

# Political Factors as Drivers of International Migration

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(*EXTENDED ABSTRACT*)

## 1. Motivation and Research Question

There is a large literature on the determinants of international migration that highlights different pull and push factors to explain the direction and strength of migrant flows. This paper adds to that body of work by focusing on whether migration flows respond to political and economic shocks including political violence, armed conflict and wars.

### *1.1. The role of political instability in shaping international migration:*

Ethnic conflicts and wars induce flows of refugees out of the affected areas. This is unfortunately a common headline in current news. How important is the role of ethnic conflicts and wars in explaining migration flows is however not well-understood given the rather limited theoretical and particularly empirical contributions to the topic.

In this paper we aim to fill this important research gap by focusing on political pressures as a determinant of international migration. In the terms of standard migration theory, we consider the outcomes of political instability to act as push factors in origins. As the standard migrant decision making model assumes that individuals can choose whether to migrate or not, we assume that even people whose lives are threatened can choose to remain in affected areas. Similarly peace and political stability can act as a pull factor in destinations. Thus we expect that people are more likely to emigrate from origins affected by ethnic conflicts and wars in search for a better life and better opportunities.

To investigate these hypotheses, we combine the following datasets: (1) annual data on international migration flows and foreign population stocks in OECD countries from 223 countries of origin to 42 destinations for the period 1980-2013 or UN/world Bank migration data obtained from changes in stocks of foreign population across (decennial) censuses; (2) data on wars, coup d'état, revolutions and democratic regimes from different sources; (3) controls of socio-economic conditions in origins and destinations, cultural and linguistic barriers between countries, political rights and naturalization regimes for migrants arriving in selected developed destination countries from every source country for the years 1965-2012; and OECD Social Expenditure Database SOCX 1980-2012.

Our empirical analyses estimates a gravity type model widely employed by previous literature on the determinants of migration, e.g. Pedersen, Pytlikova and Smith (2008) and Adserà and Pytliková (2015). Our empirical models include a number of standard push and pull factors of migration (i.e. GDP per capita in destination and origin; historical ties, distance, among others) together with a set of direct and indirect indices of political violence and conflicts, which allow us to study their association to the observed migration flows.

## 2. Data

For our empirical models we will combine data from the following sources.

### 2.1 Migration flows and stocks:

The dependent variable in this paper is the migration rate based on migration flows. In the analysis we also control for the existing diaspora of migrants using numbers of stocks of migrants from the same origin country. To this end, we will employ the data on immigration flows and stocks of foreigners used in Adserà and Pyliková (2015). Since the completion of that study we have extended the dataset to include migration flows and stocks in close to 42 developed destination countries from all world origins for years 1980-2013. The unbalanced panel was collected by writing to selected national statistical offices for majority of the destination countries to request detailed yearly information on immigration flows and foreign population stocks by source country in their respective country. This data set presents substantial progress over that used in past research on determinants of migration and over the existing datasets. First, our data covers annually *both migration flows and foreign population stocks*. Second, the data is more comprehensive with respect to destinations, origins and time due to our own effort with data gathering from particular statistical offices. For an overview of comprehensiveness of observations of flows and stocks across all destination countries over time, see Adserà and Pyliková (2015).

When we use the dataset just described, only a part of the displacement occurring from conflict is captured here, since “south to south” migration accounts for a big share of that forced migration. Therefore, in addition to the detailed annual flows and stocks to 42 developed destinations, we are interested in extending the pool of destinations. The available data to analyze migration beyond developed countries is very restricted. Data on south-south flows, for example, is rare and in some cases unreliable by undercounting some refugee population movements, among other things. For our robustness analyses, we will employ the best available data form UN and World Bank derived from changes in stocks from annual census. Those datasets expand to earlier decades and include the majority of world country-pairs.

Further we are interested in understanding whether some of these conflicts may affect the selection of the migrants. To address this issue we plan to employ data on 1990 and 2000 migrants stocks by skill level from Docquier and Marfuk (2006) to proxy the skill composition of our flows. Alternatively to control for the skill distribution we employ the new IAB brain-drain dataset on international migration that cover information for 20 OECD destination countries by gender, country of origin and educational level, for the years 1980-2010 (5 years intervals) (Brucket et al. 2013).

### 2.2 Political Data: conflict and political institutions

Among the direct measures we include for instance: a freedom house index, information on civil wars, political unrest and violence, political regime, transitions of political regime, coup d’etats and intensity of conflict from COW, CIRI, CNTS, ICRG, MPEV and PITF datasets. We use “Polity IV” and “Freedom in the World” datasets, and data by Sambanis (Sambanis, 2004; Doyle and Sambanis, 2000) to obtain some of this information.

In addition, a large literature argues that ethnic fractionalization has been conducive to more internal conflicts or civil wars (though the literature is still controversial over this issue i.e. Fearon and Laitin, 2003). To proxy for ethnic or political fractionalization some literature uses diversity of languages at origin. Esteban and Ray (1994, 2010) and Montalvo & Reygal-Querol (2005) have shown linguistic diversity to be relevant, beyond pure measures of ethnic diversity to understand political demands and civil strifes, among other things. Similarly Desmet et al. (2009) measure ethno-linguistic diversity and offer new results linking such diversity with a range of political economy outcomes: civil conflict, redistribution, economic growth and the provision of public goods. In the empirical analysis we use both measures of ethnic diversity and of polarization developed by Desmet et al. (2009) to proxy for conflicts. In addition we include indices developed by Adsera and Pytliková (2015) on language diversity at origin that also proxy for potential conflict.

### 2.3 Socioeconomic Controls, Immigrant Rights and Barriers to Migration:

In our analyses, we include the standard socioeconomic variables such as income per capita in both countries, unemployment rates in both countries collected from the World Development Indicators database, controls for historical ties, physical distance in km and linguistic distance developed by Adsera and Pytliková (2015).

## **3. Empirical Strategy and Robustness Analysis**

### **3.1 Gravity Model**

We base our empirical analyses on a *gravity type model* employed also in some previous literature, e.g. Pedersen, Pytlikova and Smith (2008) and Adserà and Pytliková (2015). As in these studies, we account for a number of standard push and pull factors of migration and then add a number of measures of immigrants' rights and immigration policies in the destination country to the list of pull factors. We derive our estimating equation from the model in Adserà and Pytliková (2015) that is based on "human capital investment" theoretical framework (Sjastaad, 1962).

Our econometric model assumes that emigration rates to one destination are driven by differences in wages, employment rates between origin and destination countries, and the costs of migration:

$$\ln m_{ijt} = \gamma_1 + \gamma_2 \ln(GDP_j)_{t-1} + \gamma_3 \ln(GDP_i)_{t-1} + \gamma_4 \ln u_{jt-1} + \gamma_5 \ln u_{it-1} + \gamma_6 \ln pse_{jt-1} + \gamma_7 \ln s_{ijt-1} + \gamma_8 L_{ij} + \gamma_9 D_{ij} + \gamma_{10} FH_{it-1} + \gamma_{11} MP_{jt-1} + \gamma_{12} \ln POL_{jt-1} + \gamma_{13} \ln p_{ijt-1} + \delta_j + \delta_i + \theta_t + \varepsilon_{ijt} \quad (4)$$

where  $m_{ijt}$  denotes gross flows of migrants from country  $i$  to country  $j$  divided by the population of the country of origin  $i$  at time  $t$ , where  $i=1, \dots, 223$ ;  $j=1, \dots, 42$  and  $t=1, \dots, 34$ . As in previous studies we proxy wages by GDP per capita and employment prospects in the sending and receiving countries by unemployment rates,  $u_{jt}$  and  $u_{it}$ . Most previous research either uses only stocks or flows to analyze migration flows, but in our models we will be able to study flows and control for existing stocks. We use the total foreign population from country  $i$  living in country  $j$  per population of the source country  $i$ ,  $s_{ijt}$ , to control for the network of migrants that has been shown to play an important role in lowering the direct and psychological migration costs (Massey et al., 1993; Munshi, 2003; Beine et al. 2011). Other pull and push factors will include  $L$

linguistic distance between source and destination countries,  $P$  population ratios, , as well as year and country of destination and origin dummies. Models include robust Hubert/White/sandwich standard errors clustered at each pair of destination and source countries.

To understand whether migration policy, welfare expenditure and migration rights are important determinants of migration flows we will include a set of measures of either public expenditure  $\ln pse_{jt-1}$  or indices of generosity of particular policies (i.e. unemployment benefits; health coverage) as well as the time-varying measures developed by Palmer of the immigrants access to those programs in relation to natives at each destination and/or indices of migration policy  $MP$ ; and the interaction of those with welfare generosity.

In this benchmark model we include our measures of *political and economic shocks*  $POL$  described in section 2 to study whether they affect the direction and intensity of migration flows once all the traditional push/pull factors have been accounted for. Among them we include  $FH$  political freedom indicators in origin; civil wars, revolutions, democracy and indicators of political institutions from the datasets described above.

#### **4. Preliminary results**

Preliminary findings confirm that political instability in the sending countries triggers the outflow of people and this outcome is remarkably robust to the choice of indicators. Particularly the militarized disputes involving fatalities increase the intensity of emigration (see Table 1). The evidence is reinforcing since the set of selected indicators relate to the different forms of political violence (cross correlations of indicators are low). In the next step we will also develop an instrumental variable (IV) estimation strategy based on the ethnic diversity of population. We will employ various strategies to exploit country differences in the political system and their resistance to the external economic shocks.

Table 1 The impact of political violence on the migration flow

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se
EStock_1	0.6689 *** (0.010)	0.6687 *** (0.010)	0.6688 *** (0.010)	0.6688 *** (0.010)	0.6688 *** (0.010)	0.6689 *** (0.010)	0.6709 *** (0.010)	0.6731 *** (0.010)
lnEPop_ij1	0.6626 *** (0.139)	0.6494 *** (0.139)	0.6536 *** (0.138)	0.6743 *** (0.138)	0.6703 *** (0.138)	0.6805 *** (0.139)	0.7363 *** (0.138)	0.7046 *** (0.139)
GDPpCapPPPj1	2.4748 *** (0.158)	2.4765 *** (0.158)	2.4765 *** (0.158)	2.4774 *** (0.158)	2.4784 *** (0.158)	2.4669 *** (0.158)	2.4647 *** (0.157)	2.4615 *** (0.157)
GDPpCapPPPi1	-0.1032 * (0.055)	-0.0892 (0.056)	-0.1024 * (0.054)	-0.1098 ** (0.054)	-0.111 ** (0.055)	-0.0967 * (0.055)	-0.0765 (0.055)	-0.0874 (0.055)
lnpsepj1	0.7151 *** (0.102)	0.7172 *** (0.102)	0.7145 *** (0.102)	0.7168 *** (0.102)	0.7176 *** (0.102)	0.711 *** (0.102)	0.7042 *** (0.101)	0.7078 *** (0.101)
distance	-0.4211 *** (0.034)	-0.4211 *** (0.034)	-0.4212 *** (0.034)	-0.4213 *** (0.034)	-0.4211 *** (0.034)	-0.418 *** (0.034)	-0.4142 *** (0.034)	-0.4139 *** (0.034)
neighbour	-0.1959 ** (0.093)	-0.1957 ** (0.093)	-0.196 ** (0.093)	-0.1963 ** (0.093)	-0.1964 ** (0.093)	-0.1926 ** (0.093)	-0.1876 ** (0.093)	-0.1884 ** (0.093)
colcomb	0.5486 *** (0.109)	0.5503 *** (0.109)	0.5481 *** (0.109)	0.5491 *** (0.109)	0.5486 *** (0.109)	0.5459 *** (0.109)	0.5406 *** (0.108)	0.5414 *** (0.108)
MEPV international warfare magnitude	0.4364 ** (0.196)							
MEPV civil warfare magnitude		0.387 *** (0.122)						
MEPV ethnic warfare magnitude			0.453 *** (0.144)					
COW Militarized Disputes - number of ongoing disputes				0.0344 *** (0.012)				
COW Number of fatalities					0.0511 *** (0.017)			
ICRG Government instability						0.2785 *** (0.066)		
ICRG Internal conflict							0.4256 *** (0.057)	
ICRG External conflict								0.4132 *** (0.062)
_cons	-30.8033 *** (1.940)	-30.8499 *** (1.940)	-30.752 *** (1.940)	-30.8674 *** (1.941)	-30.8387 *** (1.940)	-31.2156 *** (1.937)	-31.9745 *** (1.942)	-31.56 *** (1.945)
N	45189	45189	45189	45189	45189	45189	45189	45189
r2	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86

Note: OLS estimation of migration flows from 223 countries of origin (i) to 30 OECD destination countries (j), 1980-2010. FE (destinations and origins) and year dummies are included. Robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 1 The impact of political violence on the migration flow (continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se
EStock_1	0.6683 *** (0.010)	0.6685 *** (0.010)	0.6687 *** (0.010)	0.6687 *** (0.010)	0.6687 *** (0.010)	0.6687 *** (0.010)	0.669 *** (0.010)	0.6689 *** (0.010)
lnEPop_ij1	0.6795 *** (0.138)	0.6924 *** (0.139)	0.6757 *** (0.139)	0.6737 *** (0.138)	0.6812 *** (0.138)	0.6623 *** (0.138)	0.666 *** (0.138)	0.6481 *** (0.139)
GDPpCapPPPj1	2.4776 *** (0.158)	2.4781 *** (0.158)	2.4764 *** (0.158)	2.4764 *** (0.158)	2.4768 *** (0.158)	2.4762 *** (0.158)	2.4764 *** (0.158)	2.4771 *** (0.158)
GDPpCapPPPi1	-0.1141 ** (0.055)	-0.1096 ** (0.054)	-0.1135 ** (0.055)	-0.111 ** (0.054)	-0.1132 ** (0.054)	-0.1016 * (0.054)	-0.102 * (0.054)	-0.1049 * (0.054)
lnpsepj1	0.7174 *** (0.102)	0.7158 *** (0.102)	0.716 *** (0.102)	0.7162 *** (0.102)	0.7156 *** (0.102)	0.7158 *** (0.102)	0.7166 *** (0.102)	0.7179 *** (0.102)
distance	-0.4217 *** (0.034)	-0.4215 *** (0.034)	-0.4214 *** (0.034)	-0.4213 *** (0.034)	-0.4215 *** (0.034)	-0.4209 *** (0.034)	-0.4211 *** (0.034)	-0.4211 *** (0.034)
neighbour	-0.196 ** (0.093)	-0.1962 ** (0.093)	-0.1962 ** (0.093)	-0.1961 ** (0.093)	-0.1971 ** (0.093)	-0.1961 ** (0.093)	-0.1962 ** (0.093)	-0.196 ** (0.093)
colcomb	0.55 *** (0.109)	0.5494 *** (0.109)	0.5496 *** (0.109)	0.5497 *** (0.109)	0.5493 *** (0.109)	0.5485 *** (0.109)	0.5491 *** (0.109)	0.5498 *** (0.109)
CIRI Physical Integrity Rights Index, 0=full respect, 1=no respect	0.0959 ** (0.039)							
CIRI Extrajudicial Killing 0=zero		0.0487 *** (0.012)						
CTNS Government Crises			0.0193 * (0.012)					
CTNS Riots				0.009 * (0.005)				
CTNS Anti-Government Demonstrations					0.0135 *** (0.004)			
PITF ethwar average magnitude						0.0412 ** (0.018)		
PITF ethwar annual number of fatalities							0.0382 ** (0.019)	
PITF genocide scaled annual number of deaths								0.1171 *** (0.029)
_cons	-30.9328 *** (1.943)	-31.0815 *** (1.943)	-30.8269 *** (1.939)	-30.8422 *** (1.941)	-30.9055 *** (1.942)	-30.8299 *** (1.941)	-30.8583 *** (1.939)	-30.707 *** (1.938)
N	45189	45189	45189	45189	45189	45189	45189	45189
r2	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86

Note: See notes to Table 1.

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