaspora. If instead $b$ is low, the steady state is located in the peace region: although potentially peace-wrecking, the diaspora never attains the necessary size to trigger a switch from peace to war. A quick look at the trajectory of $s$ can also reveal that the steady-state repartition of the contested resource is more favorable to group $O$ in the case of easy emigration, where the two groups end up fighting, than in the case of a low $b$, when the steady-state is located in the peace region.

3.2.2 Peace-building diaspora

If $Z_1 < Z < Z_0$ and $\epsilon_E > \frac{1-\delta}{\gamma+3}\epsilon_O$, $s$ is determined through open conflict when $m < \bar{m}$ and through peaceful negotiation when the size of the diaspora exceeds $\bar{m}$. We simulate this case by setting $\{\epsilon_E = 0.4\}$, and considering successively two degrees of openness of the frontiers: $b = 0.1$ in Figure 6 and $b = 0.06$ in Figure 7.

Again, panels (a)-(c) show that the steady-state size of the diaspora is lower when there are
Figure 4: Dynamic simulation – Peace wrecking diaspora and low $b$
Figure 5: Dynamic simulation – Peace wrecking diaspora and high $b$
Figure 6: Dynamic simulation – Peace building diaspora and high $b$
Figure 7: Dynamic simulation – Peace building diaspora and low $b$
stronger barriers to migration ($b$ low, Figure 7) than in the case of a more open world (Figure 6). Notice also that, as in the previous Subsection, the chosen configuration of parameters ensures that the maximization problem of the diaspora has an interior solution and the optimal value of $\theta_O$ remains strictly inferior to zero all along the transition path of $m$ (i.e. $m_1 < m_{SS} < m_2$). Here, the openness of frontiers plays a decisive role in triggering a switch from conflict to peace: too strong barriers to migration may prevent the diaspora from reaching the threshold value $\hat{m}$, and thus hamper the transition from war to peace (with the steady-state of the system falling in the war region, i.e. $m_{SS} < \hat{m}$). As far as the sharing rule is concerned, our simulations show that it converges toward a steady-state value which is slightly more favorable to group $O$ in the case of a higher $b$ (open world case).

### 3.3 Extension

The dynamic version of our model allows us to endogenize the diaspora, by making the size of migration depend on the utility in the home country, which in turn depends on conflict (or peace). However, the outburst of civil war does not only affect the willingness to migrate but also the attitude of host countries towards potential immigrants. For instance, the very existence of a civil war may transform prospective economic migrants into refugees, thus raising their chance to leave their home country, or induce host countries to soften their immigration policies.

To account for this possibility, which will generate interesting implications, we assume that the value of $b$ depends on whether peace or war is prevailing at time $t$. More precisely, we denote by $b_p$ and $b_w$ the two possible values that $b$ can take with peace or war, respectively, and assume $b_w > b_p$.

As far as our numerical exercise is concerned, we set $b_w = 0.15$ and $b_p = 0.1$, and run our simulations under the peace-wrecking diaspora hypothesis, using the same parameter values as in Section 3.2.1, but changing initial conditions to deal with the emergence of multiple equilibria. Figure 8 summarizes the dynamics obtained starting from a $m_0 = 0.1$, while Figure 9 depicts the results of our simulations when the initial size of the diaspora is larger (namely, $m_0 = 0.34$).

Panel (a) of Figures 8 and 9 is the same, and shows how initial conditions matter and two different steady states may emerge. The first equilibrium corresponds to a peaceful situation, with
Figure 8: Dynamic simulation in the case of peace-wrecking diaspora with \( b_p < b_w \) and \( m_0 \) small

\[ m_{SS} < \bar{m}, \text{ while the second one falls in the war region, as } m_{SS} > \bar{m}. \]

Non-ergodicity depends on the assumption of \( b_w \neq b_p \), which explains the jump in the transition function for \( m_t = \bar{m} \), and define a kind of poverty trap.

In particular, as shown by Figure 8, when the initial size of the diaspora is smaller than the threshold \( \bar{m} \), the economy will end up in peace, with a smaller stationary stock of migrants, and a relatively large steady-state value of \( s \). If instead \( m_0 > \bar{m} \), Figure 9 shows how the steady-state, located in the war region, is characterized by a larger diaspora and a sharing rule (determined through violent conflict) which is more favorable to group \( O \).
Figure 9: Dynamic simulation in the case of peace-wrecking diaspora with \( b_P < b_W \) and \( m_0 \) large
3.4 Policy implications

[To be done]

4 Conclusion

This paper presents a simple model of conflict to explore how diasporas affect the likelihood of war in their homeland. Two groups contest a resource that can be either shared peacefully or through violent conflict. In the second case, since war involves soldiers, each group must collectively decide on how it allocates its resident labor force between production and conflict.

We assume that a diaspora, emanating from one of the two groups of the home country, can get involved in the conflict by transferring financial resources which are pooled by its group of origin to subsidize soldiers’ activity. The decision of the group of migrants is taken collectively, assuming that migrants also derive utility from the resource contested in their home country. We find that while small diasporas do not decide to get involved in the conflict, bigger ones do, and they contribute all the more as their size grows. Moreover, the minimal size of the diaspora that is such that it starts intervening actively in the conflict is shown to depend on the characteristics of the country of origin. In particular, diasporas are more likely to intervene if they emanate from relatively small groups in the country of origin. The share of the labor force that is allocated to war by the group of origin in the home country also increases with the size of the diaspora.

Second, we analyze the tradeoff made by resident groups between war and peace. We assume that, given the characteristics of the conflict equilibrium, the two groups that reside in the home country can decide to negotiate a peaceful settlement if there exists a sharing rule of the contested resource that make them both better off than conflict. Although the diaspora is not directly involved in this tradeoff, it indirectly plays a role by determining the characteristics of the conflict equilibrium. We find that, depending on the characteristics of the country of origin, the diaspora can have a peace-wrecking or a peace-building effect.

Finally, to go further in the investigation of the migration–conflict nexus, we develop a dynamic version of the model which additionally accounts for the impact of war on emigration, so as to make
the evolution of the diaspora endogenous. This allows us to analyze the joint dynamics of conflict in the homeland and of diasporas. We assume that each period of time is characterized by a new flow of migrants, who join the pre-existing diaspora in the host country. The size of this flow is affected by conflict, because residents decide to migrate or not in the next period in function of their current level of utility which is determined by the intensity of war and by the amount of contested resource to which they have access. Depending on the country’s characteristics, we can generate various configurations in which the diaspora contributes to a peaceful or to a conflicting steady state. Finally, if we assume that the degree of openness of the frontiers depends on the conflict in the homeland (for instance if host countries implement specific programs to welcome refugees), multiple equilibria emerge and the initial size of diaspora is determinant with respect to the long run possibility of peace.

References


& Latin America: The New Agenda, edited by J. Bulmer-Thomas and J. Dunkerley. Institute of 
Latin American Studies, University of London and David Rockefeller Center for Latin American 
Studies, Harvard University, 287–310.

Migration on the Diffusion of Democracy: Evidence from a Former Soviet Republic.” CREAM 
Discussion Paper Series No 1320.


Journal of Comparative Economics 40 (2):159–175.

versity of Jyväskylä, Diaspeace Project.


in Conflict: Peace-makers or peace-wreckers?, edited by H. Smith and P. B. Stares. United 


Nations Publications.

99 (1):528–43.
5 Appendix

1. Relaxing Assumption 1.

2. What happens if we allow $a$ to be negative?

3. Regions A and C.

4. Migration from both groups.