

## **Explaining the evolution of international migration flows: empirical evidence for migration to Spain**

Mar Cebrián  
marcebrian@usal.es  
University of Salamanca

Traditionally an emigration country, Spain has been transformed within the space of a few decades to become one of the most important immigration countries in Europe. In the European Union, Spain is currently the country that is receiving the greatest immigrant population in absolute terms, as is indicated by the figures for migration, and this has been so for the last seven years. In 1975, there were approximately 200,000 foreigners living in Spain. This number increased fivefold in the following 25 years to reach almost 1 million by the end of the century and surpassing 4 millions in 2006.

The result of this accelerated process of growth in immigration is that in a few years Spain has gone from being one of the European Union countries with the lowest percentage of immigrants – 2% of its total population in 1998, to being the fourth - 9.3% in 2006. This migratory phenomenon in Spain has no comparison in the industrialized nations since it is much more recent and, above all, it has been much more intense and rapid. Thus, for example, in 2003 Spain, with a population that represented approximately 11% of the European Community, received 23% of the total, followed by Italy (21%), Germany (16%) and the United Kingdom (10%), such that these 4 countries absorbed 70% of emigration to the Fifteen. In 2004, one of every three immigrants to the European Union arrived in Spain. In 2005, the net migratory balance was 652,300 people, a figure higher than in Germany, France and the United Kingdom together, a trio of countries whose population is five times that of Spain.

I will focus on this period of structural break of the international migration flows to Spain. This country case will be as a sort of natural experiment to test the relative importance of different variables during a period of a huge increase of immigration, providing useful evidence to understand what happens when these migratory movements are so fast. In this article, I model the determinants of annual immigration rates to Spain in the period 1995-2005 estimating a panel data model which includes economic, demographic and political variables following previous literature for other

countries. Panel data methodology is required in order to estimate the models because of the specific-effect. The models incorporate an specific effect to control for the unobservable heterogeneity that affects individuals' decision to emigrate. The data have been collected from different administrative and secondary sources.

My paper is related to an extended literature on the determinants of migration which includes several works: For example, Mayda (2007) investigates the determinants of migration inflows into fourteen OECD countries by country of origin, between 1980 and 1995. Pedersen et. al (2004) study the determinants of immigration flows into 27 OECD countries during the period 1990–2000. Clark, Hatton and Williamson (2007) and Karemera, Oguledo and Davis (2000) both focus on the fundamentals explaining immigrant inflows into the United States by country of origin for the decade 1976–1986. Hatton (2005) investigates trends in UK net migration in the last decades. Finally, there are several works studying the determinants of international immigration to Spain. The work of Casado et. al. (2003) refers to the period 1989-1999 and explains the immigration of legal workers in Spain applying a fixed effect model. Moreno Torres (2004) applies a random effect model and ordinary least square models to explain the immigration process to Spain between 1991 and 1999, a period where immigration was not so important. Márquez et al (2004) develop a gravity model to explain immigration to Spain in the period 1993-2002 using a panel data model with fixed effects. Finally, Moreno and López (2006) refer to the period 1989-2004 and explain immigration to Spain from 15 countries applying a fixed effect model corrected by Feasible Generalized Least Squares.

The present study will contribute to the empirical literature on the macroeconomic determinants of international migration. This paper, which refers to a more recent period of immigration in Spain, when this phenomenon has become really important, makes two contributions to the literature. First, our analysis places greater emphasis than other works on the demand side of international migration, namely Spanish migration policies. It is not clear whether regularisation programmes on their own could have a significant impact on migration. Hence, more research into the impact of regularisations on migration is needed. Second, the paper takes into account various econometric issues that arise in the estimation, such as heteroscedasticity, contemporaneous correlation, and heterogeneity. In this paper the fixed effect model is corrected with the Panel Corrected Standard Errors estimator, an estimator more precise than the one usually employed in migration studies, i.e., the Feasible Generalised Least Squares estimator.

The Panel Corrected Standard Errors estimator, the results of which appear in table 3, corrects for the presence of cross-sectional heteroscedasticity and residual contemporaneous correlation.

From this work it can be concluded that economic factors are the primary pull factors in migration, policy variables such as regularisation programmes being much less important.