

PART 4. FLOWS AND THE EU

Spain



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Spain¹

1. Spanish Migration Policy and Economic, Demographic and the Political Context of Immigration in Spain²

Spanish migration policy took place in the context of great economic, demographic and political upheavals that took place in the second half of the last century. Until 1950, Spanish society could be described as agrarian and emigrant. Most of the active population was occupied in the agriculture sector and emigration was significant. For example, in the one hundred years between 1850 and 1950, an estimated 3.5 million Spaniards left their home country for countries in the Americas; from World War I onwards there was also significant flows of some 500,000 people towards other European countries. (There was also the independence of the Spanish protectorate to the north of Morocco which gained independence in 1956 with some 250,000 Spaniards living there). In the middle of the last century, an estimated 56,000 foreigners were in Spain. This means that one can roughly estimate the relation between outflow (emigrants) to inflow (immigrants) was more than 100:1. These were staggering numbers for Spain and an important issue for policy.

During the period 1950 to 1975, an important economic restructuring took place. Spain moved from an economy of agriculture to one of industry and services. By the time of Franco's death in 1975, more than half of the population resided in urban zones, received a wage with rights to social and health benefits and acceded to public education and the supply of consumer goods. The birth rate was high and expanded the population from 28 to 36 million. A vast mobilisation of the population took place as well. Some 5 million people migrated from the countryside to emerging poles of industrial development. At the same time Spanish emigration underwent a shift as the flows to the Americas ebbed in the 1960s and practically disappeared in the 1970s. Spaniards now chose to leave Spain for other parts of Europe. Estimates reveal that these emigrants contributed 3% of the GDP and 15% of the gross formation of capital in the first half of the 1970s.

The presence of foreigners in Spain doubled from 0.2% of the population in 1960 to 0.4% in 1970, so while foreigners still accounted for few of the population a discreet shift was evident. In 1975, more than 60% of the foreigners in Spain came from countries of the present EU.

The cycle which began in 1975 is characterised by a reconversion of the production structure and the massive penetration of transnational companies. This took place as there was a return to parliamentary monarchy and the entrance to the EU that was underway was complete in 1986.

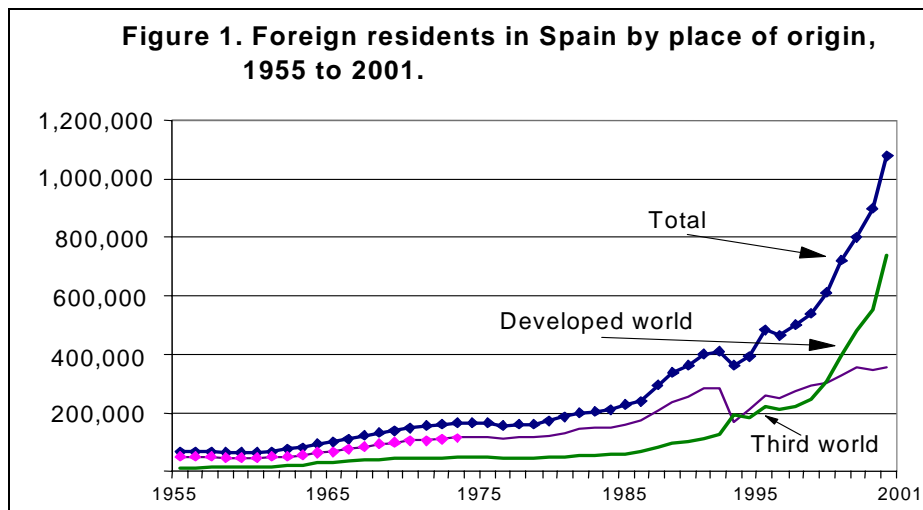
In terms of demographic change, there were some important developments. The birth rate began to descend and did so until Spain was reporting one of the lowest birth rates in the world and this as an ageing of the native population set in. Massive inner migrations disappeared and a large segment of migrants return to Spain (some 650,000 between 1975 and 1980). Although the emigration flows have since stopped, at the end of the last century, Spain can still count 1.6 million Spaniards around the world who still contribute 0.4% of the GDP

¹ This report was prepared for CNR-IRPPS for the project *The Brain Drain — Emigration Flows for Qualified Scientists*.

² Relevant information for this section is from Colectivo Ioé Política Migratoria Español en el Marco Europeo, Madrid, <http://www.nodo50.org/ioe/>

through their economic remittances.

Spain has become a new country of immigration, just like Italy, Portugal and Greece. Between 1975 and 2000, the number of foreign residents (people with residence permission) experienced constant growth, going from 165,000 to more than 1 million today. The growth rate accelerated in the 1990s, especially as of 1998, the year in which the immigrants of third



world countries surpassed the number from the EU (Figure 1).

For a more accurate picture of foreigners in Spain, it is necessary to add at least two other groups: nationalised citizens (persons who are legally Spanish but do not belong to the originating population of immigration (more than 160,000 since 1960) and, the irregular immigration in Spain. After the extraordinary process of regularisation in 2000 and 2001, some 325,000 people were admitted. Foreign immigration in Spain has been growing continuously over the last twenty five years, and it is accelerating. However, the foreign population in a regular situation still only accounted for 2.45 of the total population in Spain at the end of 2000. However, the ratio of foreign emigrated Spaniards and immigrants has dropped to 1.5:1.

On the next page, Figure 2 highlights some of the significant changes in migratory policies in Europe and Spain which contributed to this dramatic change as the last century came to a close.

Figure 2. Key Policy developments for Spain migration policy.

Year	European Union	Spain
1974	* Closing of borders to immigration in the north and center of Europe	* “Embalsamiento” of African immigrants * First political refugees of Latin America
1985	* Agreement of Schengen	* Law for foreigners regularization (43.800)
1986		* Entrance in the C.E.E. (E.U.)
1990	* Schengen treaty	
1991	* First Schengen extension	* First global political declaration of immigration * Visa to magrebies 2 ^a Regularization (110.000)
1992	* Treaty of Maastrich	* Distinction between communitarian and noncommunitarian foreigners * Modification of the constitution
	* Agreement of readmission with Poland	* Agreement of readmisión with Morocco
1993	* Trevi Group (London): restrictive criteria for the asylum	* Entrance to Schengen. Implantation of new visas * System of quotas of immigration
1994-5	* General readmission agreements	* New law of Asylum (restrictive)
1996	* Free circulation Schengen space	* Reform of the foreigners regulation law and 3 ^a regularization (18.800)
1997	* Treaty of Amsterdam: the policy of Schengen is adopted	* Propose to modify the immigration law
1999	* Summit of Tampere: towards the European judicial space	* Agreement with Morocco for seasonal immigration. Discussion new law of immigration
2000	* Summit of Nice * European rights chart	* Immigration law 4/2000. 4th regularization (200.000) * Migration Programme GRECO * Reform immigration law 8/2000
2001	* Summit of Stockholm: to promote integration and external control	* Agreement with Ecuador, Colombia, Morocco. * Voluntary return plan with Plan Ecuador (25.000) * Regularization (300.000) * Regulations of the law 8/2000

2. Brain Drain in Spain

2.1. Measures to Tackle the Problem

A recent interview made by the Consejero de Educacion y Ciencia³ said the brain drain problem is essentially one of researchers who earn their PhD abroad. It is more than likely that after graduation (or even before graduation), persons have a job offer in the country in which they are hosted and the graduate ends up staying in that country for a long time and most often for an indeterminate time. At the moment, the most attractive country is the US and the fact that the researcher can go on to research activities in the business sector is certainly a factor for Spaniards who are unable to have these possibilities in Spain. This US pull factor is especially strong because there is little change a Spaniard returning home will be able to secure the same level of job. The influence of professions (level and responsibility, for example) on mobility may be indirect, but it is quite common for scientists to have trouble being reintroduced to the Spanish system after long term international mobility.

The Spanish government has decided to tackle this problem and recently launched a programme to try and reverse brain drain. *Ramòn y Cajal* of the Ministerio de Ciencia y Tecnologia is specifically aimed at increasing research capabilities at public research institutions in Spain.⁴

R&D training programmes have been main action lines of the Spanish government since the mid 1980s. Hundreds of PhD fellowships were granted each year to every research group and individuals, some for them to go abroad for their studies. As a result, the number of PhD graduates grew rapidly.

After fifteen years, the National Research, Development and Technological Innovation Plan (2000-2003) still has among its strategic aims “to increase the qualified human resources both in the public and the private sectors, while at the same time encouraging mobility among personnel of the different centre”. In 2001, the Spanish Ministry of Science and Technology (MCYT) launched a new program *Ramòn y Cajal* aimed at tackling the problems of HRST — how to bring back, integrate and stabilise new PhD researchers into the Spanish public R&D system.

The diagnosis underlying the HRST strategy pointed to:

- the small size of the system, both in the public and private sector and the need to increase the research staff;
- the “procedures of selection of tenure personnel in universities” and the quality of research;
- the lack of mobility of researchers between public and private sectors;
- the need to bring back Spanish researchers doing research or training abroad; and,
- the limited number of new permanent jobs in the PROs leading to working conditions’ problem.

The mismatch between supply of and demand for researchers increased in the 1990s. The system produced 5,000 Ph.D.s per year, while the university permanent staff grew at an

³ Angel Maria Sainz Garcia, Consejero de Educacion y Ciencia, Spanish Embassy, Rome.

⁴ The programme description is taken from: Luis Sanz-Menéndez, *Ramòn y Cajal* Programme, CSIC and Ministry of Science and Technology, Spain, mimeo, 2002.

annual average of only 1,500 positions. Moreover, Spanish industry has a tradition of little hiring of Ph.D.s for research. The perception of low returns on HR investments continues.

The design of the program was made inside the MCYT-DGI, in the context of a high level of interaction with CRUE, a group of university Vice-Chancellors responsible for research, that acted as an advisory and pressure group.

A number of relevant problems guided the principles of action in designing the programme.

1. The selection should be competitive, centralised, and with a relevant role of the research community (ANEP) — for quality measures, it was necessary to allow all of those well trained in research. This implied matching supply and demand and avoiding ‘adverse’ selection processes.
2. There was a need to increase the ‘commitment’ of the hosting organisations to provide tenure at the end of the period when the research performance was graded as ‘excellent’. Previous arrangements had few such incentives since the Ministry paid the grants directly to the individual and the research centre(s) simply accepted. Moreover, the research centre received 100% of the costs associated with the researcher and so incentives for external funding with future allocation of resources remained low. However, once again, public subsidies, in a decreasing proportion basis, were going to be the instrument again.
3. The last issue was the need to promote strategic planning in R&D centres instead of outcomes being the result of internal pressure. The programme forced the need of selecting among various research domains and therefore fostered organisational choices and priorities in terms of research capabilities. The programme would allow R&D centre to select researchers better adapted to their needs among those declared eligible, and also allowed the candidates to apply for all research centre with personnel demand in their knowledge domain.

2.2. The Ramón y Cajal Program’s Objectives

Although the program *Ramón y Cajal* was primarily aimed to match demand and supply of doctors, it was also to solve other problems and it was eventually to identify with several objectives:

- the creation of a well defined step in the “scientific career” to stabilise and to improve the working conditions of doctors;
- to facilitate the return of researchers from abroad;
- to match the needs of HR in the priority lines of the national RTD Plan;
- to identify the most excellent researchers looking for a permanent job easing their recruitment; to support the mobility of HRST; and,
- to make RTD centre reveal their strategic priorities for HRST.

Appraisal of the first call of the programme: 2001.

- 151 universities and RTD centre demanded 2,064 scientists from all areas of knowledge. Centres in Madrid, Catalonia, Valencia and Andalusia accounted for 70% of the total.

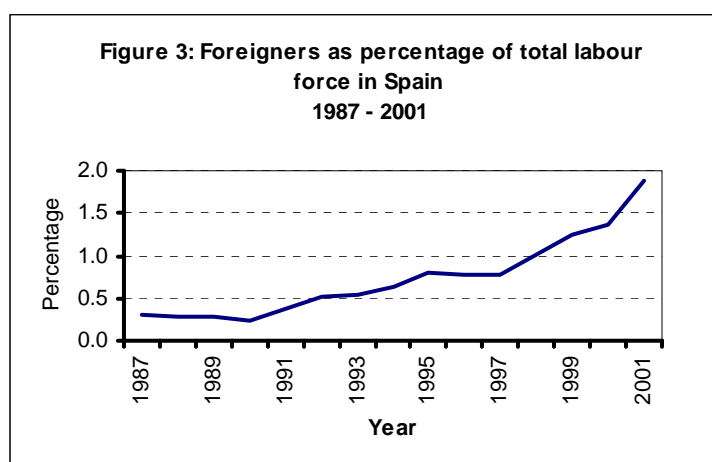
- 2,807 candidate scientists applied for a contract, resulting in 3,974 acceptances in 151 R&D centre. From 2,807 candidates, 375 had a PhD from a foreign university and 508 were residents outside of Spain.
- The plan was to approve 800 grants for 5 years. The cost for the government for the first year was 35 million Euro, while for the 5-year period, the 800 grants represented 126 million Euro.
- 774 researchers have joined R&D centre: 105 non-Spaniards of which 70 were residents outside of Spain and 35 in Spain. Out of the 669 Spanish scientists, 93 were resident outside of Spain (mainly in EU countries), and the remaining 576 scientists lived in Spain.
- The average age of selected candidates was 35.6, with an uneven gender distribution: 63% men and 37% women.
- The distribution by areas of expertise, shows some concentration in molecular and cellular biology and genetics (18%), followed by physics and space sciences (9.8%) and chemistry (9.6%). The lowest participation was for law (0.4%) and social sciences, civil engineering and architecture (each with 0.6% representation). Madrid and Catalonia had 238 and 199 contracts, respectively, and together more than 57% of the total.
- CSIC (the National Research Centre) and the University of Barcelona had the highest rate of success.

In 2002, 500 new contracts were awarded, and for 2003, 700 new contracts are planned. This raises the overall cost of the programme for the 5-year period to 315 million Euro.

2.3. International Mobility: Brain Gain in Spain⁵

The Spanish LFS provides data on the nationality of the labour force, broken down by occupational category and level of education. We consider firstly term the evolution of the weight of foreigners in the labour force. Figure 3 shows how this rate has been increasing constantly since 1987, but more intensively since 1997. Despite this evolution, foreigners represent today less than 2% of the labour force (Figure 3).

The national origin structure of the incoming foreigners has changed over the considered period. In 1987, almost 50% of the active foreigners in Spain came from the EU, whereas they only represented 25% of the active foreign population in 2001. This is explained by the raise in the number of immigrants coming from Latin



⁵ This section is from the work of Carolina Cañibano, Mónica Martín, Marco A. Cancino, *Human Mobility in Spain, Some Indicators Based on the Spanish LFS*, ENMOB, Marseille, 2002 mimeo.

America and Eastern European countries during the more recent years (Figure 4).

In order to build indicators concerning “brain gain” more specifically, we must focus on the immigrants with higher levels of qualification. In 2001, the rate of foreigners with university degrees in the total foreign labour force was 29.7%, which means that HRSTE represented almost 30% of the total foreign labour force. In 1999⁶ total HRSTE represented 32% of the Spanish Labour force. The rate of foreign HRSTE within the foreign labour force is thus very close to the HRSTE rate within the total labour force.

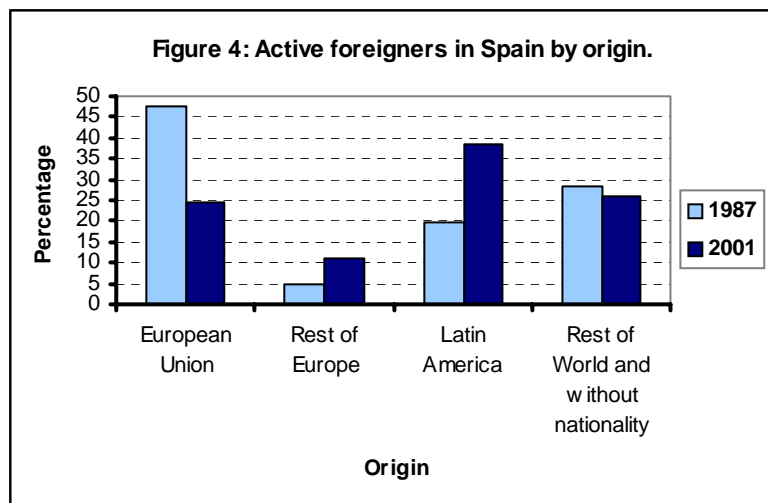
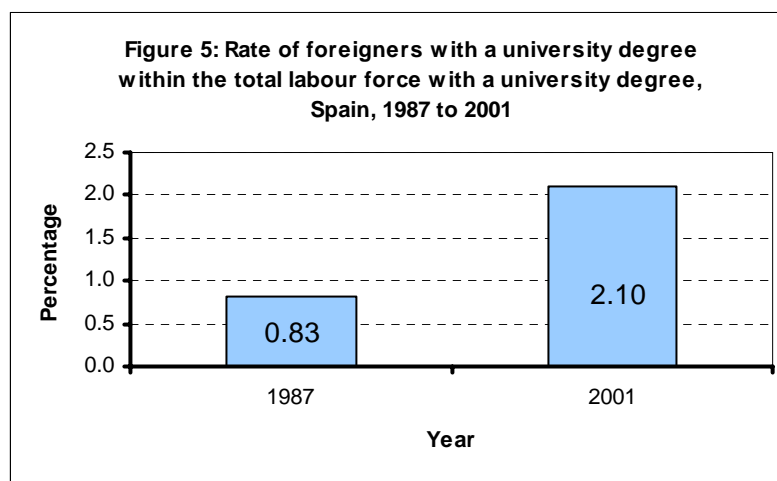


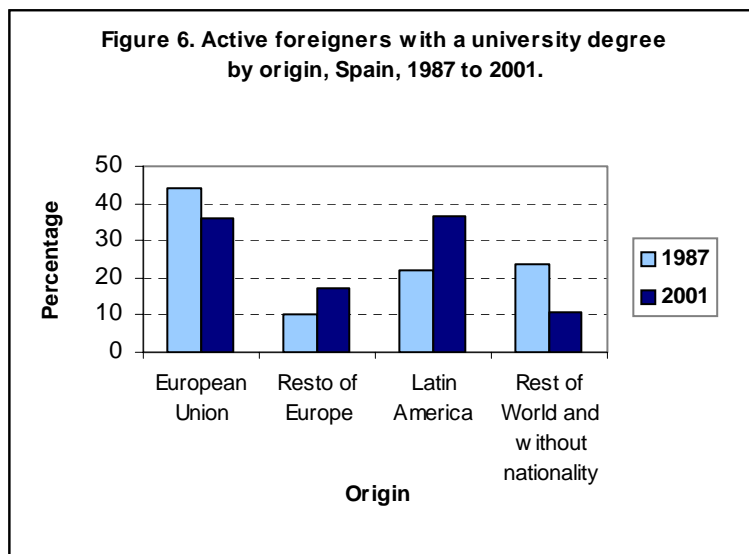
Figure 5 shows how the evolution of immigration of foreigners with university degrees has followed a similar path as total immigration. In general terms, we can say that the weight of foreign HRSTE within the total HRSTE labour force (2.1% in 2001) is at present a bit higher than the weight of total foreign population within total labour force (1.8% in 2001). As a consequence, we might conclude that brain gain has been increasing in Spain for the last 14 years at a higher average rate than total immigration.



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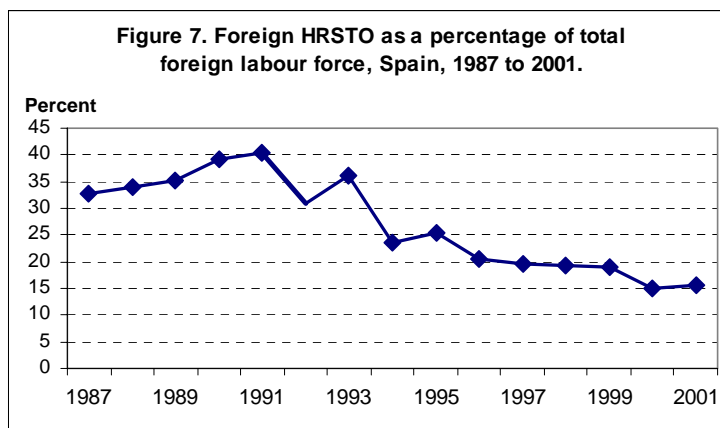
Concerning the national origin of immigrants with university degrees, we can observe how the structure shown by figure 6 is similar to the above mentioned figure 4, presenting however some differences. The main regions of origin for foreigners with university degrees are the EU and Latin America, having decreased the weight of the former and increased the latter's. The EU has a higher presence as provider of HRSTE immigrants than of total immigrants, as well as the rest of Europe. On the contrary, Latin America and the rest of the world are more frequently the national origin of total immigrants than of HRSTE immigrants (Figure 6).

⁶ 1999 is the last year for which Eurostat HRST indicators are available



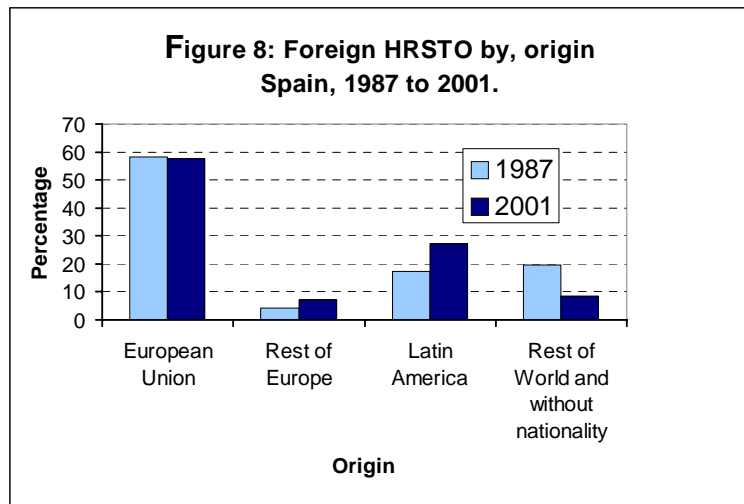
Finally, we can brake down the Spanish foreign labour force by occupation. The data present a different picture than the one related to HRSTE. In the first place, we observe a raising in the total number of foreign HRSTO in Spain during the considered period (1987-2001). This is reflected in Figure 7, by an increase in the rate of foreign HRSTO within the total HRSTO population. However, foreigners represent in 2001 a higher rate within the HRSTE popula- tion than within the HRSTO.

We observed that the rate of foreigners with university degrees has been growing in the considered period. However the rate of foreigners with occupa- tions requiring high levels of qualification (HRSTO) has been decreasing. This means, that even though Spain is “gaining brain” through immigra- tion, we are not “using brain” by employ- ing the incoming HRSTE in occupations requiring a high level of qualification. This is a problem which concerns not only immigrants, as the rate of HRSTO within the labour force in Spain was 17% in 1999 compared to an HRSTE rate of 32%. The difference between both rates is higher in Spain than in any other EU country and reflects the existing mismatch between offer and demand of qualifications, which affects also the immigrant population (Figure 8).



Spain attracts growing flows of foreigners with high levels of education but its labour market is not able to absorb this brain gain by employing all these immigrants in occupations associ- ated with high levels of qualification. Given the observed mismatch between offer demand of “foreign brains”, it seems that the Spanish Labour market is keener to employ EU citizens in high-level occupations. The data are not surprising as the economic links between EU countries are stronger and as commonly EU immigrants enter the country having already

signed a contract with the company or the institution they are going to work in.



3. Bibliography

Colectivo Ioé Política Migratoria Española en el Marco Europeo, Madrid,
<http://www.nodo50.org/ioe/>