

The Spatial Distribution of Intermarriage in Spain: a Test of Competing Hypotheses

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Short Abstract

This paper uses Spanish marriage records (2005-06) and international migrant's population counts from the Population Register to test competing hypotheses with regard to the spatial distribution of intermarriage in Spain. There is evidence that levels of intermarriage vary greatly across local marriage markets and local markets differ significantly in their marriage pool compositions because international migrants are not equally distributed in space. However, little attention has been paid to the causes behind these spatial differences. We use OLS spatial regression analysis to examine the effect of immigrants' group size, heterogeneity, origin, sex ratio, and other characteristics on crude and net measures of intermarriage by sex at municipal and provincial levels.

Introduction and Goals

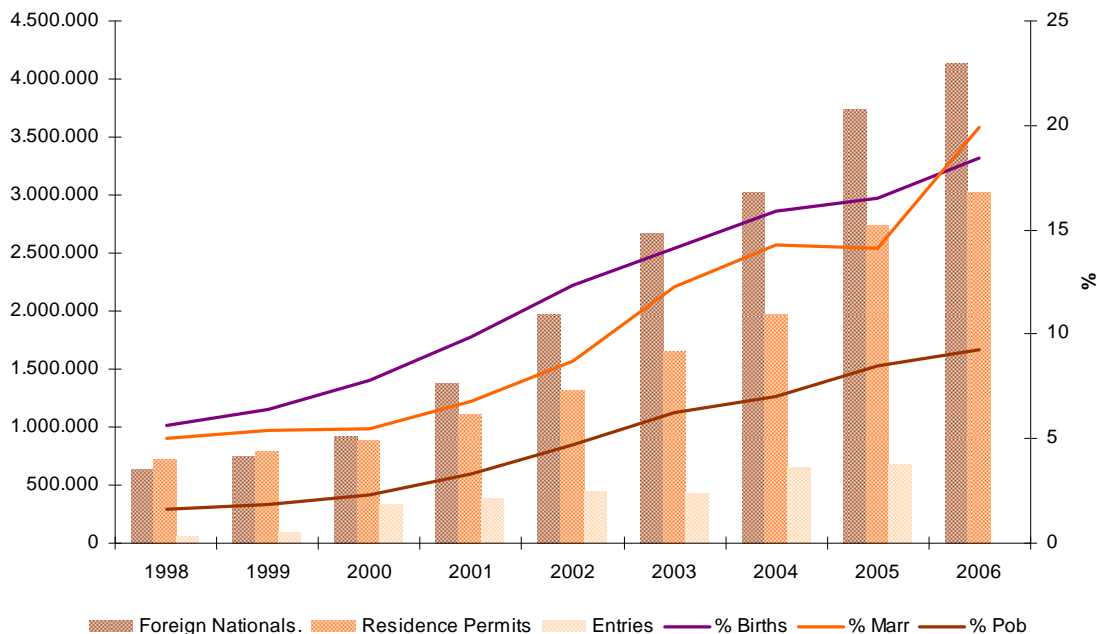
Social scientists' interest in ethnic-racial intermarriage lies in its ability to disclose details about the ethnic-racial stratification system. Most published research on this topic has paid little attention to the spatial variation of intermarriage. Even though the ethnic and racial composition of the eligible pool of candidates is often taken into consideration to estimate net indicators of intermarriage, local marriage market conditions are seldom considered. Country level views of intermarriage can often conceal large variations across areas (Harris and Ono 2004, Lewis and Oppenheimer 2000). This evidence is reinforced by the fact that individuals are likely to mate within their geographical space (McPherson et al. 2001). Therefore, in ethnic segregated neighborhoods, the likelihood of mating a partner from a different ethnic group is lower than in ethnically mixed neighborhoods. By modeling the marriage market as a single and unified pool of marriage candidates, we are implicitly assuming that the odds of intermarriage between an ethnic minority member and majority one are the same regardless of their place of residence.

Given that residential segregation is an inherent characteristic of nearly any multiethnic society, to what extent are country-level measures of intermarriage simply the result of an unequal spatial distribution of ethnic groups? By examining local variation in the marriage market, we expect to reveal the factors that influence intermarriage at the local scale. The unit of analysis is the area and not the individual. For each area we estimate crude and net indicators of intermarriage that are correlated against structural

characteristics of each area and its component neighborhoods. Structural characteristics such as group size and ethnic heterogeneity have been widely used in the literature because of their power to explain differences in intermarriage and group closure between ethnic-racial groups (Blau et al. 1982). In this paper we do a small-area verification of the influence of structural characteristics on intermarriage patterns.

The analysis is based on the Spanish case. The foreign-national population in Spain has increased dramatically during the last ten years (Figure 1). The magnitude and intensity of the growth of immigrant flows makes it an exceptional case in the European context. In 2000, with scarcely 2.3% of the total population being of foreign citizenship, Spain was still bringing up the rear among countries of the European Union. According to the Municipal Register of Population for January 1st, 2007, the number of foreign nationals had risen above four million people, placing Spain at the head of the ranking in relative terms (9.9% of foreign nationals, even more if we consider the population born abroad). The magnitude of the increase is such that 72% of Spanish population growth over the 1996-2006 period was due to the increase in the foreign population.

Figure 1. Foreign population flows and stocks, Spain 1998-2006



Source: National Statistical Institute, Spain.

Together with population growth, the incidence of immigration is beginning to have an important impact on demographic dynamics; as has been shown for the birth rate or for internal mobility. Marriage figures are very meaningful too: the proportion of marriages involving at least one foreign-born partner was 4.7% in 1996 and 19.6% in 2006, according to figures of the Spanish Vital Statistics (Cortina, Esteve, Domingo 2006).

Data and methods

Data Sources

We use Spanish vital registration data on marriages for the 2005-06 period to estimate crude and net measures of intermarriage. A marriage between two persons of different country of citizenship is considered an intermarried couple. Spatial distribution of marriages is based on the place of residence of the married couple. The lowest geographical unit that can be identified is the municipality of 10,000 or more inhabitants. There are 721 municipalities out of 8,111 that meet this criterion and they include 78.1% of the country population and 86% of the marriages with at least one foreign national that took place in Spain. We use province of residence for those married couples living in municipalities with less than 10,000 inhabitants.

We use the *Padrón Municipal de Habitantes* to obtain information about the structural characteristics of each municipality with regard to the number, sex, and precedence of the international migrants. The *Padrón Municipal* is a continuous population register managed by the municipalities but overseen by the National Statistical Institute of Spain. The reference data for our data is January 1st, 2006. Immigrants will be identified either by their place of birth or by their country of citizenship.

Variables

Dependent variables:

Crude measure of intermarriage: For each municipality, we calculate its proportion of mixed marriages from the total number of mixed marriages that were registered in Spain.

Net measure of intermarriage: For each municipality, we calculate the odds ratio of intermarriage by dividing the odds of marrying a Spanish citizen for foreign-nationals by the odds of marrying a Spanish citizen for Spanish citizens. Here intermarriage refers to marriages between foreign-nationals and Spanish citizens.

Independent variables:

Group size. For each municipality, we use the log transformation of its number of international migrants.

Heterogeneity. For each municipality, we use a heterogeneity indicator to characterize the diversity of origins of each area.

Origin. For each municipality, we compute an average social distance indicator with respect to the Spanish citizens. This indicator is based on the age-standardized difference in educational attainment between the international migrants and the Spanish citizens. Since international migrants may represent several origins, we compute a weighted measure of educational attainment that takes into account the specific contribution of each group.

Sex ratio. For each municipality, we use the log transformation of the number of international migrants of one sex divided by the number of international migrants of the opposite sex.

Model

We use standard OLS spatial regression analysis to estimate parameters for each independent variable and their spatial lags.

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