The long-run impact of historical shocks on the decision to migrate:

evidence from the Irish Migration

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Abstract

This study investigates how negative historical shocks can explain migration in the long-run. We

construct a unique dataset based on the 1901 and 1911 Irish Census data and a selection of the Ellis

Island Administrative Records which allow us to test whether the Great Irish Famine (1845-1850),

one of the most lethal starvation in history, has shaped the decision of migrating to the USA in the

following 70 years. We control for several set of individual and geographical characteristics and we

find that the Irish Famine was an important significant driver of individuals' migration choices.

Instrumental variable analysis based on the exogenous spread of the potato blight provides consistent

results.

Key words: mass migration, negative shock, long-run impact, Great Famine.

JEL classification c codes: F22, N93.

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Paper Proposal/Extended Abstract

What is the long run impact of large negative historical events on migration flows? The main aim of

the proposed paper is to provide both a qualitative and a quantitative investigation on whether personal characteristics and radical historical events matter in the decision to migrate. In a previous contribution, Narciso and Severgnini (2016) exploited the information contained in a unique dataset based on Irish historical data during the first two decades of the 20th century. By combining different historical data sources, they identified the personal features and determinants of those who voiced their discontent and actively participated in the movement for the independence of Ireland from Great Britain. Furthermore, they tested the intergenerational transmission of rebellion generated by a large negative radical shock, the Irish Potato Famine (1845-1852) on the probability of joining the movement of independence in Ireland during the Irish revolution over the period 1913-1921. Starting from the abovementioned dataset, we plan to the test whether the Great Famine had also an effect on the individual decision after half century. Our paper will investigate and link two of the most relevant demographic changes of the recent European history in modern time. First, the Great Irish Famine is one of the biggest hungers in history, which led to the death of about 1 million people, about 20 percent of the total population, having a huge impact on the demographic of Ireland (Ó Gráda (1989)). Second, between 1890 and 1924 the Irish migration flows to the USA contributed in a significant part on the economic and social conditions both in the sending countries and in America (see, for example, O'Rourke (1994), Hatton and Williamson (1998), Abramitzky, Boustan and Eriksson (2014)).

In particular, we are interested in understanding how potential long-run effects of the Famine can impact the decision of migrating. The mechanism we have in mind and we would like to test is that migration networks formed soon after the famine in the US still have this driving force two generations afterwards. More in detail, during the 50-70 year period followed by the Famine, we

believe that the Irish counties hurt most had more short-term migration, which created even more migration due to the network effect and there has been an accumulated network effect. We suppose that county level inequality has resulted in bigger network effects for counties hurt most. Furthermore, there might have been a famine-induced increase in county level inequality. This has resulted in more migration from the counties that have been hurt most and "trapped" in a bad economic situation, resulting in more emigration.

To test this, we exploit the methodology proposed by Abramitzky, Boustan and Eriksson (2014) for matching two different set of data. The first one is represented by the early waves of the 20th century Irish Census provide extraordinary pieces of information for creating a complete and realistic picture of the Irish societies before World War I. We consider the two Censuses held in 1901 and 1911, respectively. For the entire Irish population, we can have several pieces of information related to the personal characteristics of the individuals. More precisely, we can collect name and family names, gender, birth date and county of birth, the relation to the head of family, the religion beliefs, the level of education, the languages spoken, the types of occupation and eventually physical and mental handicaps in the family. Furthermore, the Census contains very precise information on the location and the quality of the houses. The 1901 and 1911 Census contains 4,429,866 and 4,384,519 observations, respectively and it has recently been digitized by the Irish national archive. The Ellis Island Administrative Records on Irish migrants represent the second type of data. This source contains characteristics of about 800,000 individuals derived from passengers' documents required to enter in the USA. Finally, information on the effect of the Irish Famine on different Irish county can be obtained by statistical work from Bourke (1959), which contains information on arable areas and the intensity of the potato cultivations for the 32 different counties in Ireland.

After having matched the two datasets, we will analyse the main drivers of migration using the same methodology introduced by Krueger (2007 and 2009). We will start considering a simple linear

regressions analysis in order to understand the different level of correlations and the structure of our dataset: the dependent variable will be a binary variable, which takes the value of 1 if the individual in the dataset has migrated and 0 otherwise. We will add as explanatory variables our measure of the impact of famine and both individual and family characteristic. We can also construct more aggregate variables such as age structure, share of literate populations and share of different religious groups. We will use geographical information system (GIS) data and additional aggregate statistics, and include additional variables for controlling geographical and institutional variations at local level. Possible covariates can be urban densities, distance to water resources, agricultural productivity and different proxies for production.

Preliminary results, also supported by different instrumental variable regressions based on the exogenous movement of the potato blight, suggest that the Famine was an important and significant driver of individuals' migration.

We believe that our findings can shed some lights on the individual characteristics of migrants and the relationship between historical shocks and the long-run effects of mobility during the Age of Mass Migration.

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