Political and Economic Shocks as drivers of International Migration
(Alícia Adserà, and Mariola Pytlíková)

(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 and wars, as well as sharp GDP or banking crises.

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. Recent research has focused on the link between diasporas and conflict (for a review of different cases, see Smith and Stares 2007).

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.

1.2 Economic and Financial Crises:

Economic uncertainty can create incentives to migrate. Individuals may not only be interested in a certain level of income per capita but also on the stability of that income over the medium-term. Acute crises are likely accompanied by stubborn unemployment and by unclear signals to the return to education (in either direction). Banking and financial crises can affect the prospects
of securing a proper retirement. Expropriation may be a valid fear among certain classes in some political contexts.

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 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’etat, revolutions and democratic regimes from different sources; (3) measures of sharp economic crises (changes in GDP or prices); (4) controls of social, economic, and political rights and naturalization regimes for migrants arriving in selected OECD destination countries from every source country for the years 1965-2009; and OECD Social Expenditure Database SOCX 1980-2010.

Our empirical analyses estimates a gravity type model widely employed by previous literature on the determinants of migration, e.g. Pedersen, Pytlíkova and Smith (2008) and Adserà and Pytlíkovà (2015). Our empirical models will 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). We will control for social expenditures in destination countries as well as a number of indices of immigrants’ rights and immigration policies in the destination country to the list of pull factors, as detailed Palmer (2012). To these standard pull/push indicators of migration we add a set of direct and indirect indices of political pressures and economic crises to the list of push factors 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 will be the migration rates to OECD countries. In the analysis we will control for the existing stocks of migrants from the same origin country. To this end, we will employ the data on immigration flows and stocks of foreigners in 30 OECD destination countries from 223 source countries for the years 1980–2010 in Adserà and Pytlíkovà (2015). Since the completion of that study we have extended the dataset to include close to 40 OECD countries until the year 2013. The unbalanced panel was collected by writing to selected
national statistical offices for majority of the OECD 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 Pylikovà (2015).

When we use the dataset just described i only part of the displacement occurring from conflict will be captured here since “south to south” migration accounts for a big share of that forced migration. However OECD countries have also received large waves of migrants leaving areas devastated by wars. In addition to detailed annual flows and stocks to OECD destinations, we are interested to 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. 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 will 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 and coup d’etats. We will 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 & Reyal-Querol (2005) have shown linguistic diversity to be relevant, beyond pure measures of ethnic diversity to understand political demands and civil strives, 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 will use both measures of ethnic diversity and of polarization developed by Desmet et al. (2009) to proxy for conflicts. In addition we will include indices developed by Adsera and Pytlikova (2015) on language diversity at origin that also proxy for potential conflict.

2.3 Economic and Financial Crises:

Economic shocks will be explored by constructing derived measures from our annual data. In particular though the data of unemployment and GDP in both the source and destination countries we will be able to construct indices for sharp and disruptive economic changes. Further we will introduce data on periods of hyperinflation. Similarly we will employ data collected by Honohan and Laeven (2005) on systemic financial crises. Currently the data covers the period 1980 to 2001. The project will attempt to extend the data to the most recent years employing similar methodology.

2.4 Socioeconomic Controls, Welfare Expenditure and Rights.

We include the standard socioeconomic variables such as income per capita in both countries, unemployment rates in both countries, political and civil freedom, historical ties, and physical distance. We add the linguistic measures we develop in Adsera and Pytlikova (2015).

To measure the generosity of the welfare programs across the OECD destinations we will use the OECD Social Expenditure Database (SOCX), which provides great indicators of social policy. It includes reliable and internationally comparable statistics on public and (mandatory and
voluntary) private social expenditure at program level. The data covers 34 OECD countries for the period 1980-2011 and estimates for 2012-2014.

In addition the OECD annual surveys provide a wealth of data on eligibility and benefits (replacement rates, for example) of many policies. We will include those indices as other means to measure the generosity of the welfare state across destinations.

To control immigrants’ rights with those of natives in each destination we will employ a set of indices quantifying the social, economic, and political rights of immigrants as well as naturalization regimes in each destination state (Palmer 2012). Some of these indices have already been used with respect to a smaller set of countries in Palmer and Pylikovà (2013).

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 Pytlikovà (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 will derive our estimating equation from the model in Adserà and Pytlikovà (2015) that is based on “human capital investment” theoretical framework (Sjastaad, 1962) and its recent applications in Grogger and Hanson (2011) and Ortega and Peri (2009).

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:

\[
\ln m_{jt} = \gamma_1 + \gamma_2 \ln(GDP_j)_{t-1} + \gamma_3 \ln(GDP_i)_{t-1} + \gamma_4 \ln u_{jt-1} + \gamma_5 \ln u_{i,t-1} + \gamma_6 \ln pse_{jt-1} + \\
+ \gamma_7 \ln s_{jt-1} + \gamma_8 L_j + \gamma_9 D_j + \gamma_{10} F_{jt-1} + \gamma_{11} MP_{jt-1} + \gamma_{12} \ln POL_{jt-1} + +\gamma_{13} \ln p_{ij,t-1} + \delta_j + \delta_i + \theta_t + \epsilon_{ijt}
\]

(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 \( i=1,...,223; j=1,...,30 \) and \( t=1,...,31 \). 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 will 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 will 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 will include our measure 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.

Preliminary results already show the relevance of ethnic diversity as a push factor as well as lack of civil liberties and wars/revolutions.
References


