

Trust Thy Neighbor: Emigration Control in Civil Conflict

ABSTRACT

During civil conflict, emigration control is one tool of many that a state can use to pursue its strategic interests. Restricting movement across borders has clear real-life implications for both combatants and civilians. This paper develops a working theory of the conditions under which a state may restrict emigration and identifies a government's trust of neighboring countries as an important cause. To test this hypothesis, I employ two-way fixed effects models, weighted and unweighted, on 146 countries from 1995-2021. I also use a dynamic difference-in-difference events study design. The results show that while attitude toward neighboring countries (a proxy for trust) has seemingly no effect on emigration freedom, there is a relationship between civil conflict and emigration freedom. In fact, in contrast to the theory originally offered by this paper, reducing emigration freedom may be an important causal factor for civil conflict.

KEYWORDS: Emigration, refugees, civil conflict, civil war, state violence, rebel behavior
border control

WORD COUNT: 6,466

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INTRODUCTION

Civil conflicts produce some of the most heinous and inhumane conditions imaginable by pitting brother against brother, decimating local economies, and creating vacuums that sometimes bring tyrants to power. Accordingly, civil conflicts and civil war have been examined by the political science literature for decades. Another consequence that has been dissected by the literature is population control via displacement. However, one of the more insidious and understudied ways a state can respond to rebel groups is by closing borders and restricting movement out of the country. Keen (2020) illustrates the point by describing what happened in Sudan:

“The RSF [Rapid Support Forces] were deployed in 2014 as Sudan’s primary border force, and this initiative was part of Sudan’s effort to demonstrate to the European Union that it could stem irregular flows of migrants from and through Sudan to Europe. Yet the RSF have also been a key instrument of repression in the face of popular protest, and indeed grew out of the notorious Janjaweed militias that played a key role in devastating Darfur from 2003 . . . This means that many of those on the ‘wrong end’ of the Darfur genocide and mass displacement have been prevented from leaving Darfur by many of those who helped to perpetrate the genocide and mass displacement,” (1147).

Why did the Sudanese regime use the RSF to restrict emigration rather than force people out? This paper develops and tests an answer based on the relationship between the incumbent regime and neighbors that share a land border.

Emigration freedom varies from state to state, and freedom of movement is certainly not a guarantee. Moreover, emigration policy can be strategically manipulated. If emigration control is tightened, then it most certainly increases the costs of emigrating by forcing clandestine exit. In a civil conflict environment, the government is typically not able to distinguish where civilian

loyalties lie (Kalyvas 2006), so locking down movement is useful for closing in on rebels, if – and especially when – they “look” like civilians. The incumbent government therefore has a strong incentive to manipulate emigration policies, secure its borders, and prevent the movement of potential rebels across state lines.

While there is a substantial body of research on refugees fleeing violence and forced relocation as a repressive tool, there is little research about the conditions under which a state will keep people where they are. Better understanding this phenomenon is important because there are significant human rights considerations at play and restricting one’s ability to escape violence would be a heinous consequence of war. Investigating the conditions that prompt a state toward preventing outward migration is important for understanding flows of refugees as well.

This project uses three methodological approaches to evaluate the relationship between civil conflict, states’ relationships with neighboring countries, and emigration freedom. First, I use two-way fixed effects as a baseline to emulate a difference-in-differences design. Second, I use weighted two-way fixed effects with robust standard errors to correct for heteroskedasticity in the error term. Third, I use a dynamic difference-in-differences events study. The results show that there is an apparent relationship between civil conflict and emigration freedom. Specifically, one’s freedom to leave the state appears to decrease in the time leading up to the outbreak of civil conflict, and after the outbreak, it continues to decrease. It is important to note, however, that these effects are not statistically significant in the events study, but are somewhat supported in the fixed effects models. Additionally, there is no apparent relationship between emigration freedom and the overall attitude that a state has toward neighboring countries. Thus, generally, the theory offered in this paper receives moderate support from the data, but the mechanism of distrust toward neighboring countries is not supported.

The first section of this paper will review the relevant literature. The second section will make an argument that the government is incentivized to close borders during conflict when it harbors distrust for a neighboring country. The third section will describe the research design, variables, and data sources. The fourth section will present the results of the analysis. Finally, the fifth section will conclude.

LITERATURE REVIEW

While determinants of immigration policy have received decades of attention, determinants of emigration policy are largely understudied. Generally, without some exogenous shock, the incentives to manipulate emigration policy should change slowly over decades (Biao 2003). Each state has different characteristics that produce incentives to restrict or allow population movement. A characteristic that exerts consistent influence on emigration policy is regime type (Miller and Peters 2018; Peters and Miller 2021). These are important and recent contributions to the study of emigration freedom. However, the effect of civil conflict on emigration freedom has not yet been explored. This section will therefore review the brief literature on border fortification, followed by studies at the intersection of migration and conflict, and finally, studies that look at other methods of population control such as displacement.

During episodes of conflict, I argue that a state – regardless of regime type – is more likely to lock down its borders and restrict emigration. Furthermore, I expect this effect to be especially strong when a government has a volatile relationship with its neighbor.

Border Fortification

The theory proposed in this paper is closely related to what Blair (2022a) called “counterinsurgent border fortification.” Blair argued that by fortifying the border, the state can deny rebels cross-border resources. Blair (2022a) studied the behavior of insurgents in Iraq as the

United States built forts along key border crossing zones in important districts. The purpose was to disrupt lines of communication, smuggling, and resource transfer between rebel groups and cross-border sponsors. Blair found that border fortifications ostensibly caused rebels to cultivate better relationships with civilian communities and argued that “counterinsurgents contemplating pursuing border control must weigh whether the good consequences — reduced insurgent capabilities — outweigh the bad — increased competition over hearts-and-minds,” (27). Blair (2022b) also found that increased inward-facing border security has been a priority in the Global South, particularly to disrupt rebel supply lines.

While Blair’s work focuses on the logistical incentives to increase border security, my theory brings in an approach that centers people. By preventing the outward movement of *people*, rather than resources, how might the state gain a military advantage over rebels? I argue that preventing the movement of people is important to securing a military victory.

Migration and Conflict

Civil conflict dislocates many people by forcing them to flee violence. Most of the work on the relationship between conflict and migration centers on where migrants and refugees eventually settle. Scholars have found that the presence of refugees, hosted in a country that borders a conflict, increases the risks of conflict in the receiving country (Choi and Salehyan 2013; Salehyan and Gleditsch 2006). More recently, other researchers have presented contradictory findings, stating that the presence of refugees is not a substantive determinant of conflict onset (Zhou and Shaver 2021). The flow of refugees may reasonably lead to interstate conflict between the sending and the receiving states, assuming that they are neighbors (Salehyan 2008). In conflict and post-conflict situations, political instability is a very important determinant for the decision to migrate. Perceptions of political instability can surpass economic

considerations that most scholars contend are top-of-mind for migrants and their decision to leave (Efendic 2016). Studies have produced different accounts of the relationship between population movement and conflict; however, this literature lacks a cohesive explanation about when the state will let refugees flee.

Emigration policies, or policies that govern a person's ability to leave a country, are important to review in the context of refugee flows. As mentioned, a large body of research discusses the impact of refugees fleeing violence, but non-refugees are not systematically tracked. Thus, the number of individuals who are forced to stay may be underestimated. I argue that emigration policy is a crucial tool for state strategy especially during civil war because the state is incentivized to counter rebels' abilities to secure outside resources. From the (potential) migrant's perspective, not all violence produces the same incentives to flee. Low to moderate levels of violence reduce incentives to migrate locally or internationally, but higher levels of violence substantially increase the likelihood of leaving (Bohra-Mishra and Massey 2011). What is missing from these studies at the individual level the role of the state. Did the government impose more costs on leaving when violence was relatively weak?

Conflict and Population Control

One might wonder why the state would bother with attempting to keep people where they are instead of committing widespread indiscriminate violence where they suspect rebels are hiding. However, indiscriminate violence is not useful and usually backfires by causing more anger and grievances from those who may have otherwise been loyal to the regime (Kalyvas 2006).

A separate (but related) variety of research analyzes the extent to which strategic population displacement becomes a viable strategy for the state during civil wars. Forced

relocation is one version of population displacement. Displacement is a topic that is consequential for this project because it is another means of population control other than closing borders. In other words, if indiscriminate violence fails, why not simply forcibly relocate a group wholesale? I review this literature because it speaks to the incentives that the state has to surround and starve rebels – as well as identify them – but the logic in the displacement literature is wanting.

To be sure, displacement happens and has consequences. Steele (2011) found that expulsion of particular ethnic groups was important for securing territorial control in Colombia, and it later shaped electoral outcomes. Lichtenheld (2020) argued that forced relocation was a useful tool for certain types of warfare, and that “[combatants] often displace not to ‘drain’ the sea, but to *map* it,” (290, emphasis in original). Using displacement allowed combatants, especially those on behalf of the state, to organize civilians by their apparent loyalties, signaled by their behavior. A person can signal their loyalty to the state by choosing an action that incurs a cost, so that the person’s intentions are credible. Actions that come without a cost do not communicate anything useful, and those types of actions are considered “cheap talk.” Lichtenheld argued that armed groups can read a civilian’s loyalty by their choices and determine the civilian’s honesty by what cost the choice incurs. Yet, there are two issues with this premise.

First, signals generated by forced relocation are hardly informative to the government. Signals generated by the displacement process are unreliable because the government does not have a precise way to differentiate civilians and rebels even if civilians follow the government order be transported elsewhere. If civilians disobey the order by staying in the area, they are likely to be labeled as rebels, and if they disobey the order by fleeing the area, they are similarly

likely to be labeled as rebels. If civilians follow the order, they are still potentially rebels that are simply attempting to blend in. Therefore, these signals are not costly enough to be useful. Instead, the government should have a stronger incentive to keep communities exactly where they are and surveil closely for rebel behavior.

Second, displacing an entire community costs time and resources that combatants should otherwise be unwilling to spend. Displacements have occurred throughout history, but it seems more plausible that displacement happens when the population can be used as a potential labor force, which would offset the costs of transportation. Otherwise, forced relocation could be viewed as a way to protect civilians and remove a potential internal resource – human capital – away from the rebels. Displacing an entire community is certainly not cheap: the process costs resources in terms of manpower, transportation, surveillance, and most importantly, it costs time. There must be other options available to the state especially when it has time-sensitive needs to cut rebels off from resources such as controlled territory or labor pools. I argue that instead of displacing entire communities, it is less expensive and more efficient for states to lock down territories and prevent any activity of suspected rebels. Governments have an advantage because they can impose further costs on movement by strengthening border security, tightening emigration control laws, and inflicting harsh punishments on those who attempt to leave the state.

This project therefore seeks to answer a question currently unanswered in the literature: during intrastate conflict, are states incentivized to restrict emigration and tighten border security? If so, what other contextual factors might cause states to tighten emigration control?

THEORY AND HYPOTHESES

A state experiencing conflict has an overwhelming incentive to engage in population control. Civil conflict indicates a credible threat to regime stability. To defeat the rebels, assuming that an all-out contest in an active combat zone is not an option in the near term, the government must starve the insurgents of resources. Lasting defeat of the rebels also requires that the rebels have no place to where they can escape. Many rebellions in Southeast Asia have continued because the insurgents are able to maintain bases and training camps in neighboring countries, beyond the reach of the state. For example, in the late 1980s, Malaysian authorities allowed some Thai Muslim insurgent groups that operated in Southern Thailand to establish headquarters in Malaysia (Funston 2010). This dragged out the conflict and further complicated the bilateral relationship between Thailand and Malaysia, which was not repaired for more than a decade.

One way to control a population is to manipulate emigration policies so that its prohibitively costly to leave. Maintaining strict border security affords the government the opportunity to keep the rebels from reaching resources that are beyond the state's borders. Lichtenheld (2020) argued that displacement allows for mapping of the combatant and civilian communities, and that displacement is favorable to searching individual-by-individual because displacement is a more cost-effective option. Cordon-and-search operations, as he puts it, are resource intensive and inefficient. However, displacing a community also requires substantial coordination on the part of the combatants that are organizing the movement of people. Restricting emigration offers another way to get control of suspected rebels.

Restricting emigration can benefit the state in many ways. First, and most importantly, obstructing movement out of the country can cut rebels off from cross-border resources. Starving

the rebels of resources helps the state maximize the chances of an outright victory over the rebels. Second, it can keep important sources of revenue in the state, such as labor or capital if some wealthier civilians are choosing to flee. Third, it sends a signal of strength to moderates in the area. If some citizens are weak loyalists, then projection of strength over rebels could help solidify those loyalties.

Though, closing the borders comes with important trade-offs. The government must weigh the costs, such as international backlash, igniting new grievances among moderates, etc. Additionally, if the state has other goals such as altering the makeup of the population for ideologically or electorally motivated reasons, then keeping a population within its borders may not serve those goals. Ethnic cleansing may come to mind. After all, if the state can force a population to leave and never return (i.e., not displace the people in the same sense that is described above), what would be the purpose of keeping people where they are? When the state perceives that risk of rebellion will continue even after the suspected population departs, the state will be less incentivized to let them go. Rather, authorities will want to starve potential rebels from resources instead of attempting to permanently drive the rebels out – simply because the state cannot guarantee that the rebels won't return, especially to historic and ancestral homelands. In fact, Salehyan (2009) shows that sanctuary, especially sanctuary provided by neighboring states, is an important factor for maintaining a rebellion. When the state is focused on outright victory, then creating a diaspora or delaying a direct military campaign against the rebels is not in its best interest.

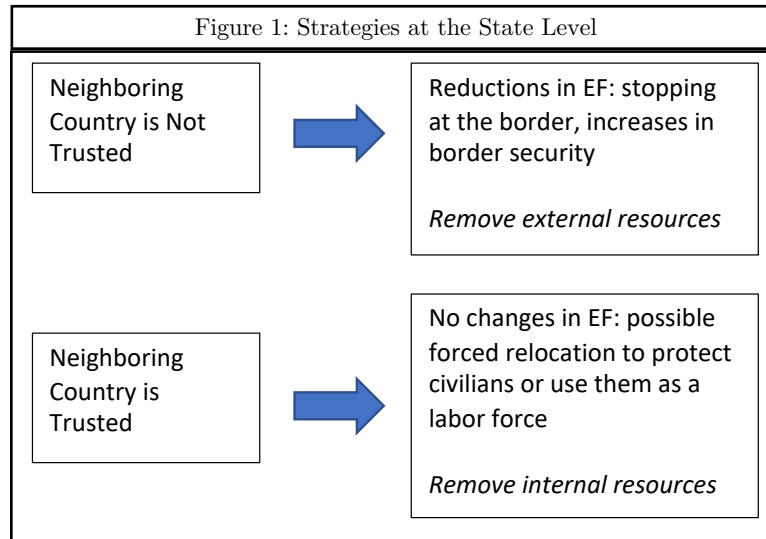
Indeed, because of the vicious nature of conflict recurrence, outright victory is preferable to the quiet death of a rebellion or to a negotiated settlement. It stands to reason that the state would be interested in eliminating all threats to the regime not only for short term, but also for

long term stability. If a state's goals include outright victory, the benefits of a potential win will outweigh the costs of border closure, since a rebellion sustained over the long term will likely cost far more. Eliminating the threat as quickly as possible would better serve the state's interest, and restricting emigration for the purposes of cutting off resources put victory within reach. In the end, I contend that closing the border occurs when the state suspects resources are available externally (sanctuary, training camps, etc.), and forced relocation may occur when the state suspects resources are available internally (civilian labor pools, capital-rich prizes such as oil derricks, etc).

However, when should a state suspect that resources are available externally? I argue that relationships with neighboring countries plays an important role. If a state suspects that its neighbor is providing safe haven, or is otherwise assisting the rebels, a state should not trust that neighbor. On the other hand, when the neighboring country is trusted, the government can request that the neighboring country expel or arrest rebels in order to assist the government in winning the war. An observable implication from a trustworthy relationship, then, would be cooperative statements or material aid. In this case, reductions in emigration freedom would not be observed, since the two countries can coordinate.

When the neighboring country is not trusted, an observable implication is that the government will be hostile to its neighbor, engaging in threats, negative posturing, and breaking off diplomatic relations. Indeed – relating back to the broader theory – when a state does not trust its neighbor, the government is incentivized to keep people within the border for two reasons. First, the government ought to starve rebels of any outside resources, which would require exit to access. Second, the government should desire to eradicate the rebels in such a way that they do not constitute a continued threat from a neighboring state. If the rebels and the neighbor both

oppose the incumbent regime, keeping rebels away from the untrustworthy neighbor is a first step to prevent future internal, and arguably, international conflict. To sum up, the state can use the blunt instrument of closing borders to surround and defeat rebels. The vastly greater number of civilians can be caught up in the process because they cannot be reliably distinguished from the rebels.



Ultimately, I propose the following hypotheses:

H₁: a state experiencing civil conflict is more likely to reduce emigration freedom than a state not experiencing civil conflict.

H₂: emigration freedom, conditional on civil conflict, will be reduced when a state has a hostile relationship with its neighbors.

RESEARCH DESIGN

This study uses two-way fixed effects models – weighted and unweighted – to test the two hypotheses. This study also uses a dynamic difference-in-differences events study technique. The variables and models are specified below. The most important variables are levels of emigration freedom, the overall attitude a state has to its neighbor, and of course the presence of

a civil conflict. These are recorded from the years 1995-2021, for 146 countries, and they are recorded by country-year. There are 3,942 observations in total.

Dependent Variable: Emigration Freedom

The primary measurement for emigration freedom is V-Dem's Freedom of Foreign Movement variable, which ranges from 0 to 4. A zero indicates that movement is "[n]ot respected by public authorities. Citizens are rarely allowed to emigrate or travel out of the country. Transgressors (or their families) are severely punished. People discredited by the public authorities are routinely exiled or prohibited from traveling," while a four indicates that movement is "[f]ully respected by the government. The freedom of citizens to travel from and to the country, and to emigrate and repatriate, is not restricted by public authorities," (V-Dem 2022). The variable itself is transformed to an interval that ranges from -3.564 to 2.850.

Independent Variable(s): Civil Conflict and Number of Rebel Groups

A civil conflict means that there have been at least 25 battle-deaths in a given year. In this study, civil conflict has two measurements: a binary measure indicating the presence of at least one conflict, and another measurement for how many rebel groups are fighting at the same time. The latter measurement has a surprisingly large range. For example, at one point India had 9 rebel groups fighting at the same time in 2000. Civil conflict occurrences are extracted from the Uppsala Conflict Data Program (UCDP) (Davies et al. 2022, Gleditsch et al. 2002).

Independent Variable: Attitude Toward Neighbors

The attitude variable refers to the relationship that a government has with countries that share a land border. I use a state's attitude toward its neighbor as a proxy for the concept of trust, which is difficult to measure. Lack of trust is operationalized by hostile interactions over cooperative interactions in a given year. The Integrated Crisis Early Warning System (ICEWS)

records interactions in international English language news sources from 1995-2021. They can range from cooperative to displays of force. To measure hostility, I focused on acts of rejection, including rejecting material cooperation, threatening, and reducing diplomatic relations from one state to its neighbors.

To measure cooperation, I also catalogued instances of cooperation between neighbors including diplomatic or material cooperation, providing aid, and expressing intent to cooperate. Like the hostility measurement, these data are recorded by country-year. I calculate overall attitude toward neighbors by taking the raw numbers of cooperative interactions over hostile interactions, logged (Weschle 2018).

Controls

Controls include logged GDP per capita and logged population, both of which are standard controls in the civil conflict literature. GDP per capita is a well-known predictor of conflict onset, and some scholars have used it as a proxy for state capacity, meaning that low GDP per capita indicated low state capacity (Fearon and Laitin 2003). Population change is a significant predictor of civil war when it is rapidly increasing, destabilizing the demographic balance especially in multiethnic states (Thayer 2009). I will also include regime type using V-Dem measurements of the electoral democracy index. Finally, I control for the number of neighboring countries.

Modeling Approaches

The working assumption is that governments have *ex ante* territorial control over every inch of its border and will not have to fight for it against the insurgent forces. This is an assumption that does not hold for every conflict, especially in cases where the state capacity is weak, and/or terrain is difficult to traverse. State capacity and difficult terrain are themselves

widely recognized predictors of civil conflict onset (Fearon and Laitin 2003). Unfortunately, solving these endogeneity problems is beyond the scope of this paper.

However, by holding the state and year constant in a two-way fixed effects model, I can solve some inferential issues, like the fact that civil conflicts are not randomly distributed. Two-way fixed effects models are equivalent to a generalized difference-in-differences design when a dummy treatment variable is included, and difference-in-differences approaches are one way to make a causal identification. Two-way fixed effects have long been used to make causal inferences in panel data, but in recent years, scholars have identified problems when the assumptions of two-way fixed effects are commonly violated. The model will account for some of these issues by using weighted fixed effects with robust standard errors (Imai and Kim 2011). Weighted two-way fixed effects are similarly equivalent to difference-in-difference design but correct for negative weights when treatment effects are heterogeneous. It is important to note that while I attempt to triangulate a causal effect by using three different estimation methods, I use the same measurements for the dependent variable, the independent variables, and the control variables across the modeling approaches. No direct adjustments to the data were made prior to model estimation.

The typical equation for a two-way fixed effects estimator is shown below, where α_i is a fixed unit effect and γ_t is a fixed time effect (Imai and Kim 2020). The term X_{it} represents the dummy treatment variable that equals 1 if the treatment occurs, and 0 if not.

$$Y_{it} = \alpha_i + \gamma_t + \beta X_{it} + \epsilon_{it}, \quad t = 1, \dots, T; i = 1, \dots, N$$

The equation for a weighted two-way fixed effects estimator, by contrast, includes the term W_{it} to represent weights.

$$\underset{(\alpha, \beta)}{\operatorname{argmin}} \sum_{i=1}^N \sum_{t=1}^T W_{it} (Y_{it} - \alpha_i - \beta X_{it})^2$$

$$W_{it} \equiv \begin{cases} \frac{T}{\sum_{t'=1}^T X_{it'}} & \text{if } X_{it} = 1 \\ \frac{T}{\sum_{t'=1}^T (1 - X_{it'})} & \text{if } X_{it} = 0 \end{cases}$$

I also employ a dynamic difference-in-difference events study (Sun and Abraham 2021). The dynamic events study treats the data as a difference-in-differences design with a staggered rollout of a treatment, i.e., civil conflict. The events study design is valuable because comparing state behavior in cross-national data always presents concerns about whether the units are truly similar enough to make generalizable claims. Sun and Abraham (2021) propose a method by which they approximate weights of aggregated treatment cohorts to create estimates that are robust to treatment effects heterogeneity. It nests a staggered adoption difference-in-differences design with the strengths of two-way fixed effects, so that pre-treatment periods can be reliably compared to post-treatment periods. Sun and Abraham derive an interaction-weighted (IW) estimator, shown below, through three steps. The first step interacts period indicators with cohort indicators ($\hat{\delta}_{e,\ell}$) and estimate weights of sample shares in each cohort for the relevant period ($\widehat{\Pr}\{E_i = e \mid E_i \in [-\ell, T - \ell]\}$), and finally, take the weighted average of estimates of the average treatment effect for the treated.

$$\widehat{v}_g = \frac{1}{|g|} \sum_{\ell \in g} \sum_e \hat{\delta}_{e,\ell} \widehat{\Pr}\{E_i = e \mid E_i \in [-\ell, T - \ell]\}$$

RESULTS

This study approached the research question using three methods. The first is a standard two-way fixed effects model, holding state and year constant. Hypothesis one is evaluated by the variables *Civil Conflict* and *Multiple Rebel Groups*. Hypothesis two is evaluated by the interaction terms between *Attitude Toward Neighbors* and *Civil Conflict*, and *Multiple Rebel Groups*, respectively. The second is a weighted fixed effects model with robust standard errors that accounts for some of the recently discovered problems with two-way fixed effects. The weighted fixed effects model evaluates hypotheses one and two functionally the same way as the standard two-way fixed effects model. Finally, the third method is a dynamic difference-in-difference events study design that uses *Civil Conflict* as a treatment and evaluates the average treatment effect for the treated to account for heterogenous treatment effects across groups that did not receive treatment at the same time.

Hypothesis One: Conflict

Table 1 shows the results that evaluate hypothesis one. It is important to note that both the *Civil Conflict* and *Number of Rebel Groups* variables were run in models on their own, rather than in the same model. Full tables are shown in Appendix A. Table 1 shows results for both standard two-way fixed effects (columns one and two), as well as results for weighted two-way fixed effects with robust standard errors (columns three and four). Columns one and two in Table 1 indicate that civil conflict and the presence of multiple rebel groups, respectively, each have a significant negative relationship with the freedom of foreign movement variable. When a state is undergoing a civil conflict, there is a marginal reduction of 0.113 of the freedom of foreign movement score. Moreover, as the number of rebel groups increases from zero, there is an expected change of -0.045 in the freedom of foreign movement score. These results are

significant at the 0.01 level. Both variables again remain significant when controls are added, as shown in column two. Interestingly, the marginal impact of the number of rebel groups increases when controls are added to the standard two-way fixed effects design. As expected, the marginal impact for the binary civil conflict variable decreases when controls are added.

Table 1: Emigration Freedom and Conflict, Hypothesis One

	<i>Dependent variable:</i>			
	Freedom of Foreign Movement			
	(1)	(2)	(3)	(4)
Civil Conflict (Binary)	-0.113*** (0.028)	-0.081*** (0.023)	-0.192** (0.096)	-0.092 (0.064)
Number of Rebel Groups	-0.045*** (0.013)	-0.048*** (0.011)	-0.122** (0.058)	-0.059 (0.037)
Controls:	N	Y	N	Y
Model Type:	2FE	2FE	W2FE/RSE	W2FE/RSE
Observations in 2FE:	3,942	3,853		
Unique Units in W2FE:			146	146

Note: *Civil Conflict* and *Number of Rebel Groups* Variables were run in separate models

*p<0.1; **p<0.05; ***p<0.01

The standard two-way fixed effects design shows support for hypothesis one when viewing civil conflict as a binary, or by counting the number of rebel groups present in the country. Columns three and four in Table 1 show the results for a weighted two-way fixed effects model with robust standard errors. While civil conflict and multiple rebel groups are statistically significant in their respective baseline models, the variables are no longer significant once controls are added. I will note that in column four, the estimate for multiple rebel groups is just shy of significance with a p-value at 0.11.

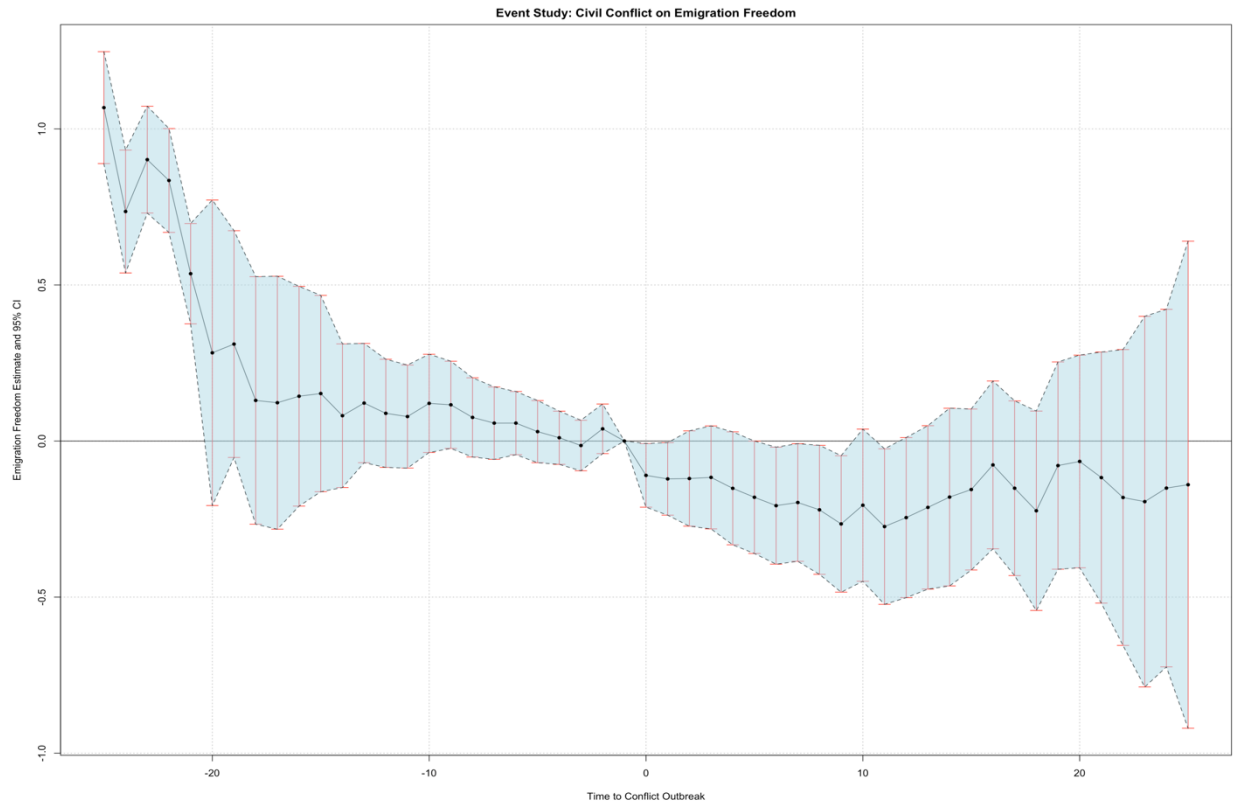
In any event, the data show moderate support for hypothesis one, meaning that there is some significant relationship between the presence of civil conflict and a reduction in the ability to leave a country freely. However, when I take a more conservative approach with weighted two-way fixed effects – which is far less likely to reject the null hypothesis – the relationship between civil conflict and emigration freedom loses clarity and is not statistically significant.

Yet, there are also other research designs that can investigate the same phenomenon. The dynamic difference-in-difference events study design evaluates hypothesis one. Table 2 on the following page shows that the average treatment effect for the treated is not significant. The effect of civil conflict does move in the expected direction, showing a negative relationship, but there is not enough evidence to reject the null hypothesis.

Democracy is the only significant predictor for changes in emigration freedom, showing that as a state ranks higher on V-Dem's electoral democracy index,¹ the more likely it is to have better freedom of foreign movement. Despite the null findings, Figure 2 does indicate that as time to treatment decreases, freedom of foreign movement is more likely to be restricted. The 95 percent confidence bars cover zero in the figure, but it does move in the expected direction according to the theory proposed in this paper.

Table 2: Dynamic Diff-in-Diff Events Study	
Civil Conflict on Freedom of Foreign Movement	
Quantity/Variable	Estimate
Average Treatment Effect for the Treated (ATT)	-0.169 (0.103)
Democracy	2.560*** (0.357)
GDP per Capita	-0.000 (0.000)
Population, Logged	-0.036 (0.315)
Number of Neighbors	0.004 (0.144)
Observations: 3,853	Adjusted R ² : 0.913 Within R ² : 0.388
<i>Note: *p < 0.1; ** p < 0.05; *** p < 0.01</i>	

¹ Freedom of Movement is aggregated into V-Dem's liberal democracy index, but not the electoral democracy index, used here.



Hypothesis Two: Trust

Table 3 shows the results that evaluate hypothesis two. The mechanism of neighborly trust is tested by an interaction term that multiplies the conflict variables (*Civil Conflict* and *Number of Rebel Groups*), respectively, with the overall attitude a country has toward its neighbors. The “better,” or more cooperative the attitude, the higher the attitude score will be. The interaction term directly tests hypothesis two by only including the population of countries undergoing a civil conflict because otherwise the effect is zero. Overall, the attitude that a country has toward its neighbors moves in the expected direction. In other words, the better the attitude, the more freedom of foreign movement. However, the attitude variable is not significant in any of the models.

In column one, the interaction term moves in the expected direction. Attitude toward neighbors in the negative direction would show that hostile attitudes would result in negative

effects on freedom of foreign movement (alternatively, cooperative attitudes indicate positive effects on freedom of foreign movement). The interaction term is in the expected direction because civil conflict has a negative effect, and more hostile attitudes would also have a negative effect. Multiplied together, the coefficient is positive – but insignificant. In the other columns, the

Table 3: Emigration Freedom and Conflict, Hypothesis Two

	<i>Dependent variable:</i>			
	Freedom of Foreign Movement			
	(1)	(2)	(3)	(4)
Attitude Toward Neighbors	0.009 (0.010)	0.014 (0.010)	0.036 (0.042)	0.033 (0.038)
Civil Conflict*Attitude	0.028 (0.020)		-0.029 (0.062)	
Number of Rebel Groups*Attitude		-0.001 (0.009)		-0.019 (0.024)
Controls:	Y	Y	Y	Y
Model Type:	2FE	2FE	W2FE/RSE	W2FE/RSE
Observations in 2FE:	3,853	3,853		
Unique Units in W2FE:			146	146

*p<0.1; **p<0.05; ***p<0.01

interaction terms do not move in the expected direction and are also insignificant.

Table 6, shown in Appendix A, displays a standard two-way fixed effects model that only evaluates the effect of attitude toward neighbors on freedom of foreign movement in countries undergoing civil conflict at the time. The effect is extremely small, and statistically insignificant, conforming to the results found with the interaction terms. Generally speaking, the results show moderate support for hypothesis one and no support for hypothesis two whether I use a standard two-way fixed effects design or a weighted fixed effects design with robust standard errors.

Endogeneity Concerns, Dependencies, and Limitations

No research design is perfect. This section will discuss some of the limitations and inferential issues that are present in this project. First, two-way fixed effects cannot account for

all inferential problems. I chose to use the two-way fixed effects models because civil conflict is not randomly distributed. In Figure 2, it is clear that emigration freedom is decreasing even before the onset of civil conflict, so there may also be some reverse causality happening. Perhaps, as rebel groups start to organize and grievances become more acute, officials increase repressive capacity and restrict foreign movement. So, reductions in emigration freedom may have a causal effect on civil conflict onset. A bivariate Granger causality test reveals that in fact emigration freedom is a significant determinant of civil conflict, but not the other way around. In any case, there is an apparent relationship in these data that can be explored further in future research.

Second, the event study may be more appropriate for random shocks that have immediate effects. There are many contextual factors that lead up to the outbreak of conflict, so the beginning of a conflict itself is not a shock and is plausibly related to policy changes. Additionally, policy responses such as closing the borders may also not respond immediately to conflict outbreak if they indeed followed the outbreak. Thus, the event study is limited in what it can report. Because difference-in-differences and two-way fixed effects are active areas of methods research, recent innovations such as the Chaisemartin and d'Haultfoeille estimator are still being refined and fine-tuned. Some new estimators only get purchase on effects directly around the shock, rather than for the entire panel. This is why I used multiple methods and chose the Imai and Kim weighted estimators in an attempt to avoid these problems. However, no method is perfect, and thus no triangulation of methods will be perfect. I recommend new attempts to study this relationship as methods innovations continue.

Third, the panel represents only a short period of time. The ICEWS dataset covers the years 1995 to 2021, which is why I chose those years to study. However, conflict is certainly not

limited to those years and countries can begin and/or end the panel in a conflict. Consequently, data at the beginning and end of the dataset are likely to be noisy. The potential noisiness of short panel threatens the interpretability of the results, so any statistical significance found in the two-way fixed effects analysis should be taken with caution.

Fourth, the explanatory and control variables are not independent of one another, not to mention dependencies between countries. Countries that share a border may be fighting the same rebel group, or there may be spillover effects of conflict from one country to another. In international relations research, it is exceedingly rare to find true exogeneity, so it is difficult to escape dependency problems in the data. In future research, it would be wise to include spatial and temporal lags that account for neighbors' levels of emigration freedom as well as civil conflict status. Additionally, the ICEWS data can be geo-located, so the data can capture public statements from rebel groups themselves. If the rebel groups have close proximity to borders, then there might be a greater incentive to restrict emigration. For now, these ideas are beyond the scope of this study.

Fifth, country-year may not be the appropriate unit of analysis. My argument is specific to rebel groups at operating at the periphery of the state. Therefore, the study risks problems of ecological inference, or inferring information about individuals by reviewing data at the group level, because I use data that is inherently taken at the country-level rather than specific to border areas. Other works, such as Michalopoulos and Papaioanno (2014), use ethnic group-country-years as their unit of analysis, which might be appropriate here. However, because the theory described in this paper relates enforcing territorial control, a better strategy might be to geolocate rebel groups and attempt to investigate targeted state responses such as martial law or

lockdowns. Thus, in future research, using data about district or city-level lockdowns may better capture the phenomenon described in this paper.

Sixth and finally, measurement issues could be at play regarding hypothesis two. From human coding errors to data sources, there are many ways that ICEWS may not have captured true hostility or true cooperation, and by extension trust. Further refinement of the variable may well find a more significant relationship. Moreover, other variables could better capture what hostility or cooperation with a neighboring state might look like, such as militarized interstate disputes,² trade, or summits between officials.

CONCLUSION

This paper proposed a theory explaining when states might close their borders. During civil conflict, in an attempt to keep rebels away from resources in neighboring states, the government might restrict the freedom to leave. If the government suspects that a neighbor is giving resources to rebel groups, the government might engage in hostile interactions with the neighbor. Overall, the findings of this paper emphasize that there is an apparent relationship between emigration freedom and civil conflict, but it may be in the opposite direction. Closing borders and keeping people where they are may exacerbate grievances to the point where a conflict breaks out.

Additionally, there is no apparent relationship between the attitude a country has toward its neighbors that share a land border and the ability of citizens to emigrate freely. The null findings in this data could indicate that there is truly no relationship between how a state publicly acts, or the null findings could be a symptom of variable choice. Cooperation takes many forms,

² MID's were not included in this project because MID's are only recorded through 2014, which would eliminate a large portion of usable data.

and public displays of cooperation or hostility may not get at the heart of the mechanism offered in this paper.

Yet future directions of this type of research are bursting with possibility. What drives the connection between freedom of foreign movement and civil conflict? Does internal border enforcement aggravate grievances that rebels already have with the government? Does it anger would-be civilians enough to join a rebel group? What's more, the strategy of keeping people where they are, rather than strategically relocating or displacing them, is certainly used by states in crises. For example, states can impose martial law in particular districts that are experiencing violence or suspected rebel activity. In fact, martial law is rarely imposed on a country-wide basis. It is much more likely to be targeted toward a municipality, district, or state within a country because the state has limited resources. So, questions remain about when and why a state is incentivized to keep people where they are, as well as what this might do to rebel tactics. Furthermore, questions also remain about what effects these repressive tools have on civilians, and if locking down movement puts civilians in more danger.

References

- Blair, Christopher. 2022a. "The Fortification Dilemma: Border Control and Rebel Violence." Available at SSRN: <https://ssrn.com/abstract=3716311> or <http://dx.doi.org/10.2139/ssrn.3716311>
- Blair, Christopher. 2022b. "The Logic of Border Fortification in the Global South." Available at SSRN: <https://ssrn.com/abstract=4178260> or <http://dx.doi.org/10.2139/ssrn.4178260>
- Biao, Xiang. 2003. "Emigration from China: A Sending Country Perspective." *Wiley Online Library*. <https://onlinelibrary.wiley.com/doi/abs/10.1111/1468-2435.00240>.
- Bohra-Mishra, Pratikshya, and Douglas S. Massey. 2011. "Individual Decisions to Migrate during Civil Conflict." *Demography* 48(2): 401–24. doi: 10.1007/s13524-011-0016-5.
- Choi, Seung-Whan, and Idean Salehyan. 2013. "No Good Deed Goes Unpunished: Refugees, Humanitarian Aid, and Terrorism." *Conflict Management and Peace Science* 30(1): 53–75. doi: 10.1177/0738894212456951.
- Cunningham, David E. 2016. "Preventing Civil War." *World Politics* 68(2): 307–40. doi: 10.1017/s0043887115000404.
- Davies, Shawn, Therese Pettersson & Magnus Öberg. 2022. "Organized violence 1989-2021 and drone warfare." *Journal of Peace Research* 59(4)
- Efendic, Adnan. 2016. "Emigration intentions in a post-conflict environment: evidence from Bosnia and Herzegovina," *Post-Communist Economies*, 28(3): 335-352.
- Facure Alves, Matheus. 2022. *Causal Inference for the Brave and True*. <https://matheusfacure.github.io/python-causality-handbook/landing-page.html#causal-inference-for-the-brave-and-true>.
- Fearon, James D., and David D. Laitin. 2003. "Ethnicity, Insurgency, and Civil War." *American Political Science Review* 97(01): 75–90. doi: 10.1017/s0003055403000534.
- Funston, John. 2010. "Malaysia and Thailand's Southern Conflict: Reconciling Security and Ethnicity." *Contemporary Southeast Asia*, 32(2): 234–257. <http://www.jstor.org/stable/41756328>.
- Gleditsch, Nils Petter, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg, and Håvard Strand. 2002. "Armed Conflict 1946-2001: A New Dataset." *Journal of Peace Research* 39(5).
- Imai, Kosuke and In Song Kim. 2019. "When Should We Use Unit Fixed Effects Regression Models for Causal Inference with Longitudinal Data?" *American Journal of Political Science*, 63(2): 467-490.
- Imai, Kosuke and In Song Kim. 2021. "On the Use of Two-way Fixed Effects Regression Models for Causal Inference with Panel Data." *Political Analysis*, 29(3): 405-415.
- Kalyvas, Stathis N. 2006. *The Logic of Violence in Civil War*. Cambridge: Cambridge University Press.

- Keen, David. 2020. "Algorithm Blues." *Development and Change* 51(4): 1146–59. doi: 10.1111/dech.12608.
- Kim, In Song and Kosuke Imai. "wfe: Weighted Linear Fixed Effects Estimators for Causal Inference." available through The Comprehensive R Archive Network. 2011-2019.
- Lichtenheld, Adam G. 2020. "Explaining Population Displacement Strategies in Civil Wars: A Cross-National Analysis." *International Organization* 74(2): 253–94. doi: 10.1017/s0020818320000089.
- Michalopoulos, Stelios and Elias Papaioannou. 2014. "National Institutions and Subnational Development in Africa," *The Quarterly Journal of Economics*, 129(1): 151–213, <https://doi.org/10.1093/qje/qjt029>
- Miller, Michael K., and Margaret E. Peters. 2018. "Restraining the Huddled Masses: Migration Policy and Autocratic Survival." *British Journal of Political Science* 50(2): 403–33. doi: 10.1017/s0007123417000680.
- Peters, Margaret E, and Michael K Miller. 2021. "Emigration and Political Contestation." *International Studies Quarterly* 66(1). doi: 10.1093/isq/sqab088.
- Salehyan, Idean, and Kristian Skrede Gleditsch. 2006. "Refugees and the Spread of Civil War." *International Organization* 60(02). doi: 10.1017/s0020818306060103.
- Salehyan, Idean. 2008. "The Externalities of Civil Strife: Refugees as a Source of International Conflict." *American Journal of Political Science* 52(4): 787–801. doi: 10.1111/j.1540-5907.2008.00343.x.
- Salehyan, Idean. 2009. *Rebels Without Borders: Transnational Insurgencies in World Politics*. Ithaca, NY: Cornell University Press.
- Steele, Abbey. 2011. "Electing Displacement: Political Cleansing in Apartadó, Colombia." *Journal of Conflict Resolution* 55(3): 423–45. doi: 10.1177/0022002711400975.
- Sun, Liyang, and Sarah Abraham. 2021. "Estimating Dynamic Treatment Effects in Event Studies with Heterogeneous Treatment Effects." *Journal of Econometrics* 225(2): 175–99. doi: 10.1016/j.jeconom.2020.09.006.
- Thayer B. A. 2009. "Considering population and war: a critical and neglected aspect of conflict studies." *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*, 364(1532): 3081–3092. <https://doi.org/10.1098/rstb.2009.0151>.
- "The V-Dem Dataset." ... <https://www.v-dem.net/vdemds.html> (May 27, 2022).
- Weschle, Simon. 2018. "Quantifying Political Relationships." *American Political Science Review* 112(4): 1090–95. doi: 10.1017/S0003055418000461.

Zhou, Yang-Yang, and Andrew Shaver. 2021. "Reexamining the Effect of Refugees on Civil Conflict: A Global Subnational Analysis." *American Political Science Review* 115(4): 1175–96. doi: 10.1017/s0003055421000502.

Appendix A: Full Regression Tables

Table 4: Emigration Freedom and Conflict, Two Way Fixed Effects

	<i>Dependent variable:</i>					
	Freedom of Foreign Movement					
	(1)	(2)	(3)	(4)	(5)	(6)
Civil Conflict (Binary)	-0.113*** (0.028)		-0.081*** (0.023)		-0.096*** (0.025)	
Number of Rebel Groups		-0.045*** (0.013)		-0.048*** (0.011)		-0.047*** (0.011)
Democracy			2.587*** (0.076)	2.601*** (0.076)	2.589*** (0.076)	2.598*** (0.076)
GDP per Capita			-0.00000 (0.00000)	-0.00000* (0.00000)	-0.00000 (0.00000)	-0.00000 (0.00000)
Population, Logged			-0.231* (0.119)	-0.226* (0.119)	-0.244** (0.119)	-0.240** (0.119)
Number of Neighbors			0.015 (0.056)	0.025 (0.056)	0.019 (0.056)	0.027 (0.056)
Attitude Toward Neighbors					0.009 (0.010)	0.014 (0.010)
Civil Conflict*Attitude					0.028 (0.020)	
Number of Rebel Groups*Attitude						-0.001 (0.009)
Observations	3,942	3,942	3,853	3,853	3,853	3,853
R ²	0.004	0.003	0.248	0.249	0.249	0.250
Adjusted R ²	-0.041	-0.043	0.212	0.213	0.212	0.214
F Statistic	15.699*** (df = 1; 3769)	11.082*** (df = 1; 3769)	242.189*** (df = 5; 3676)	244.280*** (df = 5; 3676)	173.859*** (df = 7; 3674)	174.864*** (df = 7; 3674)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 5: Emigration Freedom and Conflict, Weighted Two Way Fixed Effects, Robust Standard Errors

	<i>Dependent variable:</i>					
	(1)	(2)	Freedom of Foreign Movement		(5)	(6)
Civil Conflict (Binary)	-0.192** (0.096)		-0.092 (0.064)		-0.091 (0.090)	
Number of Rebel Groups		-0.122** (0.058)		-0.059 (0.037)		-0.060 (0.011)
Democracy			3.683*** (0.002)	3.676*** (0.001)	3.668*** (0.001)	3.664*** (0.001)
GDP per Capita			-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.002)	-0.000 (0.000)
Population, Logged			-0.987*** (0.000)	-0.947*** (0.000)	-1.018*** (0.002)	-0.987*** (0.119)
Number of Neighbors			-0.212*** (0.000)	-0.192*** (0.001)	-0.215*** (0.056)	-0.198*** (0.056)
Attitude Toward Neighbors					0.036 (0.042)	0.033 (0.038)
Civil Conflict*Attitude					-0.029 (0.062)	
Multiple Rebel Groups*Attitude						-0.019 (0.024)
Residual Standard Error	0.5191 on 3795 df	0.5178 on 3795 df	0.3933 on 3702 df	0.3927 on 3702 df	0.3924 on 3700 df	0.3919 on 3700 df
Number of unique units: 146						
Quantity of Interest: Average Treatment Effect (ATE)						

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 6: Emigration Freedom and Conflict, Two Way Fixed Effects, Only Conflict States

	<i>Dependent variable:</i>
	Freedom of Foreign Movement
Attitude Toward Neighbors	0.012 (0.030)
Observations	710
R ²	0.0003
Adjusted R ²	-0.154
F Statistic	0.159 (df = 1; 614)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01