Determinants of International Migration: Empirical Evidence for Migration to Spain

Mar Cebrián

Department of Economics and Economic History

University of Salamanca

Spain

Spain has traditionally been a country of emigrants. Since the nineteenth century, the migratory movement from Spain to the exterior followed a process similar to the one occurred in other European countries. In a matter of just a few years, Spain has evolved from being a country of emigration to being a country of immigration. This evolution started to take place in 1995–1996, and considering the numbers, it could be said that Spain is now one of the leading (if not the main) countries of immigration in the European Union. The legal foreign-born population has quadrupled in less than a decade, rising from approximately 500,000 in 1995 to three million in 2006. Relatively little is known about the factors behind the gross level of international migrant flows into Spain, despite the rapid growth in the number of migrants seen in recent years.

This paper offers a quantitative assessment of the economic and non-economic determinants that have driven and are driving world migration. The main questions we will try to answer are: Are valid standard theories of migration to explain the actual migration? Or, are these theories only valid to explain some kind of migration? What are the main factors explaining migration to developed countries? Do flows of international migrants respond to economic incentives? Which non-economic determinants, such as political, cultural, and geographical factors, shape cross-country immigration patterns? Are network effects at work?

The estimation results confirm the importance of the economic differential between countries, policy variables and migrant stock for migration. Contrary to the results obtained by Hatton and Williamson I find that the variable relative schooling years has a negative effect on immigration. This can be explained because the flows arriving to Spain are different of those who arrive to USA, in the sense that immigrants in Spain are of very low qualification and with very low levels of education.

I also find that standard theories are valid to explain migration from developing countries to develop countries but we have to find other theories in order to understand migration flows between developed countries. Relatively little is known about the factors behind the gross level of international migrant flows into Spain, despite the rapid growth in the number of migrants seen in recent years. This matters because assumptions about the future evolution of migration are an important component of official judgements about the potential trend rate of economic growth. And despite the large body of theoretical literature on the determinants of international migration, little is known about why migration has risen so sharply into Spain, or indeed why it might be expected to continue to rise.

There is no single, well-developed theory of international migration. Among the various models attempting to explain why international migration begins, five major approaches can be discerned: A) Neoclassical economics: macro theory (arguably the body of theory most familiar to World Bank staff) views geographic differences in the supply and demand for labor in origin and destination countries as the major factors driving individual migration decisions. B) Neoclassical economics: micro theory focusses on the level of individual rational actors who make decisions to migrate based upon a cost-benefit calculation that indicates a positive net return to movement. In this approach, human capital characteristics that raise the potential benefits of migration, and individual, social, or technological factors that lower costs, will lead to increased migration. C) The new economics of migration views migration as a family (i.e., group) strategy to diversify sources of income, minimize risks to the household, and overcome barriers to credit and capital. D) Dual labor market theory holds that demand for low-level workers in more developed economies is the critical factor shaping international migration. To avoid the structural inflation that would result from raising entry wages of native workers, and to maintain labor as a variable factor of production, employers seek low-wage migrant workers. E) World systems theory focusses not on labor markets in national economies, but on the structure of the world market. In this view, international migration is affected less by wage or employment differentials between countries than by policies toward overseas investments and toward the international flow of capital and goods

Several theories address the perpetuation of international movements: A) Network theory stresses that migrant networks serve to reduce the costs and risks of international migration and thus to increase the likelihood of movement. The development of such networks are often facilitated by government policies toward family reunification and, once started, migrant networks can make international flows relatively insensitive to policy interventions. B) Institutional theory points to the fact that once international migration has begun, private and voluntary organizations develop to support and sustain the movement of migrants. These include a variety of legal and illegal entities that provide transport, labor contracting, housing, legal and other services, many of which have proven difficult for governments to regulate. C) Cumulative causation theory holds that, by altering the social context of subsequent migration decisions, the establishment of international migration streams creates "feedbacks" that make additional movements more likely. Among the factors affected by migration are the distribution of income and land; the organization of agricultural production; the values and cultural perceptions surrounding migration; the regional distribution of human capital; and the "social labeling" of jobs in destination areas as "immigrant jobs." Again, once a "migration system" has developed, it is often resistent to government policy intervention.

We will try to see if these theories are valid to explain international migration flows. This paper isolates the economic and demographic fundamentals that determine immigration rates across source countries and over time, as predicted by the theory. These are real incomes, poverty, education, demographic composition and inequality. The paper also allows for persistence in these patterns as they arise from the impact of the existing immigrant stock. Specific policy variables are included which are derived directly from regularization policies.

We apply a panel data for immigration to Spain by place of birth for 36 source countries across the 10 years from 1995 to 2004. We attempt to capture the determinants of the emigration rate to Spain in the next specifications, following Hatton and Williamson, 1998 and 2003, and Rotte and Vogler, 2000:

Specification 1:

 $LnTM_{j,t} = b_0 + b_1 \ln(GDP_{pc}ratio) + b_2 \ln GDP_{pc_{j,t}} + b_3 \ln GDP_{pc_{j,t}}^2 + b_4 Age_{j,t} + b_5 Schoolrati + b_6 LnDistance + b_7 LnPStock + b_8 \operatorname{Regull} + b_9 \operatorname{Regull} + b_{10} \operatorname{Regull} + e_i$

Specification 2: $LnTM_{j,t} = b_0 + b_1 \ln(GDP_{pc}ratio) + b_2IDH + b_3Age_{j,t} + b_4Schoolrati + b_5LnDistance + b_6LnPStock + b_7 Regul + b_8 Regul + b_9 Regul + e_i$

Specification 3: $LnTM_{j,t} = b_0 + b_1 \ln(GDP_{pc}ratio) + b_2Poverty + b_3Giniratio + b_4(Ginirati)^2 + b_6Age_{j,t} + b_7Schoolrati + b_8LnDistance + b_9LnPStock + b_{10}Regul + b_{11}Regul + b_{12}Regul + e_i$

The left-hand side variable is migration to Spain from country j in year t as proportion of the source country population.

GDPpc ratio: the ratio of the average (purchasing power parity adjusted) income in j relative to Spain: It is to cover the supposed effect of decreasing migration incentives with converging living standards.

GDPper capita of the relevant sending country: In order to account for a possible dissolution of financial restrictions and the corresponding inverse u-shaped relationship between development and migration, we also included GDP per capita of the sending country and its square.

Age in the origin country is the share of population aged 15-29.

School ratio is the ratio of average years of schooling (syr) in j relative to the US.

Distance represents distance to the host country as a proxy for direct migration costs.

Stock of previous immigrants from the sending country. This is defined as the ratio of the number born in country j residing in Spain at time t-1 relative to the population of country j.

GiniRatio: ratio of gini coefficient of household income, source country to Spain.

Poverty: the ratio of the country's gini coefficient of household income to the square of its income per capita.

Regul1, Regul2 and Regul 3 are dummy variables of the years in which there has been a regularization process.

Sources:

Système d'Observation Permanente des Migrations" (SOPEMI) ECLAC: Economic Commission for Latin America, United Nations IOM: International Organization for Migration Anuarios de Extranjería, Ministerio del Interior de España. El Padrón Municipal, España, Nacional Statistics Institute La Estadística de Variaciones Residenciales, Nacional Statistics Institute.