

IMMIGRATION IN CATALONIA¹

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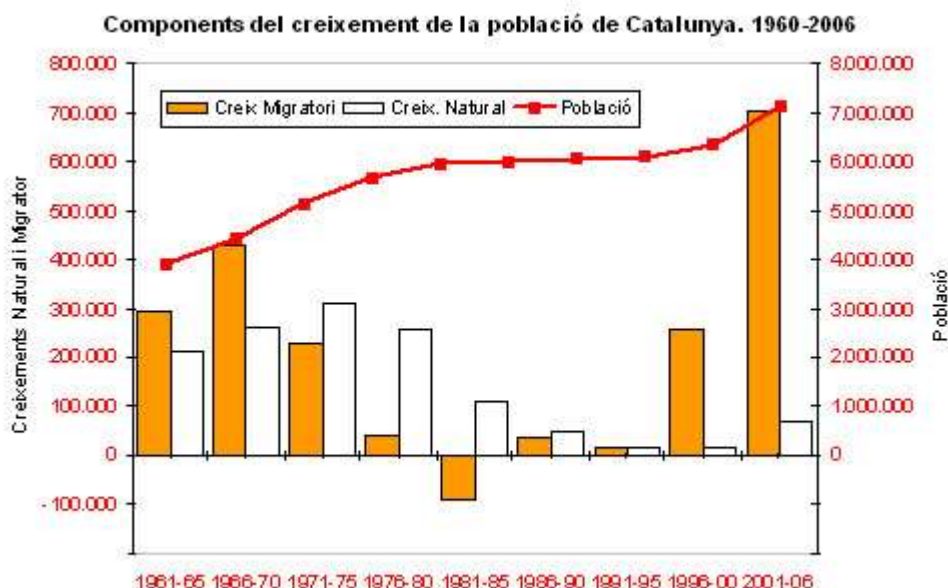
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Since 2001 Catalonia has experienced a tremendous inflow of international immigrants, who at this moment account for about 14 per cent of the total population. Immigration however is not a new phenomenon in Catalonia. A close look at figure 1 shows that the immigration rate as a share of the total population in the second half of the 60's was similar to the one experienced between 2001 and 2006. The main difference however is that while in the 60's migration flows came mainly from elsewhere in Spain, in the last few years the migrants come from about everywhere in the world.

Figure 1



Font: Censos, Padrons i Moviment Natural de la Població, INE

Elaboració CED

Migration flows are a universal phenomenon. At this moment there are about 200 million immigrants (190.6 million in 2005; World Bank, 2007) in the world, which

¹ We would like to thank Ognjen Obucina for his helpful research assistance.

represents approximately 3 per cent of the world population. Although of all these migrants only about one third is going from poor to rich countries (OECD, 2007), this is the type of migration that Catalonia is receiving. In the third quarter of 2007 (INE, 2007), almost 90 per cent of Catalonian immigrants came from less economically developed countries. The main determinant of this type of migration (excluding the relatively small percentage of political migrants²) is the economic situation of (and the differential between) the country of origin and of destination.

The effects that international migration is having in the Catalan economy and its inhabitants are still difficult to analyze, as the phenomenon is very recent and there is limited data availability. Nevertheless, one can extrapolate our knowledge from other countries to the Catalan experience. This article wants to have a close look at the immigration to Catalonia and discuss what the predicted (present and future) impacts in its economy are. This means that we will not consider either all the other effects that immigration may have in a society or all discussion on the rights that individuals have to move around the world. First, we will examine the migration flows. Here, we are not only interested in quantities but also in the composition of the immigrants, such as their education level and country of origin. Second, we will list the expected consequences that immigration can have in the economy taking into account the particular characteristics of Catalan immigration. The focus will be on the impacts of migration on employment rates, wages, economic growth and productivity, crime and the social welfare system. Third we will discuss the causes of immigration and have a look at the future although we will explain that it is difficult to know in advance how immigration will develop. Finally, we will conclude.

Immigration to Catalonia: Flows, characteristics and comparatives

We define immigrants as people who live in a country other than their native one³. Out of a population of 7,197,174 inhabitants in Catalonia (first of January of 2007), 1,061,360 had been born abroad (Padrón; INE, 2007), that is, 14.7 per cent. The impact

² Around 5 per cent of the world's immigrants are considered refugees by UNHCR (2007): 9.9 million under UNHCR mandate and 4.3 million under UNRWA mandate. In Spain, there were just 5,275 refugees at the end of 2006 (UNHCR, 2007), only 0.1 per cent of the total stock of immigrants.

³ Note that this departs from the typical definition used by INE and the Spanish government, which identifies immigrants with foreigners. The qualitative conclusions of the study do not change with either definition. However, the numbers are different. 13.4 per cent of the Catalan population was foreign at the beginning of 2007 (Padrón; INE, 2007) whereas 14.7 per cent were immigrants according to our definition. Spanish nationals born abroad account for most of this difference.

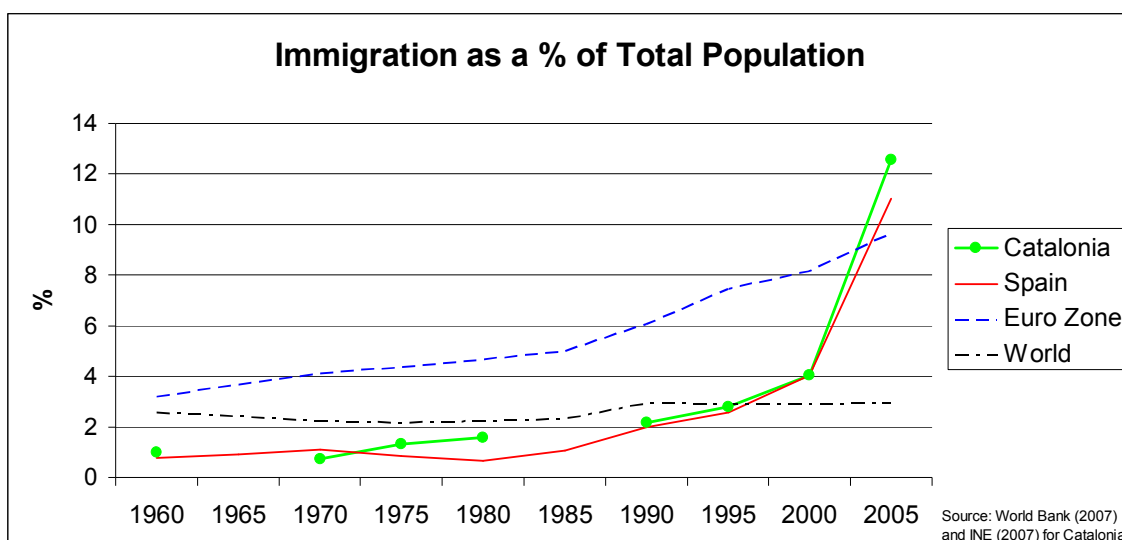
that immigrants have on the economic situation of a country largely depends on their personal characteristics, mainly on their education level, age structure, and occupation, and how this compares with the natives. Counting immigrants and examining their characteristics is therefore a key task, although a difficult one, as many immigrants are undocumented⁴ (without papers). Since the personal characteristics (notably educational qualifications) are correlated with whether immigrants are legal or not, it is very important to try to have information on all immigrants regardless of their legal status. In Catalonia, there are mainly four data sources⁵: the “Padrón Municipal”, the Spanish Labor Force Survey (EPA), the Social Security Registry, and the Registry of Residency Permits. None of these sources is perfect and all have clear inconveniences. The Padrón accounts for all immigrants voluntarily registered in the municipality and therefore it does, theoretically, account for illegal immigration. However, municipalities are not very good on notifying to the Spanish Statistics Office whenever any individual leave town so that there is probably some double counting. The EPA is the official survey used to obtain the unemployment statistics in Spain. It is performed quarterly and it provides a detailed set of characteristics of the working age population (unfortunately it does not contain information on wages). The EPA tends to underestimate the total number of migrants because the questionnaire is sent to regular households and many migrants, especially those who arrived recently, might live in quarters and are therefore not interviewed. The Social Security Registry only accounts for those registered in the social security system and thus only encompasses legal immigrants who are or have been working. Finally, Registry of Residency Permits (provided by the Spanish Labor Ministry) only accounts for legal residents.

With these caveats in mind, the evolution of the percentage of migrants over the total population in the last half a century can be observed in figure 2.

⁴ We will use the words “illegal” and “undocumented” interchangeably to refer to immigrants in irregular situation in the country, despite the controversy as to which term is more “politically correct”.

⁵ Of course, there is also the Population Census but the last one is from 2001 so it completely missing the immigration increase of the last few years.

Figure 2

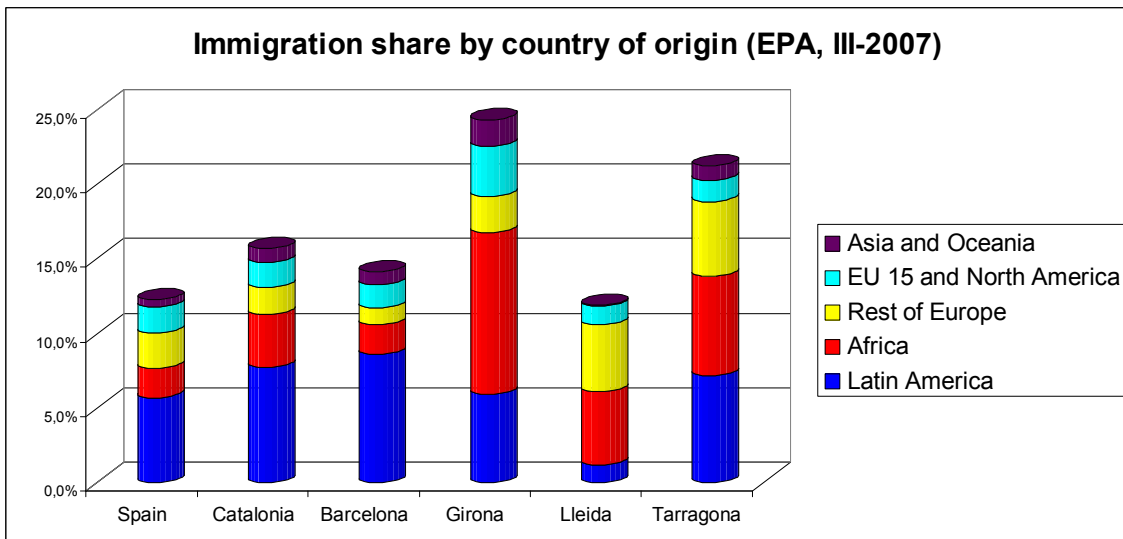


For comparison purposes, figure 2 also shows the percentage of immigrants living in the world, in Europe (the Euro zone) and in Spain every five years from 1960 to 2005. Contrasting with a migrant world population which remains almost stagnant at 3 per cent, migration flows from poor to rich countries have increased in the last 20 years. According to UN (2007), in 1960 the percentage of immigrants living in less developed countries was 2 per cent versus 3.4 per cent living in more developed countries. In 2005, these numbers were 1.4 and 9.5 per cent, respectively. In Spain and Catalonia immigration flows have accelerated in the last fifteen years. As a result, the immigrant stock in Spain as a percentage over the total population, and more so in Catalonia, is now above the average immigration rate in Europe. The difference is that it took Europe around forty-five years to arrive to a 10 per cent immigration level whereas it took between ten and fifteen years for Catalonia. Catalonia's immigrant population was 2.8 per cent in 1995, 4 per cent in 2000, 12.6 per cent in 2005 and 14.7 per cent in 2007. The growth rate has been remarkable and since immigrants, as it will be seen, are predominantly young and at their working age, the impact of immigration over the labour force is even higher. However, Catalonia's percent of immigrant population is still far from the highest immigration stocks in some other developed countries: 39.6 per cent in Israel, 22.9 in Switzerland or 20.3 in Australia in 2005.⁶

⁶ According to the UN Population Division (UN, 2007), the country with the highest proportion of immigrants in the world is the Vatican with 100 per cent. Qatar and Andorra follow with 78.3 per cent and 77.9 per cent respectively.

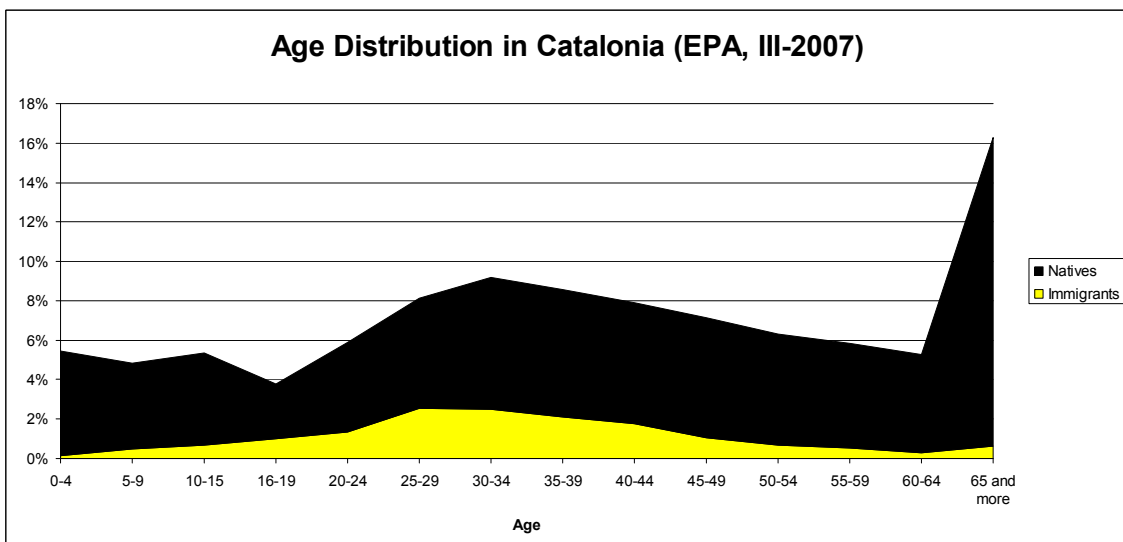
The impact that immigrants may have in the local economy depends largely on their personal characteristics and how these compare to the native population. Next, we will quickly examine the characteristics of immigrants that come to Catalonia. Using the information provided by the EPA in the third quarter of 2007 (EPA; INE, 2007), we depict in figure 4 the origin areas of Catalan immigrants. For comparative reasons, the information is presented for the total of Catalonia, for its four provinces, and for the total of Spain. First, it can be seen that the share of immigrants as a percentage of total population is higher in Catalonia than in Spain (15.7 versus 12.2 per cent). Within Catalonia, Girona and to a less extent Tarragona present higher immigrant shares (over 20 per cent of the total population) than Barcelona and Lleida. The figure also shows that the region of origin of the immigrants is very different in each Catalan province. While Barcelona looks relatively similar to the rest of Spain, the other three Catalan provinces have a different structure. Almost half of the immigrants in Catalonia and Spain come from Latin America but those are overly represented in Barcelona province. In contrast, in the other three Catalan provinces and especially in Girona, Africans (of which Morocco is the main origin country) constitute the largest group. The immigrants coming from the rest of Europe are mainly located in Lleida and Tarragona (the main nationality among those is Romanian). The large migration flow that Catalonia has experienced since 2001 has changed the distribution of immigrants' origins. In 2000 the largest immigrant group in Catalonia was African (35 per cent back then versus 22.5 now).

Figure 4



The migration decision is an investment whose benefits will be higher, the higher the amount of time the immigrant spends abroad, where earnings are higher than at home. This is the reason why most migrants tend to be young and are at their productive (working) age. In the case of Catalonia this general pattern is confirmed by the statistics presented in figure 5, in which we compare the age distribution of migrants with the one of individuals living in Catalonia and born in Spain:

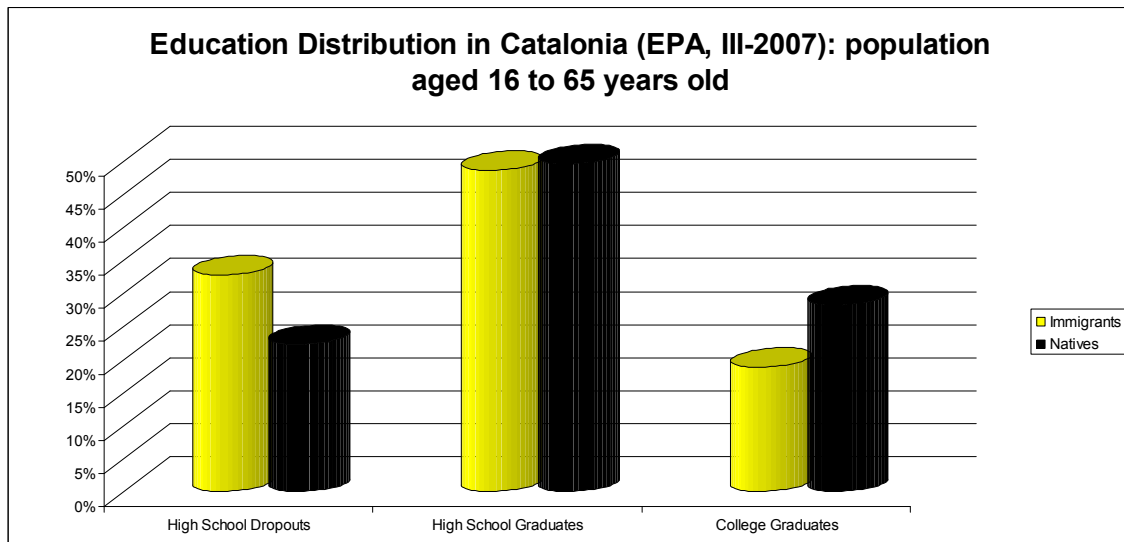
Figure 5



A very relevant characteristic of the immigrant population is its education level. Figure 6 compares the educational level of Catalan immigrants with the native ones. Education

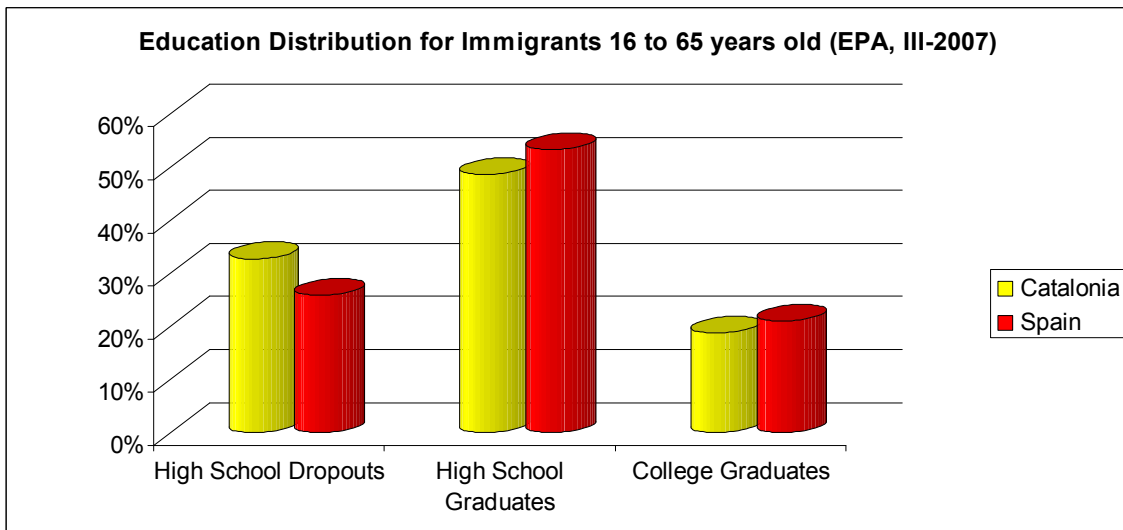
is important because it is positively correlated with productivity. Therefore we only examine the educational characteristics of individuals who are in their working-age (16 to 65 years old):

Figure 6:



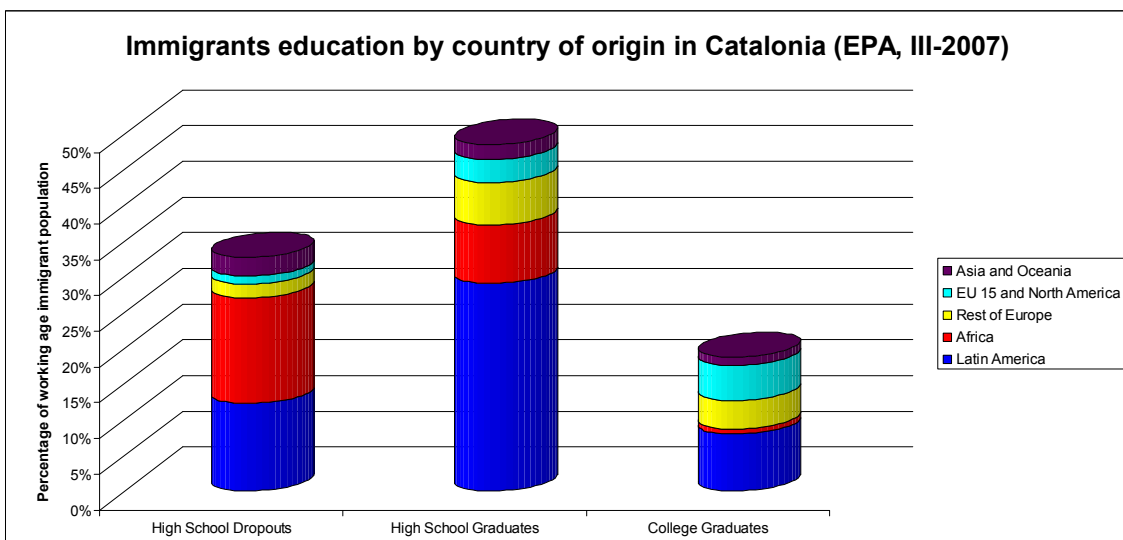
It is clear from figure 6 that natives have a higher education level than immigrants on average. Although both education distributions are similar for modal education levels, the immigrant distribution concentrates more individuals at the low end of the distribution, while the opposite is true for natives. When Spanish immigrants are compared to Catalan immigrants (figure 7), it can be seen that Catalonia is attracting immigrants that are less educated than the ones that go to the rest of Spain. Since the Catalan native population is slightly more educated than the Spanish native population, the difference between natives and migrants in Catalonia is larger than in the rest of Spain.

Figure 7



The reason why Catalan immigrants tend to be less educated than Spanish immigrants lies in their country of origin. Figure 4 showed that Catalan immigrants included a higher proportion of Africans than Spanish immigrants and it is the case that African immigrants are among the least educated in Catalonia. Figure 8 shows how African immigrants represent almost half of the share of high school dropouts working age immigrants in Catalonia.

Figure 8



Finally, we would like to point out to the fact that working immigrants in Catalonia tend to cluster into a few sectors and occupations, namely “construction work”, “wholesale,

retail trade and hotels and restaurants”, “non-qualified occupations in general” and, to a less extent, in “agriculture”. Given that these are all sectors and occupations with low capital investment, the productivity is also low.

Impact of immigration: how simple considerations are wrong

When considering the effects of immigration on the native population and the local economy, there is a set of commonplace arguments that are often not correct. With respect to the labour market, two opposite arguments have been made, namely immigrants steal natives’ jobs (which would mean that immigrant labour is a perfect substitute to native labour) and that immigrants take jobs that natives do not want to do (which imply that immigrant labour is a perfect complement to native labour). As the reader may imagine, none of the two statements is correct although there is some truth to both of them. Immigrants compete with natives in the labour market. Therefore, if the number of jobs were fixed, this competition would result in either lower employment or lower wages for natives. For example, Borjas (2003) assumes fixed capital (and thus a fixed number of jobs) and perfect substitutability in the labour market between natives and immigrants with the same skills (where skills are narrowly defined by using only experience and education). He finds for the United States in 1980-2000 that an immigration rate that increases the labour force by 10 per cent reduces average wages from 3 to 4 per cent. Ottaviano and Peri (2006) replicate Borjas’ study assuming that capital reacts to the entry of immigrants (there is not a fixed number of jobs) and that immigrants and natives may not be perfect substitutes (actually they find they are not) . In this study, with more realistic assumptions, these authors obtain a small positive effect of immigration on natives’ wages over the same time period. For Spain, Carrasco, Jimeno and Ortega (2006) replicate Borjas’ analysis and find no impact of immigration on the employment opportunities of Spanish natives for different periods and using different data sources. There is no impact on wages either although these results must be taken with more caution since the last data available on Spanish wages corresponds to 2002, a time when immigration was still relatively small. Using a different approach that compares immigrant inflows across regions in Spain, and following Card and Lewis (2005) study for the United States, González and Ortega (2007) conclude that there is no effect of immigration on natives’ job opportunities. To sum up, most studies find an almost zero impact of immigrants on employment opportunities and wages of natives. The almost null effect of immigration in wages can be however decomposed into a

negative impact for natives that are substitutes of the immigrants and a small positive effect for those who are complements. One way to mitigate the short term effects of immigration on the native population could be to compensate the natives that are substitute to immigrants. Although there is no study that specifically looks at the effect of immigration at the Catalan labour market all seems to indicate that the result of such a study would again be the absence of any statistical effect of immigration on the wages or employment opportunities of natives. The main reason is that the substitutability between native and immigrants in the labour force is even bound to be smaller in Catalonia than in the rest of Spain, as the education level differences are larger.

The effect of immigration flows on the welfare state is also a rather controversial issue. While some argue that immigrants endanger the welfare state by reducing the opportunities of natives, others affirm that immigrants ensure its survival against the problems of population ageing. None of the two extreme views seems very reasonable. Since welfare expenditure concentrates at childhood ages (education and health for children) and retirement age (pensions and health for older people) and most immigrants to Catalonia are not at those ages (see figure 5), it is not surprising that studies of the fiscal balance of immigration tend to find that immigrants pay more to the welfare state than they receive from it (for example, see OEP, 2006). As for the second view, we would like to emphasize that although immigration can indeed help to improve the balance of the Social Security system today, these immigrants will become old and their earlier contributions will have to be paid back in the form of pensions. In short, immigration does not solve the possible sustainability problems of the Social Security System although it may postpone them. The only way in which immigrants can help to sustain the Social Security System is if they make the Spanish economy more productive in the future, something that it is difficult to predict. For Spain there are some few empirical studies that carefully analyse the impact of immigration on the welfare state. Collado, Iturbe-Ormaetxe and Valera (2004) find a positive effect of immigration on the Spanish welfare state, while Conde-Ruiz, Jimeno and Valera (2007) claim that this will be the case only in the medium term and that, in the long run, the effect will be neutralized by the convergence of immigrants' and natives' behaviour in terms of, for example, labour force participation and use of public services. Although these studies are for Spain, it is quite reasonable to think that these conclusions can be

extended to the Catalan case although the fact that Catalan immigrants are less educated than those of the rest of Spain (see figure 7) could lead to a less positive impact.

In addition to the discussion on the contribution of immigrants to the welfare state, it is also relevant to look at the impact that immigrants have in the quality of the welfare state services. In the case of education in Catalonia, García and Moreno Torres (2007) find that the presence of immigrant children reduces the academic performance of natives, especially when immigrants do not speak Spanish. The effect, however, is only noticeable if the share of immigrant students is larger than 6 or 10 per cent for private and public schools respectively. Since in Catalonia the share of immigrants younger than 16 in the third quarter of 2007 was 8 per cent according to the EPA and immigrants are concentrated in some schools, it is reasonable to expect some impact on the quality of education. As for the quality of the health system, García, González and Sáez (2007), using data for 1994 and 2002 show that, on average, immigrants used medical services less often than natives, even after controlling for observable characteristics.

One of the most controversial discussions on the effects of immigration is the relationship between immigration and crime. In 2005, the number of crime sentences in Catalonia was 4 per thousand inhabitants aged 18 and older (INE). Among foreigners, however, this proportion was 8.7. Nevertheless, once age, education and other socioeconomic conditions are taken into account, most of the research shows that immigrants are not more often involved in crime sentences than natives. In fact, most studies show that crime rates are usually lower among immigrants than among natives with similar characteristics (Butcher and Morrison Piehl, 2007).

The effects described above referred to the microeconomic impact of immigration to the local economy. In addition, immigration may also impact macroeconomic variables, mainly economic growth (GDP), productivity, unemployment and inflation. Immigration usually implies moving a production factor (labour) to a more productive location. This means that immigrants can produce more output per unit of labour and thus obtain a higher wage in the region of destination. As a result, most macroeconomic models consider that immigration is efficient, that is, it increases world production (World Bank, 2006). Despite the importance of abstracting reality by using models that help us to better understand its mechanisms, it is difficult to summarize all the existing

real life interactions generated by immigration flows in a simple model. For example, it is complicated to determine whether immigration generates economic growth or it is growth that attracts immigration. Bearing these limitations in mind, one can use some basic identities to get a sense of the possible magnitude of the effect of immigration in the economy. What follows replicates for Catalonia the same growth decomposition that OEP (2006) and Dolado and Vázquez (2007) applied for Spain.

Table 1:

Catalonia Yearly Growth Decomposition (2000-2006)

GDP	GDP per capita	Population		
		Total	Natives	Immigrants
3,06%	0,98%	2,08%	0,27%	1,81%

Table 1 shows that Catalonian GDP grew on average 3.06 per cent per year between 2000 and 2006 (Contabilidad Regional; INE, 2007). Out of this, 0.98 per cent corresponds to GDP per capita growth (a controversial proxy for the standard of living) and the remaining 2.08 per cent is just a population increase mainly spurred by the inflow of immigrants (1.81 per cent). In short, the economic growth experienced in the 2000-2006 period is mostly due to the increase in the immigrant population. Since it is GDP per capital what is most relevant, we will next decompose GDP per capita growth (table 2):

Table 2:

Catalonia Yearly Growth Decomposition (2000-2006)

GDP per capita	Demographic Factor	Employment Rate	Productivity
0,98%	0,00%	1,58%	-0,60%

It can be seen that the growth in GDP per capita has been exclusively related to an enormous increase in the employment rate (employed individuals divided by working age population) that has been even able to compensate for the decrease in productivity (total GDP divided by employed individuals). The demographic factor, representing the contribution of the growth in the working age population (between 16 and 65 years old), has been almost stagnant during the period. The contribution of immigrants to changes in demographic factors and employment rate can be easily obtained and the result is presented in table 3.

Table 3:

Catalonia Yearly Growth Decomposition (2000-2006)					
Demographic Factor	Natives	Immigrants	Employment rate	Natives	Immigrants
0,00%	-0,15%	0,15%	1,58%	1,42%	0,16%

Table 3 shows that immigrants have been able to compensate for the negative contribution to GDP per capita of the population changes of native population. On the other hand, the contribution of employment growth on the increase of GDP per capita comes mostly from the native population. The main reason is that unemployment is higher for immigrants and that the labour force participation rate of natives has increased significantly since 2000, a year in which the labour participation of immigrants was already very high. OEP (2006) claims that, at least for the Spanish case, immigrants could be responsible for the increase in the employment rate of the native population due to their complementarity in the labour force.

The productivity decrease of 0.6 per cent per year (a figure that could be worrying if we believe that future growth paths depend on today's productivity levels) is fairly negative even when compared to the Spain evolution (positive 0.4) in the 2000-2005 period (OEP, 2006). Since most of the employment increase in recent years has been related to low productive sectors (where immigrants have also concentrated), it is not surprising that productivity in Catalonia has decreased. To decompose the relative impact of immigrants and natives in the productivity slowdown of recent years is not trivial. The OEP (2006) however estimates the relative contribution of Spanish immigrants and natives to the evolution of Spanish productivity between 2001 and 2005. In this study they find that natives were responsible for 75 per cent of that evolution (0.6) whereas immigrants accounted for the remaining 25 per cent (-0.2). If the same numbers were imputed in the Catalan case, it would mean that natives account for 0.45 percentage points of the decrease whereas immigrants are responsible for the remaining 0.15.

All in all, immigrants' direct contribution to GDP growth in Catalonia during the period 2000 to 2006 would amount to 64 per cent. Most of the immigrant contribution is related to the pure population increase. Thus, when we confine ourselves to GDP per capita growth, immigrants' contribution would be a more reasonable 16 per cent, a

percentage that is very close to their actual share in the Catalan population. However, it must be noticed again that this is a useful accounting decomposition of growth but nothing else. Apart from the difficulty of estimating the immigrant contribution to productivity growth, there are many interactions that are not taken into account, such as the already mentioned potential effect of immigration on the labour force participation behaviour of natives (OEP, 2006).

The causes and the future of immigration

Before looking at the future of immigration we need to ask ourselves what has caused the recent tremendous increase of immigration in Catalonia. The reasons originating immigration flows have been extensively studied in the international literature. The first and more important determinant of migration flows is the income differential (Borjas, 1999)⁷ between the country of origin and destination. In this line, it is important to notice that the border line between Spain and Morocco has become the one with the highest income gap in the world. In 2006, Spanish GDP per capita meant more than 11 times Moroccan GDP per capita (World Bank, 2007) and even 6 times if controlling for differences in living standards by using PPP⁸. Inside Spain, Catalonia is one of the regions with the highest GDP per capita, the fourth in 2006 with a GDP per capita 18 per cent higher than the Spanish average. Income per capita and employment opportunities tend to be highly correlated. Amuedo-Dorantes and De la Rica (2005) show that immigrants tend to locate within Spain where the labour market offers more opportunities. Job creation in the recent years has been very large in Catalonia and has been able to absorb most of the new comers. According to the Labour department of the Catalan government⁹, the occupation rate in Catalonia was in the last trimester of 2007 of 72.1 per cent which is much above the average of the surrounding countries (67 per cent in Spain and 64.4 per cent in the EU). According to the same source, the increase in occupation in these last months was due to the job creation in the service sector, which contrasts with the recent past in which the construction sector was the leading force on occupation creation. This seems to correspond with the immigrants' occupation

⁷ Moreno Torres (2007), following Clark et al. (2002) and Mayda (2005) approach, shows a clear positive correlation between immigration flows to Spain and Catalonia and income differentials by country of origin.

⁸ It is not clear that PPP measures are appropriate for migration studies. Assuming the immigrant will settle in the destination country, using PPP measures is correct. However, if migrants are temporary or if they send a high share of their earnings back home, then the direct comparison is the right one.

⁹ www.gencat.cat/treball/doc/doc_50334958_1.pdf

behaviour. Looking at the information provided by the EPA we can see how the increase in the percentage of Catalan immigrants working in construction is slowing down in the last year, while the opposite is happening for those working in hotels.

Of course, income differentials and job opportunities are not the only determinant of immigration flows. The decision to emigrate is an investment decision (Sjaastad, 1962) for which benefits and costs are assessed. There are certain costs that are difficult to overcome and Mayda (2005) shows how the poorest countries do not send as many emigrants to OECD countries as their GDP per capita level would predict. The main explanation for this is the existence of poverty constraints (Yang, 2006), which would also account for the relevance of another determinant of migration flows, namely existing networks that immigrants may have in the country of destination. The empirical evidence shows that immigration inflows are positively related with the stock of immigrants of the same nationality already present in the receiving country.¹⁰ Networks help to overcome the above mentioned financing constraints (McKenzie and Rapoport, 2007) and also improve the economic benefits obtained in the receiving country (Munshi, 2003). The existence of networks is especially relevant because it generates endogeneity in the migration flows (Carrington, Detragiache and Vishwanath, 1996). This means that the impact of the entry of a new immigrant in a country is multiplied by the number of immigrants this new immigrant will be able to attract in the future.

Subject to some data restrictions, it is possible to study the size and the effects that past and current immigration is having on the receiving country. However, estimating the future impacts or long term effects of immigration (e.g. the integration in the labour market of the children of immigrants) is a much more difficult task. To do this, one needs assumptions about the evolution of migration flows, which would also depend on the uncertain predictions about the future economic situation in a distant future, and the capacity of the economy to absorb them. Despite these problems, this section compares two possible immigration scenarios for Catalonia.

The first scenario is based on the medium variant 2006 population projection from the United Nations Population division (UN, 2007). This projection adjusts mortality and

¹⁰ See Clark, Hatton and Williamson (2002) for immigration to the United States; Mayda (2005) for immigration to the OECD; and Moreno Torres (2007) for immigration to Spain and Catalonia

fertility to their paths in the last fifty years and assumes that countries will be able to control immigration in the next few years. For example, migration to Spain, which attained an average of 569,000 immigrants per year in the 2000-2005 period is assumed (according to this scenario) to stabilize at 105,000 immigrants per year after 2015. To impute the corresponding fraction of those 105,000 to Catalonia, we assume that this fraction will remain constant after 2005, i.e. 20.5 per cent. The resulting scenario is depicted in blue in figure 9. According to this prediction, by 2010, Catalonia would have reached 7,153,713 inhabitants, out of which 16.2 per cent would be immigrants. These predictions, however, seem at the low side since, in 2007 and according to the Padrón (INE, 2007), the Catalan population was already 7,197,174 inhabitants, with 14.7 per cent of them being immigrants. In the long run, the UN projection predicts a population of 7.4 million Catalans in 2050, out of which 27.7 per cent would be of immigrant origin.

Figure 9

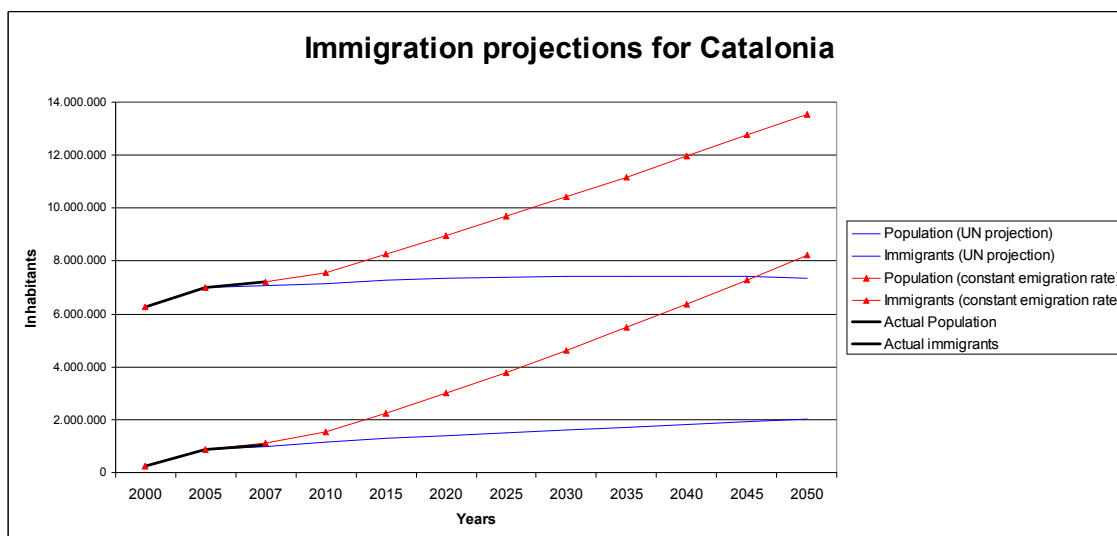


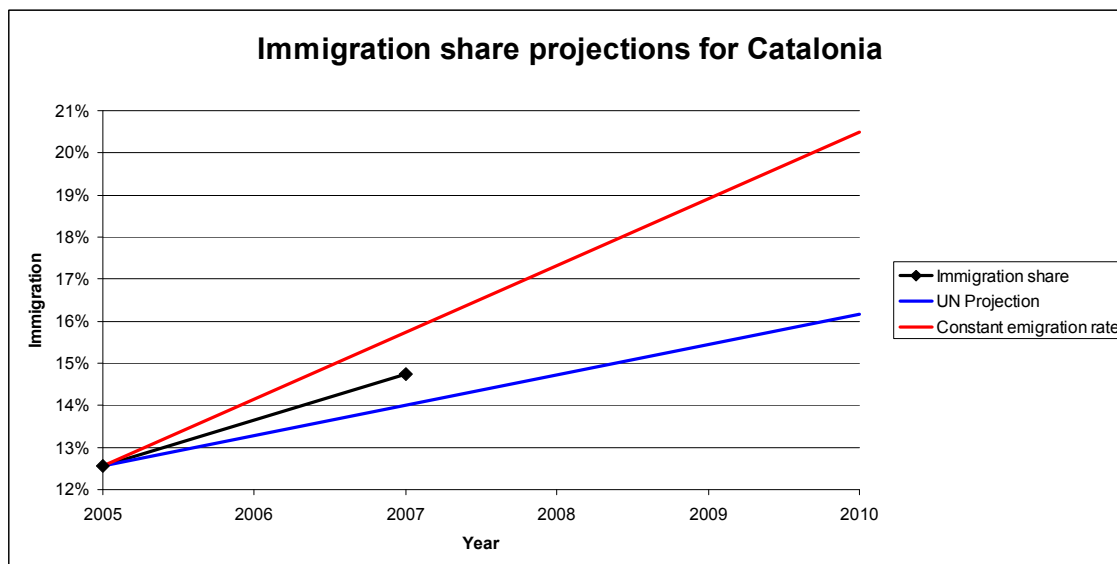
Figure 9 also presents an alternative immigration scenario. The total number of immigrants a country receives in a year can be decomposed into the percentage of population that every emigrant country is sending to Catalonia times the population of that emigrant sending country. For example, between 2000 and 2005 Catalonia received 626,019 Latin American immigrants, which correspond to a 0.06 per cent of the total Latin America population in 2000 (523 million people). An alternative immigration scenario for Catalonia can be then design such that the percentage that each country sends to Catalonia is kept constant until 2050. This scenario is depicted with a red line

with triangles in figure 9. This implies to assume that the economic situation and differences between Catalonia and the countries where the immigration comes from will remain constant all these years. There are two reasons to believe that this is a rather strong assumption. First, neoclassical growth theory (Barro and Sala-i-Martin, 1992) predicts that income differentials converge over time and reality has shown that this seems to be the case for the last few years, with the exception of Africa (Sala-i-Martin, 2002). Second, massive migration is also an effective tool for reducing income differences. Hatton and Williamson (1998) showed that mass migration in the period 1850-1914 contributed significantly to the reduction of income disparities between Europe and America, which in turn led to a stabilization and then reduction of emigration flows, generating a “migration transition” analogous to the demographic transition: migration flows show an inverted U-shape pattern with time. Martin (2005) hypothesizes a similar pattern for migration from Mexico to the United States, with the downward part of the pattern starting 5 to 10 years from now. For all this, we can say that this scenario imposes rather extreme assumptions but nevertheless it may be useful on that it gives an upper bound immigration figures. Actually, the evolution of immigration is, contrasting with the relative accuracy of estimates on fertility and mortality in the medium term, very difficult to estimate. This constant emigration rate scenario predicts a Catalan population of more than 7.5 million inhabitants for 2010, out of which 20.5 per cent would be immigrants. By 2020, the Catalan population under this scenario would have almost reached 9 million, out of which a third would be immigrants. In 2050, out of 13.6 million Catalans, more than 60 per cent would be immigrants. This does not even take into account that some native Catalans would be direct descendents of immigrants.

When comparing our projections with the UN ones, we can say that for the short term (2007) we do better than the UN. Our projection estimates that the Catalan population in 2007 will consist of 7,194,249 inhabitants (less than 3,000 short of the actual number registered), with an immigrant share of 15.4 per cent (7 tenths of a point higher than the actual number). The UN projection does comparatively worse since its population estimate for 2007 is 7,052,845 (144,000 short of the actual number) and its estimated immigration share is 13.9 per cent (9 tenths of a point lower than the actual number). Figure 10 shows the comparison between the immigration shares projected by both scenarios between 2005 and 2010 and the actual immigration share registered in 2007.

The fact that the actual immigration share in 2007 is already below the constant emigration rate scenario suggests that this scenario, as argued above, can indeed be considered as an upper bound for migration in the next few years.

Figure 10



Conclusions and highlights

Catalonia has traditionally been very open to migration flows that have been rather quickly incorporated in our society and in our labour market. Actually this migration flows have been compensating for the extremely low fertility rate of Catalan women. The few studies existing in Spain, our own contribution for Catalonia, and the many studies around the world seem to conclude that the effects that migration has on the local labour market are positive although very small. Immigrants tend to go to those economies that can better absorb them and therefore the impact for the wages and unemployment rates of the local population are small. The effects on crime and on the welfare state also tend to be over exaggerated. The effect that immigrants have on economic growth and the productivity level of a country in the long run is a somewhat more discussed issue and more difficult to study although the same is true for any economic phenomenon, as it depends on events that are difficult to predict, such as oil prices, technological change, increase in trade flows, or the creation of the European Union. In order to be able to study the immigration phenomenon and its impacts on the economy we clearly need better data with information on wage structure. In addition,

and in order to look at the future and multiplicative impacts of migration we would also need to know more about the children of these immigrants.

The future of immigration is not clear and it will depend on the convergence of the world economies, with different effects in the short or the long run. If less developed countries economic growth brings them to levels similar to the ones of developed countries, we should expect a stabilization of migration flows in Catalonia in the long run although this will probably not be the case in the short run. If some less developed countries (notably Africa) however continue to diverge we can expect that the immigration pressure will not disappear. Even if migrations flows reduce, the percentage of immigrants and its direct descendents will increase by definition. This means that we have as a task ahead of us to be able to include these often called “second generation immigrants” into the education system and labour market of Catalonia with equal opportunities. This is important not only from an ethical perspective but also from an economic perspective, as a way to increase the productivity of our economy.

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