

## **Crossing 'Through Areas With Mines': Rethinking Determinants Of Forced Migration 1970-2016**

*Unprecedented number of forcibly displaced people and the controversy around the so called 'refugee crises' require a fresh review of the proven relationship between political violence and forced migration. This article identifies the causes of forced migration followed by deadly armed conflicts including one-sided violence and terrorism through a global cross-sectional time series data analysis from 1970-2016 with models based on refugees, internally displaced people and asylum seekers. By turning focus to intensity of violence, dispute at borders and level of freedom in the states of origin, it seeks the answers to the question of what causes variations in the number of people that flee within or beyond the borders of their home states. The results show that indicators of political violence are relatively stronger for the internally displaced. Findings also point terrorism related fatalities are a push factor for increase in the number of forced migrants. Although overall impact of socioeconomic determinants do not surprise with their ambiguity, the results do not support the increasingly popular argument that poverty drives refugee crises and that numerous forced migrants are economic refugees in disguise. On the contrary, freedom of political rights and civil liberties, ethnic dispersion and intensity of violence remain the drivers of forced displacement.*

Why do people flee? One mother has an answer to this complicated question with plain words reminding that sometimes the simplest answer may indeed be the right one: 'no one would be crazy enough to walk for three hours in the night but we had to – we were hungry. We had to cross through areas with mines'. Iraqi mother Iqbal Qalaf walked across a minefield at night with her children in search of food and safety near Kirkuk (Otten, 2016). Although she states that her action was 'crazy', it was in effect a rational choice based on a simple probability calculation: if they stayed the family was going to starve, but if they fled, there was a probability that they could survive. What is undeniably more complex is trying to mitigate so-called 'refugee crises' once large waves of forced migration happen. This article proposes to take a step back from the

debates about refugee policies and analyse the main factors behind variations in the number of people that flee as a result of violence targeting civilians simply because it is not possible to manage or even prevent forced migration flows without understanding their main drivers.

As of 2017, there are 68.5 million forcibly displaced people in the world of which 40 million are displaced within their own countries and 20 million are refugees (Global Trends 2017, 2).<sup>1</sup> What is also concerning is the rising number of refugee mortalities: International Organisation for Migration (2019) reports that 17,918 migrants and refugees have perished in the Mediterranean since 2014. This makes forced migrant deaths comparable to other types of political violence caused fatalities. Nevertheless, the factors behind the involuntary journey of forcibly displaced populations still remain an under-researched, geography and time-limited theme in International Relations to a great extent as many scholars have pointed out (e.g. BenEzer and Zetter, 2015; Chatty and Marfleet, 2013). In attempt to fill part of this gap, this study seeks an answer to the question of *what causes variations in the number of people that flee by particularly looking at intensity of violence, disputes around borders, and level of democracy and civil liberties in the home countries.*

Before proceeding to an overview of the research method and findings, it is necessary to define the main concepts that this study is based on since many key concepts of forced migration are contested. In doing so, the purpose is not to make strong claims about which definition is 'best', but to be clear about what each of these terms mean within the scope of this study. Firstly, 'conflict' in this study refers to violent conflict, which can be

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<sup>1</sup> The growth of the forced migrant population is equally striking considering there was a total of only 23 million forced migrants in 1993 (Global Trends 2014).

measured by the number of fatalities.<sup>2</sup> Since the goal is to obtain as much detailed analysis as possible, there are four categories of conflict that are included in this project: interstate conflict, one-sided conflict, non-state conflict and terrorism. Secondly, forced migrants or peoples of concern, according to the UN, mainly consist of refugees, internally displaced people (IDPs) and asylum seekers. Refugee is 'a person who, owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear is unwilling to avail himself of the protection of that country' according to the 1951 Convention and 1967 Protocol (UNHCR Protecting Refugees) and IDPs are 'displaced in their own country as a result of conflict or human rights violations' (Global Protection Cluster, 1, 2007).

Those categorized as asylum seekers by the UNHCR are included in the 'refugee' category in the large-n part of this study considering that the number of asylum seekers is too small to be tested as a separate category, but are included in the total number of forcibly displaced people.<sup>3</sup> It should also be noted that when the term leaving or fleeing from 'homes' is used throughout this study, it does not necessarily 'refer to a house or a building but can also designated land on which groups traditionally live or depend for their livelihoods' (GPC, 8, 2007). I adopt these UN definitions of forced migrants since the UN data is the source for the dependent variable (number of forced migrants by country of origin) of this project.<sup>4</sup>

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<sup>2</sup> While non-violent or unarmed-conflicts can cause people to be forcibly displaced, too, limiting the study to violent conflicts provides the opportunity to test relevant hypotheses with a consistent unit of measurement.

<sup>3</sup> The estimated number of asylum seekers is 866,000 as of 2014 according to the UNCHR (Asylum Trends 2014, 2).

<sup>4</sup> However, it is fair to question whether the UNHCR has been able to meet the challenge of non-partisan policy regarding the people of concern including refugees and has been able to produce unbiased data. In particular, there are criticisms of the UNHCR's status determination procedure by some legal scholars.

## Previous Research

Forced migration largely benefits from findings in conflict resolution literature (Balcells and Kalyvas 2014; Blattman and Miguel 2010; Davenport et al. 2003; Melander and Öberg 2006; Milton et al. 2013; Moore and Shellman 2004, 2006, 2007; Salehyan and Gleditsch 2006; Schmeidl 1997; Zolberg et al. 1992). However, considering not every one flees during armed conflicts, scholarly work should not be limited to conflict data and disentangling the forced migration puzzle goes through freeing it particularly from the two dominating approaches that are problematic.

The first is treating violence induced force migration as a separate phenomenon than other types of migration. This is problematic for couple of reasons: an analysis of how violence against civilians causes people to flee should not be alienated from migration studies that concentrate on other types of disasters, particularly considering the benefits of interdisciplinary approach (Ioncev and Moskovskij gosudarstvennyj universitet im. M.V. Lomonosova, 2002). Consequences of doing so can reach beyond the academic world. For example, sometimes states mix the meaning of asylum seekers and economic migrants (Cenciarelli et al., 2017) to avoid their legal obligations under the 1951 Refugee Convention leading to 'more labels and fewer refugees' as Zetter (2007, 172) put it.<sup>5</sup>

Additionally, the division between 'voluntary' versus 'forced' movement is often too simplistic (Coluccello and Massey, 2015) particularly when it comes to the theoretical distinction between the voluntary economic migration and refugee migration (Crawley

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For instance, Kagan (2006) questions excluding asylum seekers with otherwise valid claims from protection in countries like Egypt where the agreement with the UNHCR ruled out any permanent refuge for the asylum seekers. Additionally, Hyndman (2000) points out, the introduction and use “internally displaced person” legally in the 1990s was around the time when the UNHCR was under international pressure for countries with forced migration problems to “manage displacement” within their borders and limit the movement of fleeing people beyond their borders as much as possible.

<sup>5</sup> Add information here about the 1951 Convention.

and Skleparis, 2018). Such an approach overlooks the fact that conflicts can generate devastating economic circumstances and force people to flee. For instance, the collapse of both the political and the economic system created 'economic refugees' in Albania in the post-1990 period (King et al., 2005). Another example is the 350,000 Bulgarian Turks that fled to Turkey in 1989 as they refused assimilation policies of the Bulgarian Communist Party; they had also faced economic and social challenges as they went through cultural exclusion (Dişbudak and Purkis, 2016). However, to conclude that these examples reflect blurriness between voluntary and forced displacement would imply ambiguity, which casts a cloud over a potential empirical research. Instead, considering migrants have become increasingly mobile in modern times, it is possible to argue that there are 'intersections' between drivers of forced migration and identifying where they are may hold the key to understanding causes of it (Duda-Mikulín, 2018; Ozaltın et al., 2019).

Secondly, forced migration literature is also dominated by refugee studies. This is concerning not only because it invites selection bias, but also because it often overlooks IDPs (Bloch and Dona, 2018, 34; Fiddian-Qasmiyeh et al., 2014). However, some states target their civilian residents (who then become displaced within its borders) because they have incentives to do so (Valentino et al., 2004). There is even evidence that some actors intentionally increase level of violence until they displace enough civilians domestically to gain control of a territory (Steele, 2011); therefore, any forced migration model without IDPs would be incomplete (Moore and Shellman, 2006).

## Research Design

The models tested in the study are based on the theory that the degree to which civilians are targeted during armed conflicts directly affects the number of forced migration flows. How do different levels of intensity affect the volume of forced migration movements? Is it intensity or type of violence that triggers more people to leave? Do more countries affected by border disputes necessarily produce more forced migrants? Is terrorism an indicator of forced displacement, too? These hypotheses are tested with multiple regression models by utilizing global annual data for 1970-2015. The combined data is obtained by merging datasets from the UNHCR, World Bank, Polity Project, UCDP - including One-Sided Violence, Political Terror Scale, Peace Research Institute Oslo (PRIO), Global Peace Index and The Association of Religion Data Archives (ARDA).<sup>6</sup>

The study is based on all the states listed by the UNHCR for the period of 1970-2016.<sup>7</sup> This data is matched with deadly armed conflict data from PRIO; what remains outside the universe then are any cases of conflict that have not resulted in loss of life. Any cases that have generated forced migrants related to reasons other than deadly political violence (e.g. famines, natural disasters or unintentional human-made disasters such as a nuclear leak) remain outside the focus of this study. For the purpose of identifying relevant determinants of forced migration without limiting it to conflict data, the study also investigates freedom ratings, ethnic concentration and religious oppressions and socio-economic variables as shown in Table 1.

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<sup>6</sup> A single one that can provide all the relevant variables does not exist at this time. All the datasets are merged by reconciling by country names based on COW codes.

<sup>7</sup> For the purpose of avoiding selection bias, the annual data of displaced people by country does not exclude years with no forced migrants.

**Table 1 Operationalization of variables**

<b>Variables</b>	<b>Operationalization</b>
Dependent variable: net displaced (ii)	Number of net displaced people
Total deaths (i)	Number of all deaths in an armed conflict
Civilian deaths (i)	Number of all civilian deaths in an armed conflict
Terrorism deaths (i)	Number of all deaths due to a terror attack
Border disputes (i)	% of settled borders
Freedom	Not free=0; partially free=1; free=2
Religious oppression	%100 - % largest religion
Ethnic dispersion	%100 - % largest ethnicity
GDP per capita growth	Growth in total GDP/ country population
Unemployment (ii)	% of unemployed in total labour force
Vulnerable employment	% of vulnerable employment in total labour force
Poverty ratio	Poverty head count ratio (% of population)
Population (country/urban/rural/slums) (i)	Total number of people living in a country/rural/urban/slums

i: variables were logarithmically transformed

ii: variables were lagged.

### **Dependent Variable**

The dependent variable is the number of net displaced people (based on the UNHCR data of 1970-2016).<sup>8</sup> While the UN has been collecting this data in consultation with each government for decades, presenting and utilizing forced displacement data cannot be isolated from reliability and validity issues: unit of analysis is country although some forced migrants may rather identify themselves according to their region of origin; definition of a refugee is a disputed matter in the literature; and while the UN collects official data from governments around the world, there are also an unknown number of unaccounted forced migrants. Nevertheless, the UNHCR data has the

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<sup>8</sup> The net migration is calculated by subtracting the sum of displaced people each year from the previous year (possible negative totals are truncated to '0' following previous literature by Melander et al., 2006). The number of net displaced people by country is considered a 'count' variable.

advantage of including refugees, internally displaced people and asylum seekers as opposed to some other data sets.<sup>9</sup>

## **Independent and Control Variables**

### **Political violence**

Political violence in this study is used to refer to armed conflicts with deadly consequences including, non-state conflict, one-sided violence and terrorism. Conflict data was obtained from the Uppsala Conflict Data Program (UCDP)/PRIO dataset, which defines a conflict event as 'an incident where armed force was used by an organized actor against another organized actor, or against civilians, resulting in at least 1 direct death at a specific location and a specific date' (Croicu and Sundberg, 2016, p.9). The dataset defines armed force as 'use of arms in order to promote the parties' general position in the conflict, resulting in deaths' (Croicu and Sundberg 2017, p.9). Although the UCDP/PRIO data set is dyadic, it also provides 'the country in which the event takes place', which makes reconciliation with the rest of the data in this project possible since country is the unit of analysis here (Croicu and Sundberg, 2017, p.6).

The UCDP does not 'classify any type of violence' as terrorism; instead it evaluates events according to their targets. Therefore, its one-sided violence category 'often

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<sup>9</sup> Other options for relevant datasets either also were based on the UN data or only reported a specific forced migrant category: Migration Policy Institute reports refugees and asylums seekers; U.S. Committee for Refugees and Immigrants focuses on refugees; OECD does not include IDPs, either. Therefore, the UNHCR is the logical choice for the dependent variable data. An alternative organization providing IDP data could be Internal Displacement Monitoring Centre (IDMC), however, availability of data is still limited in this organization, too. I have chosen UNHCR for IDP data for consistency (since I use refugee data from UNHCR, too).



overlaps' with lethal terrorism events.<sup>10</sup> While this rationale is clear, it falls short of providing a clear picture of the potential impact of deadly terrorist acts on forced displacement movements.<sup>11</sup> This project uses the Global Terrorism Dataset to compensate for this missing piece. The GTD is suitable for this study for a few reasons: it is similar to the UCDP/PRIO data set in terms of its 'event-based' approach, but the data can easily be filtered by the corresponding state of each 'event' location; it includes terrorist events around the world from 1970; and it provides casualties for each event with no minimum threshold.<sup>12</sup>

If a country produces refugees or IDPs but there are no corresponding fatalities in a given year in the PRIO data, then it is compared to the Centre for Research on the Epidemiology of Disasters (CRED) supported Emergency Events Database (EM-DAT) to explain any anomalies in the data and eliminate cases that can be explained due to natural disasters.<sup>13</sup> The reason for going through this process instead of including only the list of countries reported in PRIO versus the UN list of countries is to prevent selection bias in the research. Observations that are due to natural disasters

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<sup>10</sup> Uppsala Universitet Department of Peace and Conflict Research. Available at [https://www.pcr.uu.se/research/ucdp/faq/#How\\_does\\_terrorism\\_fit\\_into\\_the\\_UCDP\\_s\\_categories\\_of\\_or\\_ganized\\_violence](https://www.pcr.uu.se/research/ucdp/faq/#How_does_terrorism_fit_into_the_UCDP_s_categories_of_or_ganized_violence).

<sup>11</sup> Although the Global Peace Index recorded slight improvements in peace in 2016, it also reported that the terrorism impact indicator had the largest deterioration with 60 per cent of countries having higher levels of terrorism than a decade ago.

<sup>12</sup> It should be noted here that while terrorism is included in non-state conflicts by some datasets, here, it is a separate variable. This is because 'ten of the 11 countries most affected by terrorism also had the highest rates of refugees and internal displacement' in 2015 (Global Terrorism Index (GTI) 2015, 3)<sup>12</sup>. However, the decrease reported by GTI (2016; 2017) in the number of people killed by terrorism over the last two years does not make the relationship between terrorism and forced migration any less important: the decline in terrorism related deaths is a pleasing development, but there is no guarantee that it will continue and even if did, there is still the issue of a relatively less explored line of enquiry: although GTI lists number of refugees and IDPs as percentage of the population among the drivers of terrorism in non-OECD countries in particular, supporting the recent studies on the same topic (e.g. Bossis and Lampas, 2018;

and Böhmelt, 2016; Choi and Salehyan, 2013; Milton et al., 2013; Okafor and Piesse, 2017), what about a reverse causality in the relationship between terrorism and forced migration where terrorist attacks may be pushing people to flee? Analysing terrorism related deaths separate from other types of (armed conflict) fatalities help to complete another part of the forced migration puzzle during this study.

<sup>13</sup> Cases of forced migration unrelated to natural disasters but with no fatalities are listed in Appendix A.

are then explained, but not excluded from the study since studies such as Bohnet et al. (2014) point out that disaster-induced migrants are particularly at risk of conflict. There is also evidence that such migration is a threat to social stability and poses a serious risk of social conflict and (particularly environmental) 'migrants are more likely to perceive conflict and challenges in their new locations' (Koubi et al., 2017, p.1).

### *Total deaths*

The models use three variables to test the impact of intensity of violence: total deaths, civilian deaths and terrorism related deaths. The expectation for all the three is the same: increases in intensity of violence correspond to increases in the number of forced migrants. First of these variables, total deaths, is the sum of the best estimate of deaths sustained by side a (deaths\_a) and the best estimate of deaths sustained by side b (deaths\_b) in conflict according to UCDP/PRIO.<sup>14</sup>

### *Civilian deaths*

Civilian deaths, also from the UCDP/PRIO dataset, are 'the best estimate of dead civilians' in a conflict 'event' (Croicu and Sundberg, 2017, p.7). Civilian deaths are the focus among all types of fatalities in testing the effect of intensity of violence since majority of forced migrants typically consist of civilians.

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<sup>14</sup> Side a or side b is always equal to 0 for one-sided violence events although this become irrelevant for the total deaths variable created for this project since it sums both sides.

### *Terrorism deaths*

Terrorism related deaths were obtained by using GTD's 'nkill' variable, which 'is the number of total confirmed fatalities for' each 'incident' including 'all victims and attackers who died as a direct result of the incident' (GTI, 2017, p.48). Total civilian deaths were calculated by summing all terrorism related casualties by year and country.

### *Border disputes*

While previous literature looked at the impact of how many borders a country has (if any) and length of those borders, number and length of borders do not necessarily affect odds of migration without controlling for various economic, social, political and terrain characteristics of countries on both sides of the borders. Although such detailed data may not be easy to collect and integrate to other datasets, it is useful to limit these controlling factors to those related to conflict data.

Datasets such as the International Border Agreements Dataset (IBAD) are helpful to add another angle to the relationship between borders and forced migration by providing information on whether a country has border dispute with neighbouring states. Since the focus of this project is the relationship between political violence and the forced migration, the IBAD was chosen over other socio-economic circumstances or terrain features and number of borders. The IBAD has a 'monadic measure' of whether a state 'settled its borders with all contiguous neighbours prior to the year in question' due to concerns about countries' border settlement and the effect of such issues about territorial peace (Owsiak, 2016, p.10). This study uses the percentage of

borders settled variable by country and year from IBAD assuming that unsettled borders positively may increase the odds of forced migration.

### *Freedom*

Regime type, stability and openness in terms of freedom of thought are common variables in conflict studies literature. Since this study's focus is on forcibly displaced people who are generally stripped off both their democratic and civil rights, Freedom House (2017) becomes the natural choice for the relevant dataset .

The Freedom House groups its variable observations into three: 'free', 'partly free' and 'not free' states based on the average of the Political Rights and Civil Liberties scores. If countries are 'free' this score is between 1 and 2.5; 'partly free' between 3 and 5.0' and 'not free' between 5.5 and 7. The expectations is the level of freedom to be directly associated with the decision to stay or leaving during armed conflicts. Accordingly, Freedom House data was recoded to three groups to give them numerical values: not free = 0; partly free = 1; free = 2.

## **Social and economic variables**

### *Ethnic concentration*

Geographical distribution of ethnicities (by country or region in this case) is one of the indicators in the models. Including an independent variable about ethnicity may initially evoke the idea of ethnic cleansing leading to inter-state or intra-state wars, but this project is not limited to such extreme cases of ethnic violence and considers existing ethnic composition of a country as a possible indicator of forced migration. Although previous research discusses the impact of certain ethnic groups in host states

(Krcmaric, 2014) and expulsion of ethnic minorities (Chatty, 2013), here the focus is on a less explored aspect: whether ethnic concentration plays a role in the decision to flee or not, with the expectation that ethnically divided countries are more likely to generate forced migrants.<sup>15</sup> Ethnic Power Relations (EPR) Dataset (Vogt et al., 2015) is suitable to use as part of this project since it annually reports size and share of ethnic population by country including the 1970-2016 period.<sup>16</sup> The study also follows Constant et al.'s (2013) logic, which focuses on ethnic concentration, defined as the size of the ethnic groups relative to the population of each country. Obtaining this data for the EPR, the largest percentage of ethnic group is subtracted from 100 per cent.<sup>17</sup> This is based on the argument that oppression by the dominating ethnic group, particularly if there is a power struggle, may potentially lead to political violence and therefore play a role in the decision making of moving.<sup>18</sup>

### *Religious oppression*

Oppression is a system of unequal treatment based on social group memberships. Religious oppression can occur when there is mistreatment of individuals or groups based on their religious affiliation (or lack of). Although the literature has not specifically focused on the relationship between religious oppression and forced migration (compared to its focus on ethnic conflicts), it is a control variable here based on recent findings. For example, Toft (2012) points out, 'religiously-inspired violence' is known to be more deadly than other types of violence and therefore directly relates

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<sup>15</sup> There is not consensus on the best way to reflect the power of 'ethnic relations'. Fearon (214, 2003) warns about the 'inherently slippery concept of an ethnic group' and argues that a study working on group oppression should reflect a sense of how citizens 'map' ethnicity in the country.

<sup>16</sup> EPR includes countries with a population of at least 250,000 and where ethnicity has been politicized.

<sup>17</sup> On theoretical and methodological issues about how to measure politicized ethnic relations, see McDoom and Gisselquist (2016); they define four particular 'sensitivity' challenges related to choice of measure, categorization, time and space.

<sup>18</sup> EPR also provides 'power status' of each ethnic group in a country, which is particularly useful to understand the dynamics of ethnicity in a society where power of an ethnic group does not necessarily correspond to the size of its population.

to the research question of this study; Kolbe and Henne (2014, 665) found that 'state-driven religious repression, in particular religious bans, tends to increase forced migration; and recently, Pew Research Centre (2018) reports an increase in government restrictions on religious practice.

Similar to the logic of ethnic concentration, religious clustering in a particular a country or region may have an impact on the decision to remain or flee leading to the following expectation: the higher the percentage of minority religion is, the more likely it is to cause tensions within a society and possibly oppression of the minority groups. Targets of this type of oppression may be called subordinates (Adams, 2013; Williams, 2012).<sup>19</sup>

#### *GDP per capita growth*

Gross domestic product per capita is commonly used as the main indicators of standard of living or well being of population in a country and can be defined as 'the aggregate of production divided by the population size' (UN Data). The growth in per capita GDP is derived as the percentage change in GDP divided by the population.

Although GDP per capita reflects the wellbeing of a nation from an individualist perspective, this is suitable for this particular study since the purpose of including this variable to understand its role in individuals' decision to stay or flee. The GDP per capita growth variable is brought from the World Bank's Databank (2016), which provides access to time series data and allows creating customized reports with much

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<sup>19</sup> Religious subordination is calculated by subtracting the percentage of the largest religion in a country from 1 (100 per cent).

of its data originating from the World Bank's member countries. The remainder of economic variables explained below also come from the same Databank.

#### *Unemployment and vulnerable employment*

Unemployment is the percentage of total labour force (modelled on International Labour Organisation (ILO) estimate). Unemployment is one of the controlling indicators in the models based on the argument that although unemployment is not a main factor in the decision to flee, it may have an impact combined with other devastating economic circumstances and threat of political violence. Lack of economic opportunities may also be a push factor leading individuals to choose their country of relocation based on economic opportunities (Adhikari, 2012).

#### *Poverty ratio*

Extreme poverty is likely to push people away and is a common economic indicator of migration, however, the controversial topic of how much this argument is relevant to cases of political violence induced forced migration is not simple to verify, particularly, considering that people's motivations can change en route (Van Hear, 2009) and several times. Nevertheless, a control variable measuring poverty is required to establish if there is any direct relationship between lack of necessary and basic needs and the decision to move during armed conflicts, particularly in light of recent research such as Betts and Collier's (2017), which recommends creation of more

Special Economic Zones (SEZs) to tackle the global 'refugee problem'. The World Bank's poverty (headcount) ratio is used to determine poverty for each country.<sup>20</sup>

#### *Population (of country, urban, rural, in slums)*

The Databank also reports time series data of population and provides specific types of population such as population living in urban versus rural areas or population living in slums, which are tested in the models to determine if certain types of population according to these demographic characteristics are more or less likely to migrate. For instance, people living in slums are expected to be in (economically) more vulnerable situations, potentially, pushing people to areas with better standards of living.

### **Findings**

Below are the hypotheses and the results are presented in Tables 2-3:

H<sub>1</sub>: The higher the intensity of conflict, the higher the number of forced migrants.

H<sub>2</sub>: The higher the level of border disputes in a country, the higher the volume of refugees it produces.

H<sub>3</sub>: The lower the level of democracy and civil liberties in a country, the higher the number of forced migrants it generates.

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<sup>20</sup> The World Bank reports included in this study apply the poverty (headcount) ratio at \$1.90 a day as a baseline for all countries. This calculation is based on 2011 purchasing power parity (PPP) and the PPP is based on a 'basket of goods approach'; it shows the ratio of prices in national currencies of the same good or service in different countries (OECD <https://data.oecd.org/conversion/purchasing-power-parities-ppp.htm>). For PPP Calculation and Estimation see <http://www.worldbank.org/en/programs/icp/brief/methodology-calculation>.



**Table 2 Descriptive statistics of the variables**

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
net displaced	5,794	106594.30	544517.30	0	1.20E+07
net displaced <sub>t-1</sub>	5,604	103117.50	530703.40	0	1.20E+07
log of total death	1,184	4.40	2.23	0	10.80
log of terror. death	2,348	2.66	2.11	0	9.48
log of death civ.	1,156	3.68	2.21	0	13.12
gdp per cap.growth	7,282	1.96	6.27	-65	141.64
poverty ratio	670	29.59	17.03	0.60	83.30
unemployment <sub>t-1</sub>	5,604	103117.50	530703.40	0	1.20E+07
log of urban pop.	8,759	14.39	2.28	7.38	20.45
log of total death	1,184	4.40	2.23	0	10.80
ethnic concentration	7,471	0.32	0.26	0	0.92
freedom	8,039	1.10	0.83	0	2.00
religious oppression	5,666	0.20	0.16	0.00	0.67

Regressions<sup>21</sup>

**Table 3.1: zero-inflated negative binomial (refugees, IDPs and asylum seekers), robust**

Dependent variable:	Reg 1	Reg 2	Reg 3	Reg 4 (inflate)	Reg 5 (inflate)	Reg 6 (inflate)
net forcibly displaced						
log(total deaths)	1.45*** (0.08)			-0.16*** (0.04)		
log(death civilians)		1.36*** (0.06)			-0.17*** (0.04)	
log(terrorism deaths)			1.41*** (0.06)			-0.12*** (0.03)
freedom	0.30*** (0.05)	0.39*** (0.06)	0.21*** (0.03)	0.29** (0.12)	0.22* (0.13)	0.46*** (0.09)
ethnic dispersion	2.10** (0.76)	2.77** (1.08)	5.02*** (1.75)	1.28*** (0.37)	1.01** (0.37)	0.32 (0.27)
religious dispersion	0.38 (0.24)	0.09*** (0.05)	0.12*** (0.06)	-1.61** (0.61)	-0.06 (0.57)	-0.15 (0.45)
log(settled borders)	5.69*** (2.56)	10.11*** (3.85)	6.37*** (2.17)	-0.23 (0.36)	-0.43 (0.35)	-0.34 (0.29)
in alpha	1.04	1.11	1.39	1.04	1.11	1.39
alpha	2.82	3.03	4.00	2.82	3.03	4.00
Wald chi-square	195.43	287.87	422.11	222.71	222.71	239.15
Log (pseudo)likelihood	-5965.62	-6144.73	-8194.55	-5799.13	-5799.13	-5882.58
Observations	711	711	1147	701	701	704

<sup>21</sup> \*\*\*: significant at 1 percent, \*\* significant at 5 percent, \*: significant at 10 percent. Count regression reports incidence rate ratios and inflation regression reports coefficients. Standard errors in parentheses.

**Table 3.2: zero-inflated negative binomial (refugees, IDPs and asylum seekers), robust**

dependent variable	Reg 7	Reg 8	Reg 9	Reg 10 (inflate)	Reg 11 (inflate)	Reg 12 (inflate)
net forcibly displaced	1.28***					
log(total deaths)	(0.05)			-0.06***		
log(death civilians)		1.21***		(0.04)	-0.05	
		(0.04)			(0.05)	
log(terrorism deaths)			1.41***			-0.12***
			(0.06)			(0.03)
freedom	0.43***	0.56***	0.21***		-0.08	0.46***
	(0.06)	(0.07)	(0.03)		(0.15)	(0.10)
ethnic dispersion	1.04	1.15	4.73***	(0.13)	1.75***	0.31
	(0.37)	(0.42)	(1.65)	(0.41)	(0.49)	(0.27)
religious dispersion	1.22	0.72	0.12***	-2.07	-1.05	-0.14
	(0.73)	(0.38)	(0.06)	(0.67)	(0.76)	(0.45)
log(settled borders)	2.86***	4.82***	6.05***	-0.03***	0.11	-0.33
	(0.94)	(1.65)	(2.28)	(0.37)	(0.42)	(0.30)
log(urban population)	0.83**	0.87**	0.97	-0.07**	-0.01	-0.01
	(0.05)	(0.05)	(0.06)	(0.06)	(0.07)	(0.05)
unemployment_L1	1.00***	1.00***		0.00***	0.00**	
	(0.00)	(0.00)		(0.00)	(0.00)	
in alpha	0.74	1.05	1.39	0.74	1.05	1.39
alpha	2.09	2.86	4.00	2.09	2.86	4.00
Wald chi-square	416.18	422.96	463.44	416.18	422.96	463.44
Log (pseudo)likelihood	-5799.18	-5979.78	-8193.89	-5799.18	-5979.78	-8193.89
Observations	701	704	1146	701	704	1146

**Table 3.3: zero-inflated negative binomial (refugees), robust**

dependent variable:

net forcibly displaced	Reg 13	Reg 14	Reg 15 (inflate)	Reg 16 (inflate)
log(total deaths)	1.50*** (0.11)		-0.03 (0.05)	
log(death civilians)		1.48*** (0.12)		-0.09* (0.05)
freedom	0.32*** (0.08)	0.28*** (0.06)	-0.18 (0.18)	-0.40** (0.20)
ethnic dispersion	0.55 (0.38)	0.36 (0.28)	-0.15 (0.49)	0.25 (0.51)
religious dispersion	1.87 (1.63)	0.23 (0.22)	0.00 (0.75)	-1.47* (0.80)
log(settled borders)	1.63 (2.60)	4.34** (2.49)	1.19** (0.47)	1.10** (0.49)
in alpha	1.67	1.69	1.67	1.69
alpha	5.31	5.42	5.31	5.42
Wald chi-square	84.52	93.74	84.52	93.74
Log (pseudo)likelihood	-4636.39	-4711.90	-4636.39	-4711.90
Observations	711	711	711	711

**Table 3.4: zero-inflated negative binomial (refugees), robust**

dependent variable:

net forcibly displaced	Reg 17	Reg 18	Reg 19 (inflate)	Reg 20 (inflate)
log(total deaths)	1.49*** (0.11)		-0.03 (0.05)	
log(death civilians)		1.43*** (0.14)		-0.10** (0.05)
freedom	0.48*** (0.11)	0.41*** (0.10)	-0.03 (0.16)	-0.21 (0.19)
ethnic dispersion	0.61 (0.38)	0.45 (0.35)	-0.20 (0.44)	0.32 (0.47)
religious dispersion	0.47 (0.37)	0.06*** (0.05)	-0.33 (0.74)	-2.07** (0.88)
log(settled borders)	1.68 (1.28)	1.89 (1.13)	0.71 (0.47)	0.50 (0.52)
log(urban population)	0.65*** (0.07)	0.68*** (0.08)	-0.21*** (0.06)	-0.28*** (0.08)
unemployment_L1	1.00*** (0.00)	1.00* (0.00)	0.00 (0.00)	0.00 (0.00)
in alpha	1.56	1.62	1.56	1.62
alpha	4.76	5.05	4.76	5.05
Wald chi-square	148.56	119.64	148.56	119.64

dependent variable:	<b>Table 3.5: zero-inflated negative binomial (IDPs), robust</b>					
	Reg 21	Reg 22	Reg 23	Reg 24 (inflate)	Reg 25 (inflate)	Reg 26 (inflate)
net forcibly displaced						
log(total deaths)	1.10 (0.09)			-0.26* (0.14)		
log(death civilians)		0.96 (0.08)			-0.15 (0.11)	
log(terrorism deaths)			1.22*** (0.09)			-0.15 (0.12)
freedom	0.80 (0.25)	0.64** (0.21)	0.97 (0.40)	-0.82* (0.43)	-0.96 (0.44)	-0.95** (0.44)
ethnic dispersion	0.80 (0.56)	0.37 (0.24)	2.24 (2.22)	-3.98*** (1.08)	-3.88*** (1.04)	-4.01*** (1.17)
religious dispersion	0.22* (0.17)	0.21* (0.17)	0.10*** (0.08)	1.77 (1.47)	1.68 (1.41)	1.41 (1.55)
log(settled borders)	141.97** (323.78)	58.28* (127.35)	110.90** (225.60)	-4.63* (2.68)	-4.47* (2.68)	-5.20** (2.35)
In alpha	0.16	0.16	0.13	0.16	0.16	0.13
Alpha	1.17	1.17	1.13	1.17	1.17	1.13
Wald chi-square	11.40	11.15	24.73	11.40	11.15	24.73
Log (pseudo)likelihood	-1002.70	-1058.40	-912.06	-1002.70	-1058.40	-912.06
Observations	118	122	109	Reg 42 (inflate)	Reg 44 (inflate)	Reg 46 (inflate)
Log (pseudo)likelihood	-4617.87	-4695.74	-4617.87	-4617.87	-4695.74	
Observations	711	711	711	711	711	

dependent variable:

**Table 3.6: zero-inflated negative binomial (IDPs), robust**

	Reg 27	Reg 28	Reg 29	Reg 30 Inflated	Reg 31 Inflated	Reg 32 Inflated
net forcibly displaced						
log(total deaths)	1.09* (0.06)			-0.23 (0.22)		
log(death civilians)		1.16* (0.09)			-0.08 (0.18)	
log(terrorism deaths)			1.13* (0.07)			0.04 (0.21)
freedom	0.45*** (0.10)	0.63* (0.18)	0.51 (0.14)	-0.34 (0.70)	-0.47** (0.76)	-0.27 (0.70)
ethnic dispersion	0.79 (0.36)	0.63*** (0.22)	1.35 (0.89)	-3.83** (1.61)	-3.64 (1.34)	-3.06 (1.91)
religious dispersion	2.06 (1.05)	2.78 (1.93)	1.15 (0.65)	-2.00 (1.96)	-0.91 (1.88)	-1.73 (2.02)
log(settled borders)	20.70 (41.35)	5.71 (10.40)	17.48 (33.93)	1.60 (3.96)	0.10 (3.66)	0.87 (3.55)
log(urban population)	1.43*** (0.15)	1.44*** (0.13)	1.37*** (0.15)	0.75** (0.37)	0.65* (0.35)	0.65* (0.38)
unemployment_L1	1.00*** (0.00)	1.00*** (0.00)	1.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)
In alpha	-0.39	-0.47	-0.31	-0.39	-0.47	-0.31
Alpha	0.68	0.62	0.74	0.68	0.62	0.74
Wald chi-square	104.67	185.64	64.16	104.67	185.64	64.16
Log (pseudo)likelihood	-753.07	-803.79	-740.72	-753.07	-803.79	-740.72
Observations	88	92	86	88	92	86

In the zero-inflated negative binomial regression tables (3.1-3.6) the count regressions are on the left and the inflation equations are on the right.<sup>22</sup> While the inflation regression reports the coefficients and standard errors (in parentheses), the count regression presents the incidence rate ratios (IRR) and standard errors. IRR provides an easier interpretation of the results as it treats the dependent variable of net displaced people as a rate ('the number of events per time or space'<sup>23</sup>) and represents the change in net forcibly displaced people given a unit change in the independent variable, holding all other variables constant.<sup>24</sup> The tables have all number of (net) forced migrants as the dependent variable on the left side; reporting first the total migrants (refugees, internally displaced people and asylum seekers), second the refugees and third the internally displaced migrants. Tables 3.1, 3.3 and 3.5 focus on political violence related variables. Tables 3.2, 3.4 and 3.6 have additional socio-economic variables where available. Regressions are also run separately (where data is available) for total number of deaths, civilian deaths and terrorism deaths to be able to distinguish the potential impact of each type of fatality.

The regression results include independent and controlling variables that demonstrate some level of significance throughout the models; however, I have some controlling (economic or social) variables such as GDP and poverty were dropped since they were consistently insignificant throughout the models. However, all the political

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<sup>22</sup> Zero-inflated negative binomial regression (ZINB) becomes the logical choice since it includes an auxiliary logistic regression model specified in the 'inflate' option that determines whether the observed count is zero in addition to the standard negative binomial regression model.

<sup>23</sup> UCLA Institute for Digital Research and Education. <https://stats.idre.ucla.edu/stata/output/negative-binomial-regression/>.

<sup>24</sup> An IRR of 1.0 indicates no change in the expected count of forced migrants, an IRR greater than 1.0 indicates an increase in the expected count, and an IRR lower than 1.0 indicates a decrease in the expected count. See Melander and Öberg for more on IRR (2007).

violence related variables remain because their significance varies through the models and political violence is the focus of this project. The models are all statistically significant and include large sample populations with the exception of some IDP regressions, however, that is not unexpected considering data limitations for this group of forced migrants. The likelihood ratio tests that  $\alpha = 0$  is significantly different from zero, which confirms the over dispersion of the data and suggests that a zero-inflated negative binomial regression is more appropriate than a zero-inflated Poisson model. The models use robust standard errors to address heteroskedasticity.

The regression outputs have the expected signs and support all the hypotheses. Since the main concern is on civilian deaths in this project, it is particularly notable that the intensity of violence leading to civilian loss is a strong indicator for forced displacement holding other variables constant. It is also noteworthy that terrorism related fatalities are statistically significant holding all other variables constant; the relatively unexplored relationship between terrorism and the decision to flee clearly requires more attention in literature. On the other hand, impact of socio-economic factors as controlling variables is not exactly clear. Although unemployment is statistically significant, its IRR points to no change in the expected number of net forced migrants; growth in per capita GDP and poverty ratio were dropped because they are not statistically significant; but living in urban areas is statistically significant and negatively associated with the number of net forced migrants. The results also show that indicators of political violence are relatively stronger for the internally displaced.



Findings also point terrorism related fatalities are a push factor for increase in the number of forced migrants. Freedom of political rights and civil liberties, ethnic pressures and intensity of violence remain the drivers of forced displacement.

### **Conclusion**

Findings based on global data of refugees, IDPs and internationally displaced people for the period of 1970-2016 confirm that civil rights and liberties, intensity of violence and ethnic pressures remain strong indicators of forced displacement particularly for civilians. Since terrorism related fatalities are also one of the significant drivers of forced migration, future research would benefit from focusing on this reverse causality rather than analysing forced migration as one of the drivers of deadly terrorist attacks only.

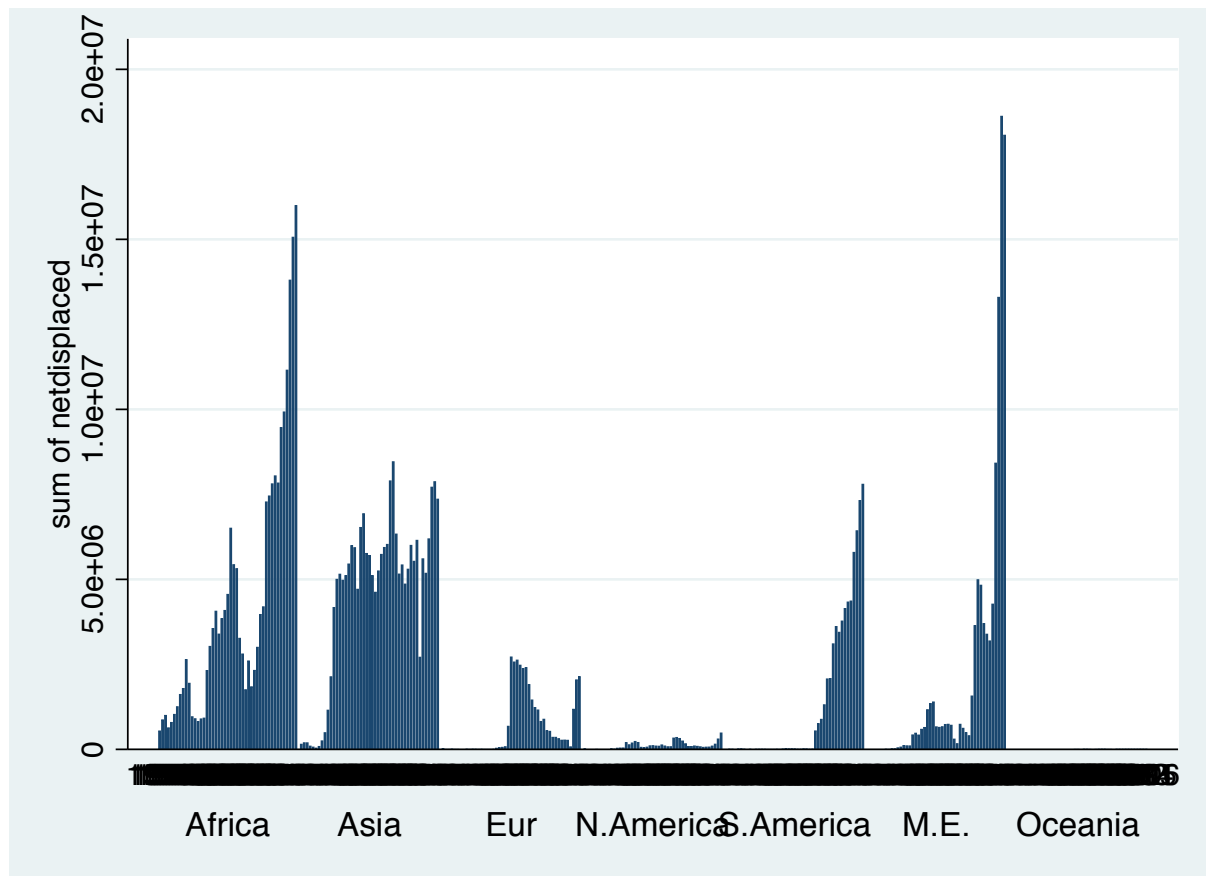
Can forced migrants be considered as consumers of goods at the end of the day since they may be pricing the right to live (with access to basic needs) on one side of their scale? Although social and economic variables have not led to conclusive findings in the past, the findings in this study clearly do not support the 'economic' refugee thesis, either. This highlights the need for further research in this complex area where socio-economic interests may play a role (albeit a relatively less significant one) in the decision to stay or leave during deadly armed-conflicts, as opposed to looking at the forced migration phenomenon only through the myopic lens of conflict data versus financial indicators.

**Table 4 List of countries in the study**

Afghanistan	Dominican Republic	Liberia	Saint Vincent and the Grenadines
Albania	East Timor	Libya	Samoa
Algeria	Ecuador	Lithuania	San Marino
Andorra	Egypt	Luxembourg	Sao Tome and Principe
Angola	El Salvador	Macedonia	Saudi Arabia
Antigua & Barbuda	Equatorial Guinea	Madagascar	Senegal
Argentina	Eritrea	Malawi	Serbia and Kosovo
Armenia	Estonia	Malaysia	Seychelles
Australia	Ethiopia	Maldives	Sierra Leone
Austria	Federated States of Micronesia	Mali	Singapore
Azerbaijan	Fiji	Malta	Slovakia
Bahamas	Finland	Marshall Islands	Slovenia
Bahrain	France	Mauritania	Solomon Islands
Bangladesh	Gabon	Mauritius	Somalia
Barbados	Gambia	Mexico	South Africa
Belarus	Georgia	Moldova	South Korea
Belgium	Germany	Monaco	South Sudan
Belize	Ghana	Mongolia	Spain
Benin	Greece	Montenegro	Sri Lanka
Bhutan	Grenada	Morocco	Sudan
Bolivia	Guatemala	Mozambique	Suriname
Bosnia and Herzegovina	Guinea	Myanmar	Swaziland
Botswana	Guinea-Bissau	Namibia	Sweden
Brazil	Guyana	Nauru	Switzerland
Brunei	Haiti	Nepal	Syria
Bulgaria	Honduras	Netherlands	Tajikistan
Burkina Faso	Hungary	New Zealand	Tanzania
Burundi	Iceland	Nicaragua	Thailand
Cambodia	India	Niger	Togo
Cameroon	Indonesia	Nigeria	Tonga
Canada	Iran	North Korea	Trinidad and Tobago
Cape Verde	Iraq	Norway	Tunisia
Central African Republic	Ireland	Oman	Turkey
Chad	Israel	Pakistan	Turkmenistan
Chile	Italy	Palau	Tuvalu
China	Ivory Coast	Palestinian	Uganda
Colombia	Jamaica	Panama	Ukraine
Comoros	Japan	Papua New Guinea	United Arab Emirates
Congo	Jordan	Paraguay	United Kingdom
Costa Rica	Kazakhstan	Peru	United States of

			America
Croatia	Kenya	Philippines	Uruguay
Cuba	Kiribati	Poland	Uzbekistan
Cyprus	Kuwait	Portugal	Vanuatu
Czech Republic	Kyrgyzstan	Qatar	Venezuela
Democratic Republic of the Congo	Laos	Romania	Vietnam
Denmark	Latvia	Russia	Yemen
Djibouti	Lebanon	Rwanda	Zambia
Dominica	Lesotho	Saint Lucia	Zimbabwe

**Table 5 Total Net Displacement By Regions 1970-2016**



## References

- Adams, M. (Ed.), 2013. Readings for diversity and social justice, Third edition. ed. Routledge Taylor & Franacis Group, New York.
- Adhikari, P., 2012. The Plight of the Forgotten Ones: Civil War and Forced Migration1: The Plight of the Forgotten Ones. *International Studies Quarterly* 56, 590–606. <https://doi.org/10.1111/j.1468-2478.2011.00712.x>
- Balcells, L., Kalyvas, S.N., 2014. Does Warfare Matter? Severity, Duration, and Outcomes of Civil Wars. *Journal of Conflict Resolution* 58, 1390–1418. <https://doi.org/10.1177/0022002714547903>
- BenEzer, G., Zetter, R., 2015. Searching for Directions: Conceptual and Methodological Challenges in Researching Refugee Journeys. *Journal of Refugee Studies* 28, 297–318. <https://doi.org/10.1093/jrs/feu022>
- Betts, A., Collier, P., 2017. *Refuge: transforming a broken refugee system*. Allen Lane, an imprint of Penguin Books, London.
- Blattman, C., Miguel, E., 2010. Civil War. *Journal of Economic Literature* 48, 3–57. <https://doi.org/10.1257/jel.48.1.3>
- Bloch, A., Dona, G. (Eds.), 2018. *Forced migration: current issues and debates*. Routledge, Abingdon, Oxon ; New York, NY.
- Bohnet, H., Cottier, F., Hug, S., 2018. Conflict-induced IDPs and the Spread of Conflict. *Journal of Conflict Resolution* 62, 691–716. <https://doi.org/10.1177/0022002716665209>
- Bossis, M., Lampas, N., 2018. Is Refugee Radicalization a Threat to Greece? *Mediterranean Quarterly* 29, 36–47. <https://doi.org/10.1215/10474552-4397325>
- Bove, V., Böhmelt, T., 2016. Does Immigration Induce Terrorism? *The Journal of Politics* 78, 572–588. <https://doi.org/10.1086/684679>
- Cenciarelli, O., Mancinelli, S., Ludovici, G.M., Palombi, L., 2017. Migration and Terrorism: A New Approach to Consider the Threat, in: Martellini, M., Malizia, A. (Eds.), *Cyber and Chemical, Biological, Radiological, Nuclear, Explosives Challenges*. Springer International Publishing, Cham, pp. 277–287. [https://doi.org/10.1007/978-3-319-62108-1\\_13](https://doi.org/10.1007/978-3-319-62108-1_13)
- Chatty, D., 2013. Forced migration, in: Ness, I. (Ed.), *The Encyclopedia of Global Human Migration*. Blackwell Publishing Ltd, Oxford, UK. <https://doi.org/10.1002/9781444351071.wbeghm236>
- Chatty, D., Marfleet, P., 2013. Conceptual Problems in Forced Migration. *Refugee Survey Quarterly* 32, 1–13. <https://doi.org/10.1093/rsq/hdt008>
- Choi, S.-W., Salehyan, I., 2013. No Good Deed Goes Unpunished: Refugees, Humanitarian Aid, and Terrorism. *Conflict Management and Peace Science* 30, 53–75. <https://doi.org/10.1177/0738894212456951>
- Coluccello, R., Massey, S., 2015. *Eurafrican Migration: Legal, Economic and Social Responses to Irregular Migration*. The Editor(s) (if applicable) and the Author(s), Place of publication not identified.
- Crawley, H., Skleparis, D., 2018. Refugees, migrants, neither, both: categorical fetishism and the politics of bounding in Europe’s ‘migration crisis.’ *Journal of Ethnic and Migration Studies* 44, 48–64. <https://doi.org/10.1080/1369183X.2017.1348224>
- Croicu, Mihai and Ralph Sundberg, 2016, “UCDP GED Codebook version 4.1”,

- Department of Peace and Conflict Research, Uppsala University.
- Davenport, C., Moore, W. H., Poe, S.C., 2003. Sometimes You Just Have to Leave: Domestic Threats and Forced Migration, 1964–1989. *International Interactions* 29: 27-55.
- Dişbudak, C., Purkis, S., 2016. Forced Migrants or Voluntary Exiles: Ethnic Turks of Bulgaria in Turkey. *Journal of International Migration and Integration* 17, 371–388. <https://doi.org/10.1007/s12134-014-0411-z>
- Duda-Mikulin, E.A., 2018. *Should I stay or should I go now?* Exploring Polish women’s returns “home.” *International Migration* 56, 140–153. <https://doi.org/10.1111/imig.12420>
- Fearon, J.D., 2003. Ethnic and Cultural Diversity by Country. *Journal of Economic Growth* 8, 195–222.
- Fiddian-Qasmiyeh, E., Loescher, G., Long, K., Sigona, N. (Eds.), 2014. *The Oxford handbook of refugee and forced migration studies*, First Edition. ed. Oxford University Press, Oxford, United Kingdom.
- Freedom House, *Freedom in the World 2018 - United States*, 16 January 2018. <https://www.refworld.org/docid/5a5e11f626.html>
- Global Protection Cluster, 2007. *Handbook for the Protection of Internally Dsplaced Persons*. <http://www.globalprotectioncluster.org>
- GTI, Institute for Economics & Peace. *Global Terrorism Index 2015, 2016, 2017, 2018: Measuring the impact of terrorism*, Sydney, November 2018. <http://visionofhumanity.org/reports>
- Hyndman, J., 2000. *Managing displacement: refugees and the politics of humanitarianism, Borderlines*. University of Minnesota Press, Minneapolis.
- International Organisation for Migration, 2019. *Missing Migrants*. <https://missingmigrants.iom.int>
- Ioncev, V.A., Moskovskij gosudarstvennyj universitet im. M.V. Lomonosova (Eds.), 2002. *World in the mirror of international migration*, Scientific series: International migration of population : Russia and the contemporary world. MAX Press, Moscow.
- Kagan, M., 2006. The Beleaguered Gatekeeper: Protection Challenges Posed by UNHCR Refugee Status Determination. *International Journal of Refugee Law* 18, 1–29. <https://doi.org/10.1093/ijrl/eei045>
- King, R., Mai, N., Schwandner-Sievers, S. (Eds.), 2005. *The new Albanian migration*. Sussex Academic Press, Brighton, Great Britain ; Portland, Or.
- Kolbe, M., Henne, P.S., 2014. The Effect of Religious Restrictions on Forced Migration. *Politics and Religion* 7, 665–683. <https://doi.org/10.1017/S1755048314000522>
- Koubi, V., Böhmelt, T., Spilker, G., Schaffer, L., 2018. The Determinants of Environmental Migrants’ Conflict Perception. *International Organization* 1–32. <https://doi.org/10.1017/S0020818318000231>
- Krcmaric, D., 2014. Refugee Flows, Ethnic Power Relations, and the Spread of Conflict. *Security Studies* 23, 182–216. <https://doi.org/10.1080/09636412.2014.874201>
- McDoom, O.S., Gisselquist, R.M., 2016. The Measurement of Ethnic and Religious Divisions: Spatial, Temporal, and Categorical Dimensions with Evidence from Mindanao, the Philippines. *Social Indicators Research* 129, 863–891. <https://doi.org/10.1007/s11205-015-1145-9>

- Melander, E., Öberg, M., 2007. The Threat of Violence and Forced Migration: Geographical Scope Trumps Intensity of Fighting. *Civil Wars* 9, 156–173. <https://doi.org/10.1080/13698240701207310>
- Melander, E., Öberg, M., 2006. Time to Go? Duration Dependence in Forced Migration. *International Interactions* 32, 129–152. <https://doi.org/10.1080/03050620600574873>
- Melander, E., Öberg, M., Hall, J., 2006. The “new wars” debate revisited: an empirical evaluation of the atrociousness of “new wars,” Uppsala peace research papers. Uppsala University, Dept. of Peace and Conflict Research, Uppsala.
- Milton, D., Spencer, M., Findley, M., 2013. Radicalism of the Hopeless: Refugee Flows and Transnational Terrorism. *International Interactions* 39, 621–645. <https://doi.org/10.1080/03050629.2013.834256>
- Moore, W.H., Shellman, S.M., 2006. Refugee or Internally Displaced Person?: To Where Should One Flee? *Comparative Political Studies* 39, 599–622. <https://doi.org/10.1177/0010414005276457>
- Moore, W.H., Shellman, S.M., 2004. Fear of Persecution: Forced Migration, 1952–1995. *Journal of Conflict Resolution* 48, 723–745. <https://doi.org/10.1177/0022002704267767>
- Moore, W. H., Shellman, S. M. 2007. Whither Will They Go? A Global Study of Refugees Destinations, 1965–1995. *International Studies Quarterly* 51(4): 811-834.
- Okafor, G., Piesse, J., 2017. Empirical Investigation into the Determinants of Terrorism: Evidence from Fragile States. *Defence and Peace Economics* 1–15. <https://doi.org/10.1080/10242694.2017.1289746>
- Ozaltin, D., Shakir, F., Loizides, N., 2019. Why Do People Flee? Revisiting Forced Migration in Post-Saddam Baghdad. *Journal of International Migration and Integration*. <https://doi.org/10.1007/s12134-019-00674-z>
- Owsiak, A.P., Cuttner, A.K., Buck, B., 2018. The International Border Agreements Dataset. *Conflict Management and Peace Science* 35, 559–576. <https://doi.org/10.1177/0738894216646978>
- Pew Research Center, June 21, 2018, “Global Uptick in Government Restrictions”
- Salehyan, I., Gleditsch, K.S., 2006. Refugees and the Spread of Civil War. *International Organization* 60. <https://doi.org/10.1017/S0020818306060103>
- Sales, R., 2007. Understanding immigration and refugee policy: contradictions and continuities, *Understanding welfare*. Policy Press, Bristol, UK.
- Schmeidl, S., 1997. Exploring the Causes of Forced Migration: A Pooled Time-Series Analysis, 1971–1990. *Social Science Quarterly* 78: 284-308.
- Steele, A., 2011. Electing Displacement: Political Cleansing in Apartadó, Colombia. *Journal of Conflict Resolution* 55, 423–445. <https://doi.org/10.1177/0022002711400975>
- Toft, M.D., 2012. Religion, Terrorism, and Civil Wars, in: Shah, T.S., Stepan, A., Toft, M.D. (Eds.), *Rethinking Religion and World Affairs*. Oxford University Press, pp. 127–148. <https://doi.org/10.1093/acprof:oso/9780199827978.003.0009>
- UNHCR, (2015) ‘Global Trends: Forced Displacement in 2014’. <http://www.unhcr.org/uk/statistics/unhcrstats/576408cd7/unhcr-global-trends-2014.html>.

- UNHCR, (2017) 'Global Trends: Forced Displacement in 2016'.  
<http://www.unhcr.org/uk/statistics/unhcrstats/576408cd7/unhcr-global-trends-2016.html>.
- UNHCR Protecting Refugees, 2002.  
<https://www.unhcr.org/publications/brochures/3b779dfe2/protecting-refugees-questions-answers.html>
- Valentino, B., Huth, P., Balch-Lindsay, D., 2004. "Draining the Sea": Mass Killing and Guerrilla Warfare. *International Organization* 58.  
<https://doi.org/10.1017/S0020818304582061>
- Van Hear, N., Bakewell, O., Long, K., 2018. Push-pull plus: reconsidering the drivers of migration. *Journal of Ethnic and Migration Studies* 44, 927–944.  
<https://doi.org/10.1080/1369183X.2017.1384135>
- Vogt, M., Bormann, N.-C., Rügger, S., Cederman, L.-E., Hunziker, P., Girardin, L., 2015. Integrating Data on Ethnicity, Geography, and Conflict: The Ethnic Power Relations Data Set Family. *Journal of Conflict Resolution* 59, 1327–1342. <https://doi.org/10.1177/0022002715591215>
- Williams, T.K., 2012. *Understanding Internalized Oppression: A Theoretical Conceptualization of Internalized Subordination*. University of Massachusetts Amherst.
- Wilson, P., 2015. The misuse of the Vuong test for non-nested models to test for zero-inflation. *Economics Letters* 127, 51–53.  
<https://doi.org/10.1016/j.econlet.2014.12.029>
- World Bank. *World Development Indicators*, The World Bank Group, 2016.  
<https://data.worldbank.org>
- Zetter, R., 2007. More Labels, Fewer Refugees: Remaking the Refugee Label in an Era of Globalization. *Journal of Refugee Studies* 20, 172–192.  
<https://doi.org/10.1093/jrs/fem011>
- Zolberg, A.R., Suhrke, A., Aguayo, S., 1992. *Escape from violence: conflict and the refugee crisis in the developing world*, First issued as an Oxford Univ. Press paperback. ed. Oxford Univ. Press, New York.