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Emigration of immigrants in Spain.

A fictitious arrival cohort analysis.

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Introduction

The analysis of the outflows and their characteristics, especially in terms of self-selection processes, is a key element in understanding migration dynamics (Constant and Massey, 2003). Besides, the Spanish immigration case is of great interest both because of the intensity of the recent demographic and economic changes and because of the timing in which they occurred. The employment crisis began at a time when most of the immigrant population had only resided in Spain for a short period of time. In this sense, the relative weakness of the family and social consolidation can make this population group more sensitive to the developments in the labour market.

There have been substantive theoretical developments in the social sciences regarding temporary migrations. However, the quantitative empirical contributions available in the international literature have been less conspicuous. Indeed, the nature of immigrants' migration involves some measurement difficulties that are faced by national statistical offices.

Besides the methodological difficulties to measure outflows, there is a relevant theoretical debate about the nature of these migration movements. The authors of Neo-classical Economics (NE) have traditionally seen immigrants' migration as a result of the failure of their migration project, because they conceive migration as a permanent project, while the authors of the New Economics of Labour Migration (NELM) understand that many immigrants plan temporary projects. Such migrants are considered 'target earners', and once they have managed to meet their savings targets, they leave the host country (Kirdar, 2009). Taking this into account, NE authors expect a negative self-selection in out-migration, but NELM theorists foresee a positive self-selection.

Also, we expect to find different outmigration patterns for migrants arrived before and during the Great Recession that began in 2008. We expect to find a smaller emigration rate for migrants arrived once the economic cycle had change, due to a bigger match between expectations and reality when their migratory project was planned.

This paper has two objectives. First, it targets to measure the foreign-born population emigration from Spain. Second, it aims to find self-selection patterns regarding these outflows in terms of educational level. These two aims represent a contribution to the scarce empirical international evidence about migrants' emigration patterns.

In this paper, we use Dustmann and Weiss (2007) strategy to measure outmigration flows, by studying the sample attrition of different fictitious arrival cohorts with Spanish Labour Force Survey data from 2007 to 2014. Following this approach, we calculate emigration rates for different arrival cohorts. We also compare educational composition evolution in order to deduce self-selection patterns.

Migrants' outmigration analysis

The vision of migration as permanent projects defended by neoclassical economists (Todaro 1969; Todaro 1971) has been thoroughly refuted by the theoretical and empirical literature since the 80s. Both from the New Economics of Labour Migration (Stark and Bloom 1985) and from the transnationalists approaches (Portes, Guarnizo, and Landolt 1999; Ali and Koser 2002) the emphasis has been put on return, successive and circular migratory movements, both in quantitative and conceptual terms.

This focus on the temporality of migration has moved the focus of analysis from the differences in income or unemployment among host and destination countries to the analysis of other factors such as risk diversification, the decision-making process in families (instead of the individual decision) and the effect of social networks both in the decision to migrate as in the integration of immigrants into host societies.

In addition, an important stream of literature has dedicated its efforts to measure the quantitative importance of these migratory movements. Usually the absence of incentives to give information on outmigration entails a remarkable scarcity of data, so research on this field need to develop empirical solutions to approximate the magnitude the phenomenon. While some of these proposals use data from administrative records (Bijwaard, Schluter, and Wahba 2014; Warren and Kraly 1985) or the combination of several types of records and surveys (Jasso and Rosenzweig 1982; Borjas and Bratsberg 1996) others have chosen to compare census data (Warren and Peck 1980; Lam 1994). Also, some studies have formulated empirical exercises using surveys to measure or characterize the emigration of the immigrant population. Constant and Massey (2003) Adda, Dustmann, and Görlach (2015) and Bellemare (2007) measure emigration from the Socio-Economic Panel German (SOEP) sample attrition, exercise repeated by Miyar-Busto and Muñoz-Comet (2015) with the Spanish Labour Force Survey Panel. Other studies have focused on the analysis of the intentions of return as an approach to

the phenomenon (Adda, Dustmann, and Görlach 2015, De Arce and Mahia 2012; Agyeman and Garcia 2015; Coniglio, De Arcangelis, and Serlenga 2006; Makina 2012). Finally, Dustmann and Weiss (2007) followed the evolution of fictitious arrival cohorts in the British Labour Force Survey to deduce outmigration of immigrants, strategy to be followed in this work.

On the other hand, the characterization of self-selection in terms of income, unemployment or educational level has generated different results. While the classic work of Borjas and Bratsberg (1996) finds an increasing effect of emigration on the initial self-selection, some research found a predominance of negative self-selection in outflows both in terms of occupational prestige (Constant and Massey 2003) unemployment (Bijwaard, Schluter, and Wahba 2014; Miyar-Busto and Muñoz-Comet 2015) and education (Piotrowski and Tong 2010). However, other analysis find a U-shaped relationship, so both the most successful and the least are more likely to migrate again (Bijwaard and Wahba 2014th). In short, the debate on the sign and size of self-selection and on the factors that determine it remains open in the literature on return.

The relevance of the information in migration projects

Both planning and achieving migration projects depend heavily on the information available to potential immigrants (DaVanzo 1983; Fokkema and Haas 2015; De Haas 2014). The availability of this information is therefore linked to the success of migration projects, although the expected effect on the return differs depending on the theoretical perspective adopted. Borjas and Bratsberg (1996) point to the lack of information at arrival as one of the causes of the failure of migration projects and outmigration. However, from NELM perspective the realization that circumstances are worse than expected lengthen the time needed to accumulate the goals outlined in the migration project (Berninghaus and Seifert-Vogt 1989; Lindstrom 1996; Rendall, Brownell and Kups 2011). From a trans-nationalist perspective, information on the country of origin can facilitate decision-making on the return (Cassarino 2004).

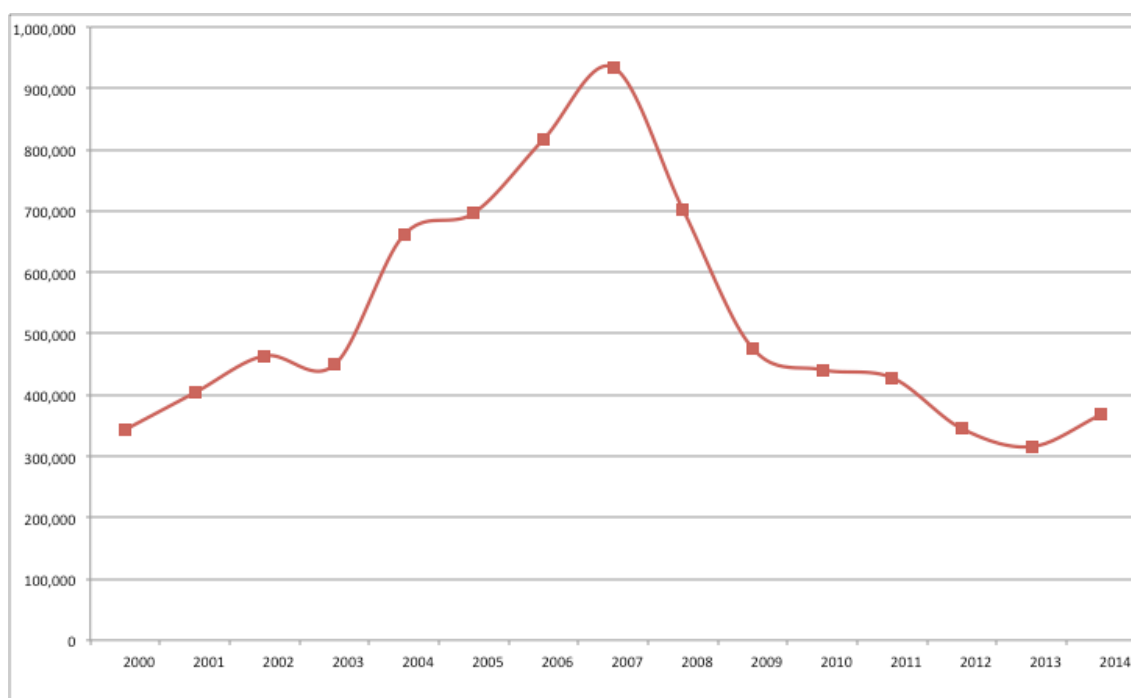
The quantity and quality of information available to immigrants depend mainly on three elements: the existence of networks in the destination country, the educational level of potential immigrants, and the information available at all times on the development of the host country economy. In this context, we can expect a different propensity to

emigrate depending on the arrival moment, according to which those who have had more information to formulate their migration projects have different probabilities of prematurely interrupt their migration projects.

From this point of view, an economic shock in the host country could lead to different outmigration behaviours depending on arrival cohort, because migrants arrived after the shock had information about the new economic context when they made their migration projects. One would expect therefore that, although during adverse economic conditions inflows decrease, the migrants arrived during these periods would be composed by migrants with better-planned migration projects or less labour market oriented. Bijwaard and Wahba (2014b) results suggest that higher unemployment at the time of arrival is negatively related to the probability of exit. However, there is evidence for Canada that those who arrive during the recession have a bigger propensity to leave (Aydemir and Robinson 2008).

For the Spanish case, the change of economic cycle in 2008 may have harmed the integration of those who arrived before that date and developed their migration projects in another economic context. The decrease of inflows to Spain from the beginning of the Great Recession is consistent with the reduction of employment opportunities. According to data from the Survey of Residential Variations, foreign-born arrivals from abroad decrease from more than 900.000 in 2007 to nearly 500,000 in 2009. Despite the expansion of the recession, in 2014 nearly 400.000 foreign-born migrants had entered Spain, amount similar to that of 2001 when migration was expanding in the country (Figure 1). The idea that these migrants developed their migration projects with better information about their chances of integration into Spanish society than migrants arrived in 2006 or 2007 is plausible.

Figure 1: Foreign born inscriptions, coming from abroad, 2000-2014



Source: Own elaboration with EVR data.

Data and methods

In order to measure the migration of the population born abroad over time and the differences depending on the arrival moment, data from the Spanish Labour Force Survey (SLFS) will be used. The SLFS is a quarterly survey conducted by the National Statistics Institute (NSI) since 1964. The surveys sample consists of some 60,000 households and collects information from about 170,000 individuals, about 9000 of them are born outside in 2015 surveys.

Fictitious arrival cohorts will be built from the variable "years of residence" so that everyone that claims to have arrived the same year will be grouped along different surveys. Each of these groups constitutes a fictitious arrival cohort.

Information about time of residence for those born abroad of Spanish nationality is only available since 2007. Given the numerical importance of the nationalizations of immigrants in Spain (40% of those born abroad had Spanish nationality in 2015) analysis was restricted to the period 2007-2015. We will follow the evolution of the arrival cohort sample size throughout each survey year, which shall consist of the sum of the four quarterly surveys.

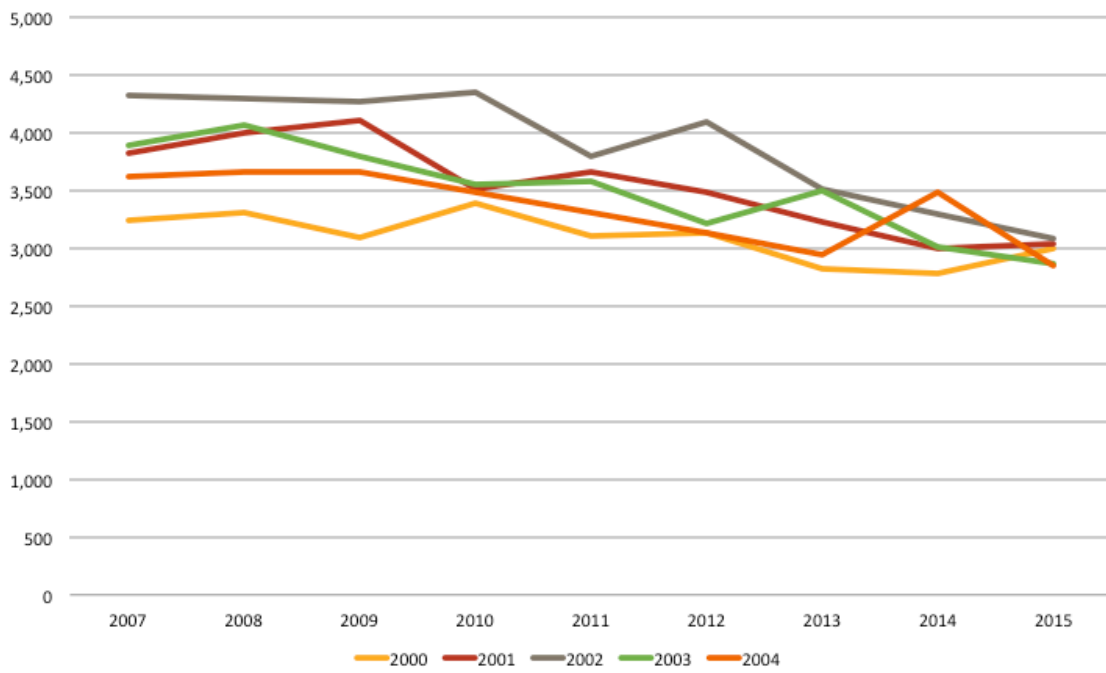
In addition, the same analysis will be performed by educational level, grouping to immigrants from each fictitious arrival cohort in three educational levels: primary or less, secondary and higher education.

The evolution of arrival cohorts before and during the Great Recession

In Figures 2, 3 and 4 we can follow the sample evolution of the fictitious cohorts who arrived between 2000 and 2004, 2005 and 2010 and 2011 to 2015. In light of the evidence presented in the figures, and as expected, sample attrition is only observed for those arrived before 2008. Any attrition in the sample is shown for those arrived 2008 onwards. Moreover, it is interesting to note that the attrition occurs only from 2010. The use of savings and unemployment benefits (lasting up to 2 years in Spain) may have provided the necessary support to not emigrate since the worsening of economic conditions in 2008.

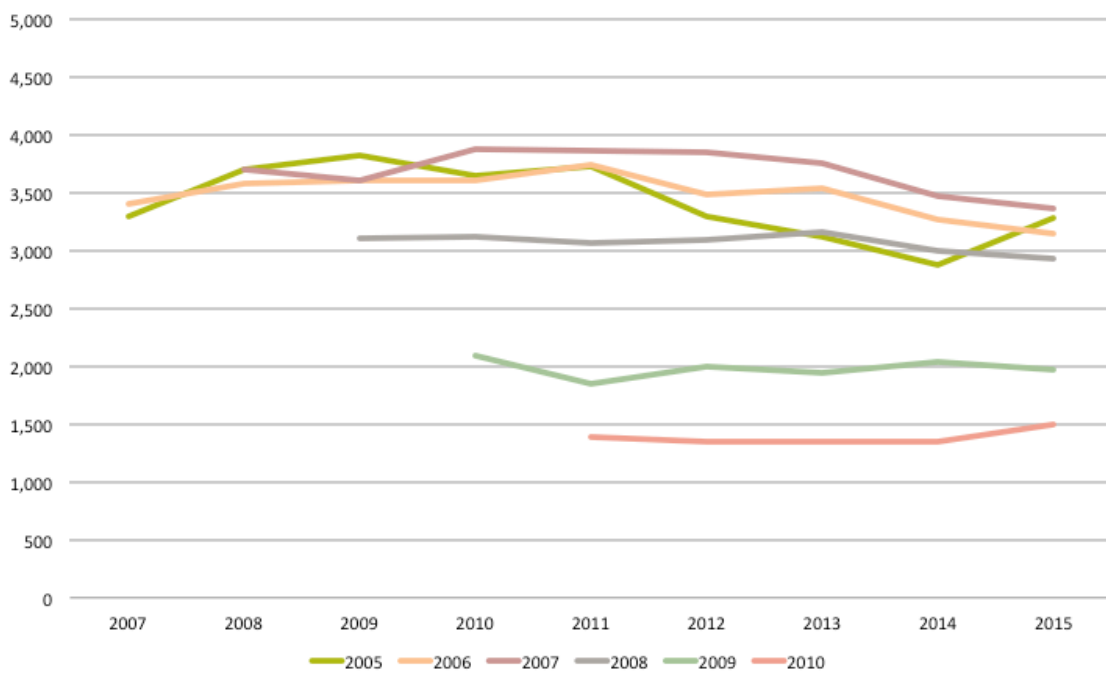
If we compare the sample sizes in 2010 (when the attrition begin) and 2015, we find that 2008 and 2009 arrival cohorts only decrease around 5%, while 2006 and 2007 arrival cohorts sample size decrease 13%. Still, the decrease in sample size was bigger for previous cohorts, and reached 29% for 2002 arrival cohort.

Figure 2: Sample evolution by arrival cohort, 2000-2004 arrival cohorts, 2007-2015 surveys.



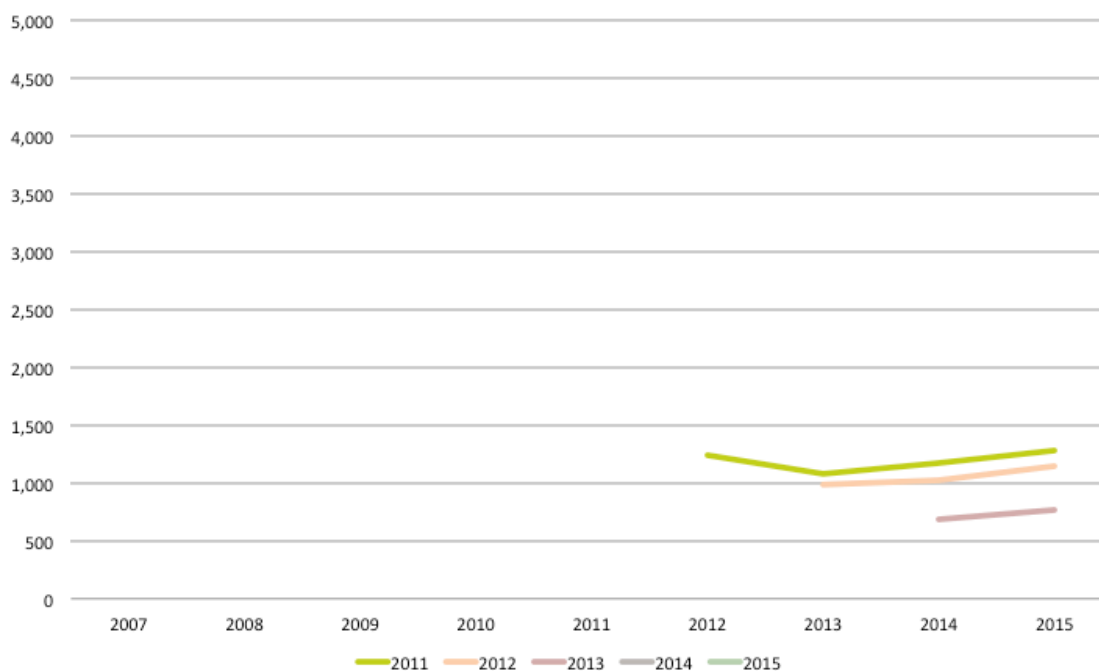
Source: Own elaboration with SLFS data I/2007-IV/2015.

Figure 3: Sample evolution by arrival cohort, 2005-2010 arrival cohorts, 2007-2015 surveys.



Source: Own elaboration with SLFS data I/2007-IV/2015.

Figure 4: Sample evolution by arrival cohort, 2011-2015 arrival cohorts, 2007-2015 surveys.

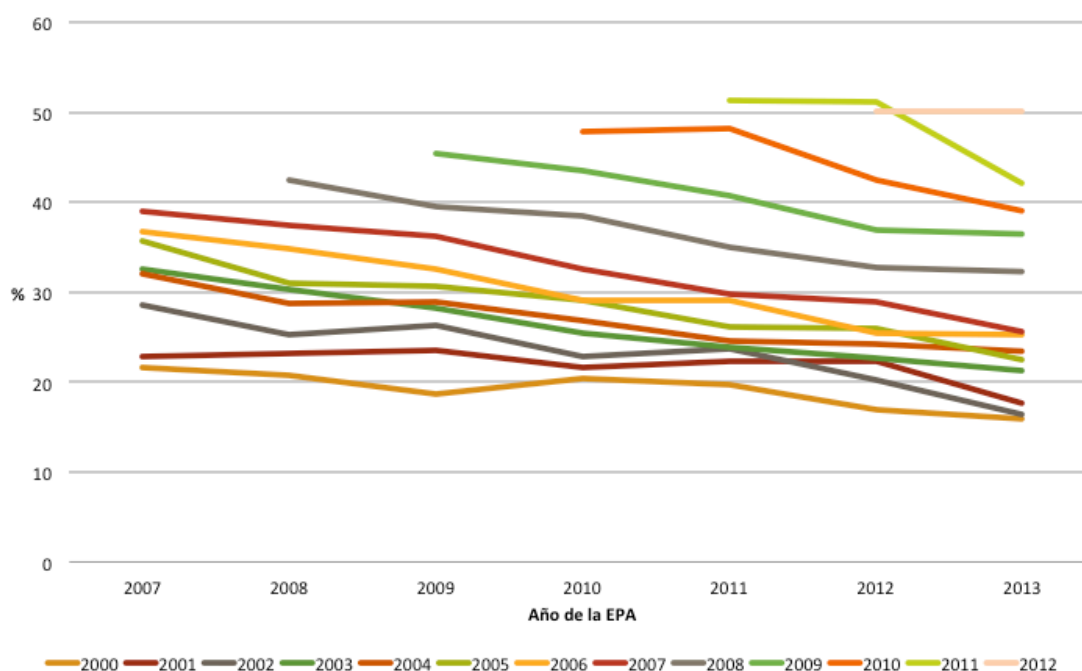


Source: Own elaboration with SLFS data I/2007-IV/2015.

Outmigration self-selection

Figure 5 shows the evolution of the percentage of migrants with high education by fictitious arrival cohort and survey year. Results suggest that the composition in terms of educational level change, so that the percentage of those with high educational level decreases. This would imply that out-migration self-selection is positive. This phenomenon affects all arrival cohorts.

Gráfico 5: Migrants with high educational level by arrival cohort, 2007-2013 surveys, percentage.



Source: Own elaboration with SLFS data I/2007-IV/2015.

Preliminary conclusions

Temporality and plurality of migration projects have been highlighted by the international literature on migration. The emergence of an unexpected economic shock has brought to public debate the question about the permanence of immigrants who had arrived to Spain in previous years, but statistical data that can account for them are scarce and imperfect.

In order to shed light on the size and characteristics of outmigration, this paper has analysed the evolution of the fictitious arrival cohort in the period 2007-2015, with data from Spanish Labour Force Survey. The results highlight the differences in the loss of population of different arrival cohorts, being higher the decrease in the sample of cohorts arrived before the economic change. These results support the initial hypothesis on the different information on economic conditions in the host country of the different cohorts. Those who migrate during the recession would have less labour market oriented projects and also better information to plan their integration. In addition, preliminary results suggest that self-selection in outmigration have been positive for all arrival cohorts in the period analysed in this work.

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