

Demography, Migration and the Economy at a Regional Level: Recent Evidence from Catalonia

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Abstract In the last decade Spain had one of the highest immigration levels in the European Union and Catalonia was one of the most important destinations within the country. Immigration drove a strong and fast population growth and rejuvenated the population of the region. The world economic crisis is probably going to mark a turning point in international migration trends and has already caused a sharp decrease in Spanish and Catalan immigration flows. However, Catalonia is historically a very intriguing example of the close links that exist between demographic trends, migration movements and economic development. Around the mid 1800s the region was one of the first in Europe to experience a demographic transition and as a consequence it was affected early on by low levels of natural population change and by imbalances in the age structure. Moreover, Catalonia's economy has almost always been one of the most dynamic in Spain. The main consequence of the diverging trends in demography and the economy has been the recurrent need for large immigration flows in periods of sustained economic growth. From this point of view, Catalonia is a meaningful example for all the European regions with a structurally low fertility and dynamic economic systems. The main aims of this paper are to analyse the interplay between demographic, migratory and economic factors during the last decade in Catalonia and try to infer their possible

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future interactions, according to the results of innovative regional projections implemented for EU and EFTA countries.

Keywords Population change · Migration · Economic change · Catalonia · Spain · Regional studies

Introduction

The transition of Southern Europe from area of emigration to a significant destination for international migratory flows represents one of the most important changes in the European demographic scene over the past few decades. The difference in the demographic pressure between countries of origin and destination is not enough to explain the changing role of the countries on the northern shores of the Mediterranean (King 2000; Bonifazi 2008). Immigration to the receiving countries offset a manpower shortage caused not only by the very low fertility of the last quarter of the twentieth century but also has a qualitative dimension. Foreign workers were actually absorbed above all by the relatively unqualified sectors of the labour market which were less attractive to the autochthonous population. The strong demand for flexible seasonal work plus the informal characteristics of a large proportion of the Southern European labour markets facilitated the widespread absorption of migrant labour (Arango and Baldwin-Edwards 1999).

Over the last decade Spain was one of the countries in the forefront of this process, with one of the highest immigration levels in the European Union. The world economic crisis is probably going to mark a turning point in international migration trends, and has already caused a sharp decrease in Spanish immigration flows. During the immigration boom, Catalonia was one of the most important destinations of foreign labour in Spain. It is also a very intriguing example of the close relations between demographic trends, migration movements and economic trends. Catalonia was actually one of the first European regions to experience a demographic transition outside France, and as a consequence it was affected early on by low levels of natural population change and by imbalances in the age structure. Moreover, Catalonia's economy has almost always been one of the most dynamic within Spain. The main result of these diverging trends between demography and economy has been the recurrent need for large immigration flows in the periods of sustained economic growth.

From this point of view, Catalonia is a meaningful example for all the European regions with a structural low fertility and dynamic economic systems. Indeed, a recent demographic typology of European regions produced for the ESPON DEMIFER project (Bauer and Fassmann 2010) places Catalonia in the *Young potentials* cluster. This cluster is defined by a youthful age structure (in comparison to the European average), and population growth due to both natural increase and positive net migration. In the specific case of Catalonia, in all evidence, the main research question is the effect of large migration gains on the demographic situation of an area with a structural low fertility. In such a situation, migration on one hand contributes to rejuvenating the population's age structure through the arrival of young people and, on the other, generally contributes to increasing fertility. The positive effects of such a demographic path are evident. However the prospects for the future are more uncertain. It is, in fact,

evident that this external contribution is linked to a demand for work coming from the local economy and depends on the ability of the host society to incorporate a significant number of immigrants with cultural backgrounds that may be very different from those of the natives. The world economic crisis is deeply affecting migration scenarios, making their future trends more and more uncertain.

This situation involves a larger group of regions than the 15 included in the *Young potentials* cluster. Indeed, according to the results of the DEMIFER project, over the last decade, international migration contributed to counteract population ageing, the slowing down of population growth and the decrease in the growth rate of the working age population in many European regions (de Beer et al. 2010). This role of international migration may be found in many regions included in other clusters in accordance with DEMIFER project typology. What makes the Catalonia case particularly significant is the fact that this region in the previous decade was at the forefront of this process and had such strong immigration as to determine also a birth revival.

The main aims of the present paper are to analyse the interplay between demographic, migratory and economic factors during the last decade in Catalonia and to endeavour to infer how they might interact in the future. In this regard, the paper provides a short historical overview of demographic and migratory flows before illustrating, in chapter 3, the main demographic trends of the region during the immigration boom of the last decade. In chapter 4 recent economic change and population trends are considered according to their inter-related aspects, with special attention focused on the characteristics of the working age population and the role of migration. Chapter 5 illustrates the demographic challenges that Catalonia will probably face in the near future according to the results of new and innovative regional projections implemented for 287 regions in EU and EFTA countries (de Beer et al. 2010).

Demography, Migration and the Economy in Catalonia: A Historical Perspective

During the Middle Ages Catalonia was one of the main centres of Mediterranean trade. With the merging of the Aragon and Castile kingdoms (1479), a long period of economic decline began for Catalonia due to the centralised policy of the Spanish state and the discovery of America, which shifted the centre of world trade from the Mediterranean to the Atlantic. The situation was reversed in the 18th century, when the first industrial centres of the country started developing in Catalonia and in the Basque regions. The industrial role of Catalonia within the country grew during the 1800s and the early 1990s (Harrison 1978).

As regards population trends, Catalonia was one of the first European regions to follow France in the process of demographic transition. The drop in the fertility rate began around the mid 1800s and involved the urban Barcelona area and the rural areas (Benavente 1989; Cabré 1989). Available estimates indicate that the average annual rate of population growth decreased from 10.6 per thousand in the period 1797–1860 to 3.6 per thousand between 1860 and 1887 and to 5.4 per thousand between 1887 and 1910 (Fig. 1). This slowdown was a reflection of the decrease in fertility, a still high mortality rate and a small migratory gain (Cabré and Pujadas 1989). The years elapsing between the end of the First World War and the economic crisis of 1929 were instead years of strong demographic growth. The decrease in fertility (up

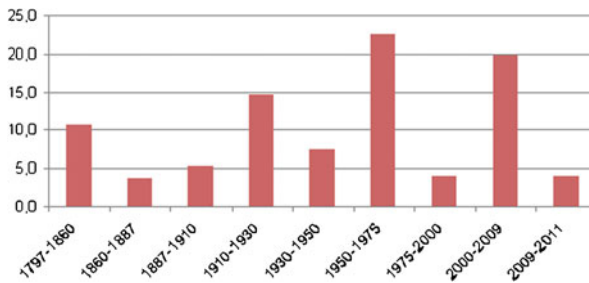


Fig. 1 Annual average growth rates of population in Catalonia, 1797–2011 (per 1000 in.). 1797–1930 Reher e Rowland (1999); 1950–2011 elaborations on data INE (Instituto Nacional de Estadística)

to 2.2 children per woman in 1930)¹ was offset by a declining mortality and, most of all, by a large internal migration (Cabré and Pujadas 1987). The following years were characterized by demographic stagnation. The economic crisis, the civil war and the first years of Franco's dictatorship strongly affected Catalonia.

The situation changed radically after the Second World War. Starting in the 50's, Catalonia became the location for many of the regime's development initiatives, with consequent waves of immigrants from Southern Spain (Keating et al. 2003). As a consequence, the number of the region's inhabitants increased from 3,240,000 in 1950 to 5,663,000 in 1975, with an annual average growth rate of 22.6 per thousand. This large increase was due both to the migratory movement and natural causes. Net internal migration amounted to about 1.4 million persons (Cabré and Pujadas 1989; Pascual de Sans et al. 2000). The natural increase was also strong, with an increase of about 1 million persons during the period as an effect of a fertility revival and a further decrease in mortality. TFR was 1.7 children per woman in 1950, but rose to 2.7 in 1975 (Cabré and Pujadas 1987). Life expectancy at birth for both sexes increased by almost 9 years between 1950 and 1975, and the infant mortality rate fell sharply over the same period (Cabré and Pujadas 1989).

These years of demographic boom were followed by years of stagnation notwithstanding that the end of the Franco regime (1975) and the entrance of Spain into the EU (1986) were important factors in the economic development of the Catalan region. Catalonia had reached a population of nearly 6 million inhabitants by 1981, which increased to barely 6,262,000 by 2000. Net internal migration turned negative in the 1980s (Romero and Albertos 1996), while in the following two decades it remained low, whether positive or negative. Fertility decreased again to below replacement level.

Demographic stagnation came to an end with the new century when Catalonia started to experience a new period of strong population increase, one of the highest in the history of the region. Growth was due to the strong foreign immigration and to a slight revival in fertility (Cabré and Domingo 2007) and will be described and analysed in greater detail in the following chapter. The world economic crisis, particularly acute in Spain, was a setback to this process of population growth. In the period 2009–11 the rate of population change dropped to 4 per thousand and the contribution made by migration to population growth fell from nearly 131,000 units in 2007 to only 9,000 in 2009.

¹ In 1930, the TFR for Spain was 3.6 children per woman (Cabré and Pujadas 1987).

The Main Demographics of Catalonia During the Immigration Boom of the Last Decade

Population Change

Catalonia is the second Spanish autonomous community by number of inhabitants. It includes the provinces of Barcelona, Girona, Lleida and Tarragona and 16 % of its almost 7.5 million residents are foreigners² (Table 1). The province of Barcelona is strongly urbanised and has a population of 5.5 million, almost three quarters of Catalonia's. The municipality of Barcelona has 1.6 million residents. The other 3 provinces have a much smaller population, ranging from the 436,000 residents in Lleida to 803,000 in Tarragona. The city of Barcelona has the highest percentage of population aged 65 years and older (20.4 %), while the lowest is in the rest of Barcelona's province (hinterland) (14.7 %) because of a higher presence of young families with children.

During the last decade Catalonia attracted massive migratory flows from abroad. As a result, the population increased by 1.2 million after almost 20 years of stagnation. Migration also contributed, directly and indirectly, to the rejuvenation of the demographic structure and, in particular, of the workforce. This was due to the high percentage of young adults amongst the migrants. The arrival of women from high fertility countries brought about the recent increase in the regional fertility rate, which was rather low during the 90's.

International migration represents the most significant component of demographic growth in all the regional areas. Between 2000 and 2008 the population of Catalonia had an average annual growth rate of 17.6 per thousand. The international migration contributed to almost 90 % of the total growth³ and natural change made a smaller contribution while the internal migratory balance was slightly negative. The highest total growth occurred in the coastal provinces of Girona and Tarragona, where even net internal migration was positive. The growth of the Lleida province was instead almost exclusively linked to international migration. In the province of Barcelona, the hinterland grew faster than the urban core. The latter owes its increase only to external flows that counterbalance a slight deficit in the natural dynamics and a strong deficit in the internal migrations, especially in the interchange with the peri-urban centres. The foreign presence was particularly high in the province of Girona (21.4 %) whereas in Barcelona's hinterland it was less than in the municipality.

Between 2000 and 2008 Catalonia witnessed an increase in the Spanish population (+206,000) due to a favourable natural dynamic. The growth in foreign citizens was as high as one million units (Table 2). Sixty per cent of the growth was concentrated in the province of Barcelona (+752,000), in particular in its hinterland (+626,000), where almost a third was linked to the Spanish population's growth. The municipality

² In this paper migration data are generally drawn from *padrón municipal*, that is the main Spanish source for measuring migration flows and immigrant stocks. Owing to the recent nature of immigration in Spain and to the greater availability of data, the stock considered is the foreign population enrolled in *padrón municipal*. In this respect, it is worth noting that *padrón municipal* "contains data on the entire population living in Spain regardless of their legal status" (González Ferrer 2009, p. 4). As a consequence, data on foreigners drawn from this source include legal immigrants and unauthorized migrants. According to a recent estimate, unauthorized migrants in Catalonia were 134,000 in 2009, 75,000 less than in 2006 (Generalitat de Catalunya 2010).

³ Data or estimates of gross and net migration flows are based on *padrón municipal* statistics and include movements of foreigners (legal and unauthorized) and nationals.

Table 1 Recent main demographics in the provinces of Catalonia

Reference areas, Region, Provinces	Resident population (1/1/2009)			Av. annual rate of change (2000–2008) (%)			
	Total (000)	65+(%)	Foreigners (%)	Total	Natural	Internal migration	International migration ^a
Spain	46,745.8	16.6	12.1	15.3	1.8	0.0	13.5
Catalonia	7,475.4	16.3	15.9	17.6	2.5	-0.6	15.6
Barcelona Province	5,487.9	16.4	14.6	13.7	2.7	-3.0	14.0
Girona	747.8	15.5	21.4	31.7	3.2	6.3	22.2
Lleida	436.4	17.8	17.8	20.2	-0.1	0.3	20.0
Tarragona	803.3	15.6	18.6	31.9	2.5	10.5	18.9
Barcelona Municipality	1,621.5	20.4	17.5	8.9	-1.2	-14.3	24.3
Barcelona Hinterland	3,866.4	14.7	13.4	15.9	4.4	2.0	9.5

^a Net international migration has been calculated as difference between total change and the other types of change for 2000 and 2001 and for Barcelona Municipality and Hinterland

Elaborations on data INE, Padrón municipal

of Barcelona, involved in a phenomenon of peri-urbanisation that mainly concerned Spanish nationals, lost many national residents and owed its growth exclusively to the increase in foreigners. The provinces of Girona and Tarragona each gained around 200,000 inhabitants, with two thirds due to the foreign population. The inner province of Lleida was the least dynamic of the four, gaining a total of 75,000 residents, but only a small number of whom were Spanish .

The naturalization of foreign migrants contributed to the growth of the Spanish population. Between 2003 and 2008, the granting of Spanish citizenship to foreigners resident in Catalonia rose from about 6 thousand to just under 20 thousand (Generalitat de Catalunya 2010). More than half these cases involved citizens of Spanish speaking countries, who enjoy a fast track to the acquisition of Spanish nationality (Generalitat de Catalunya 2010).

Table 2 Change of the Spanish and foreign population (2000–2008)

Reference areas, Region, Provinces	Absolute values			%		
	Spanish	Foreigners	Total	Spanish	Foreigners	Total
Catalonia	205,739	1,007,682	1,213,421	17.0	83.0	100.0
Barcelona Province	71,010	680,648	751,658	9.4	90.6	100.0
Girona	56,861	125,322	182,183	31.2	68.8	100.0
Lleida	6,479	68,333	74,812	8.7	91.3	100.0
Tarragona	71,389	133,379	204,768	34.9	65.1	100.0
Barcelona Municipality	-113,023	238,294	125,271	-90.2	190.2	100.0
Barcelona Hinterland	184,033	442,354	626,387	29.4	70.6	100.0

See Table 1

Natural Change: Fertility and Mortality

The demography of Catalonia over the last decade underwent a decisive revival. At the beginning of the 90's the regional natural balance was well below the national average (Table 3). From 2000 to 2008 the natural growth rate of Catalonia increased from 1.3 to 4.0 per thousand, showing an increase in all the provinces. The increase in foreign immigration deeply influenced the trend of birth rates over the last decade. By the end of the 90's the share of births from foreign mothers was about 5 % in Spain and in Catalonia, where the province of Girona was an exception with 13.4 %. In just one decade this value rose above 20 % at the national level and reached 28.2 % in Catalonia. Particularly high percentages were recorded in the provinces of Girona, Lleida and Tarragona, where over a third of the mothers have foreign nationality.⁴

Between 1996 and 2008 the number of births rose from 55,000 to 89,000, whereas the number of deaths moved from 53,000 to 59,000. Without the contribution of births from foreign mothers, which increased from just below 3,000 in 1996 to 25,000 in 2008, the natural dynamic of Catalonia would have stagnated, although a part of the recovery in births also had an endogenous origin. Between 1996 and 2005, the number of births from Spanish mothers grew by 12,000 units, remaining stable until 2008. This rise was dependent on the increase in the fertility of the Spanish and on the entry into the age groups with the highest fertility (20–34 years) of generations of women more numerous than their predecessors. The immigration boom also led to a change in the Catalan and Spanish fertility as a whole. During the mid 90's the decrease in fertility reached its lowest point, both in Spain and Catalonia, with a TFR in both the areas of about 1.15. During the following years in Catalonia the TFR grew faster than in the rest of the country, reaching 1.58 in 2008. In the provinces of Girona, Lleida and Tarragona, it attained even higher levels.⁵

Migration Movements

In the period 2000–2008 Catalonia had an overall positive migratory rate (15.0 per thousand) owing to the international balance that largely compensated for the slightly negative national one (Table 4). Foreigners accounted for almost a third of Catalan internal migration. The positive internal migration balance of foreigners partially offset the negative value of the local population. For the sake of example, in 2008, while the internal net migration of the Spanish population was negative (–6,000), foreigners showed a slightly positive value (1,000).

The international net migration rate is therefore the element that contributes most to the revitalisation of the Catalan migratory dynamic. In the Barcelona municipality, the international migration balance is the only positive value. The immigration boom transformed the Catalan demographic framework rapidly and significantly. At the end of the 90's the yearly arrivals were less than 15,000. In 2000 they more than doubled

⁴ The impact is stronger considering births with at least one foreign parent. In 2008 this percentage was 32.2 % in Catalonia.

⁵ According to a recent estimate, the TFR of Spanish women increased from 1.14 to 1.25 between 1996 and 2004 (Devolder and Trevino 2007).

Table 3 Demographic rates and indexes. National total and provinces (1990–2008)

Reference areas, Region, Provinces	Gross mortality rate (‰)			Gross birth rate (‰)			Natural increase (‰)			Life expectancy at birth (years)		Total fertility rate (TFR)	
	1990	2000	2008	1990	2000	2008	1990	2000	2008	1991	2008	1990	2008
Spain	8.6	9.0	8.5	10.3	9.9	11.4	1.8	0.9	2.9	77.1	81.2	1.36	1.46
Catalonia	8.7	9.0	8.3	9.4	10.2	12.3	0.7	1.3	4.0	77.3	81.6	1.25	1.58
Barcelona	8.4	8.7	8.3	9.2	10.2	12.1	0.8	1.5	3.8	77.3	81.7	1.23	1.57
Girona	9.0	9.2	8.1	10.5	10.6	13.0	1.5	1.5	4.9	77.6	81.6	1.39	1.67
Lleida	10.0	10.8	9.8	8.8	9.2	12.2	-1.2	-1.5	2.4	77.3	81.7	1.23	1.69
Tarragona	9.3	9.4	8.2	9.9	10.4	12.7	0.6	1.0	4.5	77.6	81.0	1.35	1.63

INE

and in 2002 they reached 55,000 persons (Fig. 2). The big jump in registrations, also due to administrative causes, occurred in 2004 with 150,000 arrivals. Up until 2007 the growth in the number of immigrants was constant and totalled nearly 200,000. In 2008, also due to the economic crisis, the first reduction, amounting to 25,000 entrances, occurred. Alongside the immigrations, the number of emigrations of foreign citizens also increased. In 2002 the figures were very low, just above 1,000, which however increased up to 75,000 cancellations in 2008, also due to an improvement in the accounting of the outgoing flows. It is possible that the values underestimate the real dimensions of the phenomenon, as migrants normally have little interest in giving information regarding their departure to the host country's authorities.

During the period 2000–08 the age structure of foreigners from abroad registered in a Catalan municipality was mainly characterised by a strong presence of people between 25 and 34 years of age, accounting for over one third of new immigrants. The share of entrances of working age population (15–64 years) exceeded 80 %, while the share of people under the age of 16 years was around 15 %.

Table 4 Annual average net migration rates per thousand, 2000–08

Reference areas, Region, Provinces	Intra-Catalonia (1)	Extra-Catalonia (2)	National balance (3=1+2)	International balance ^a (4)	Total migratory balance (5)
Catalonia	0.0	-0.6	-0.6	15.6	15.0
Barcelona Province	-2.0	-1.0	-3.0	14.0	11.0
Girona	6.0	0.3	6.3	22.2	28.5
Lleida	0.4	-0.2	0.3	20.0	20.3
Tarragona	9.1	1.4	10.5	18.9	29.4
Barcelona Municipality	-13.6	-0.7	-14.3	24.3	10.0
Barcelona Hinterland	3.1	-1.1	2.0	9.5	11.5

^a See Table 1

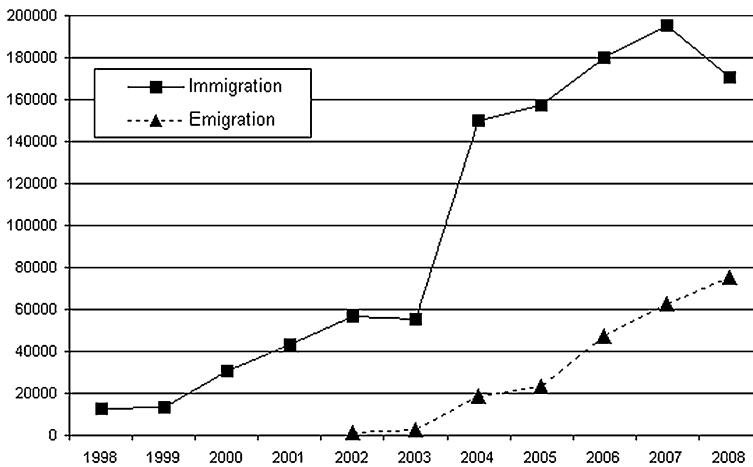


Fig. 2 International immigration and emigration of foreigners. Catalonia, 1998–2008. Absolute values. INE, Padrón municipal

As a result of these trends, at the beginning of 2009, the foreigners living in Catalonia totalled around 1.2 million (Table 5). Some 800,000 foreigners lived in the province of Barcelona. The influence of international migrations on the rejuvenation of the age structure in the region is confirmed by the under 15 quota and the births from foreign mothers, which are well above the share of foreigners in the total population. The structure by sex sees a prevalence of men over women. The latter, over the past few years, has tended to diminish and thus signals a re-equilibrium that, among other things, indicates the intensifying of the process of insertion of foreign families into Catalan society.

The age structure of the foreign population living in Catalonia is typical of a population of recent immigration, with a strong prevalence of young adults, especially between 25 and 39 years of age, and a rising share of very young immigrants.

Table 5 Some features of the foreign resident population in the provinces (1.1.2009)

Reference areas, Region, Provinces	Absolute values (000)	% foreigners in			M/F
		Total population	0–14 population	Births (2008)	
Spain	5,648.7	12.1	13.4	20.8	112.7
Catalonia	1,189.3	15.9	20.3	28.2	119.5
Barcelona Province	802.0	14.6	17.6	25.9	116.6
Girona	160.3	21.4	31.0	36.0	122.4
Lleida	77.8	17.8	27.8	33.5	136.1
Tarragona	149.2	18.6	26.3	32.6	124.4
Barcelona Municipality	284.4	17.5	16.0	22.5	111.9
Barcelona Hinterland	517.6	13.4	18.2	26.9	119.3

INE, Padrón municipal

The presence of the elderly population amongst immigrants is still very moderate, despite the retirement migration that has affected the region. Over one third of the foreigners that reside in Catalonia in 2009 come from America, especially South America. African and EU citizens are also numerous and a growing number of immigrants come from Asia. As far as the country of origin is concerned, the immigrants coming from Morocco represent the vast majority and account for almost one fifth of all the foreigners. Romanians, Ecuadorians and Chinese are also well represented.

Changes in the Age Structure

During the current decade, the ageing index (AI) has increased slightly in Spain, even if the share of the older age group has decreased to a slight extent (Table 6). Conversely, in Catalonia the AI decreased enormously (from 125 to 108.7), approaching a level of equilibrium between young and old. The population's rejuvenation occurred in all the Catalan provinces. In the province of Barcelona the AI decreased both in the urban core, where the age structure remains largely older than the regional average, and in the hinterland where the resident population is younger.

Between 1999 and 2009 the working age population underwent a small change in the whole region, its share shifting from 69 to 68.7 %. During the decade considered, the Barcelona hinterland saw a decrease in its middle-aged population whereas the other three provinces and the Barcelona municipality showed a greater than one percentage point increase. The rejuvenation of the Catalan population is clearly shown by the age pyramid (Fig. 3). The base of the pyramid, which in 1999 was heading towards contraction, after 10 years shows a clear tendency towards enlargement due to the greater growth in the younger age groups (0–4 and 5–9) with respect to the entire population.

Table 6 Age structure of the population in the provinces (1999–2009)

Reference areas, Region, Provinces	0–14 years		15–64 years		65+ years		AI	
	1999	2009	1999	2009	1999	2009	1999	2009
Spain	14.8	14.6	68.4	68.8	16.8	16.6	113.4	114.2
Catalonia	13.8	15.0	69.0	68.7	17.2	16.3	125.0	108.7
Barcelona Province	13.6	14.9	69.5	68.8	16.8	16.4	123.5	110.2
Girona	14.8	15.6	67.5	68.9	17.7	15.5	120.1	99.4
Lleida	13.3	14.4	65.6	67.7	21.1	17.8	159.1	123.5
Tarragona	14.5	15.6	67.8	68.9	17.7	15.6	122.1	100.1
Barcelona Municipality	11.6	11.9	66.4	67.7	22.0	20.4	190.3	172.3
Barcelona Hinterland	14.6	16.1	71.0	69.2	14.4	14.7	98.7	91.1

The ageing index (AI) is calculated as the number of persons 60 years old or over per hundred persons under age 15

INE, Padrón municipal

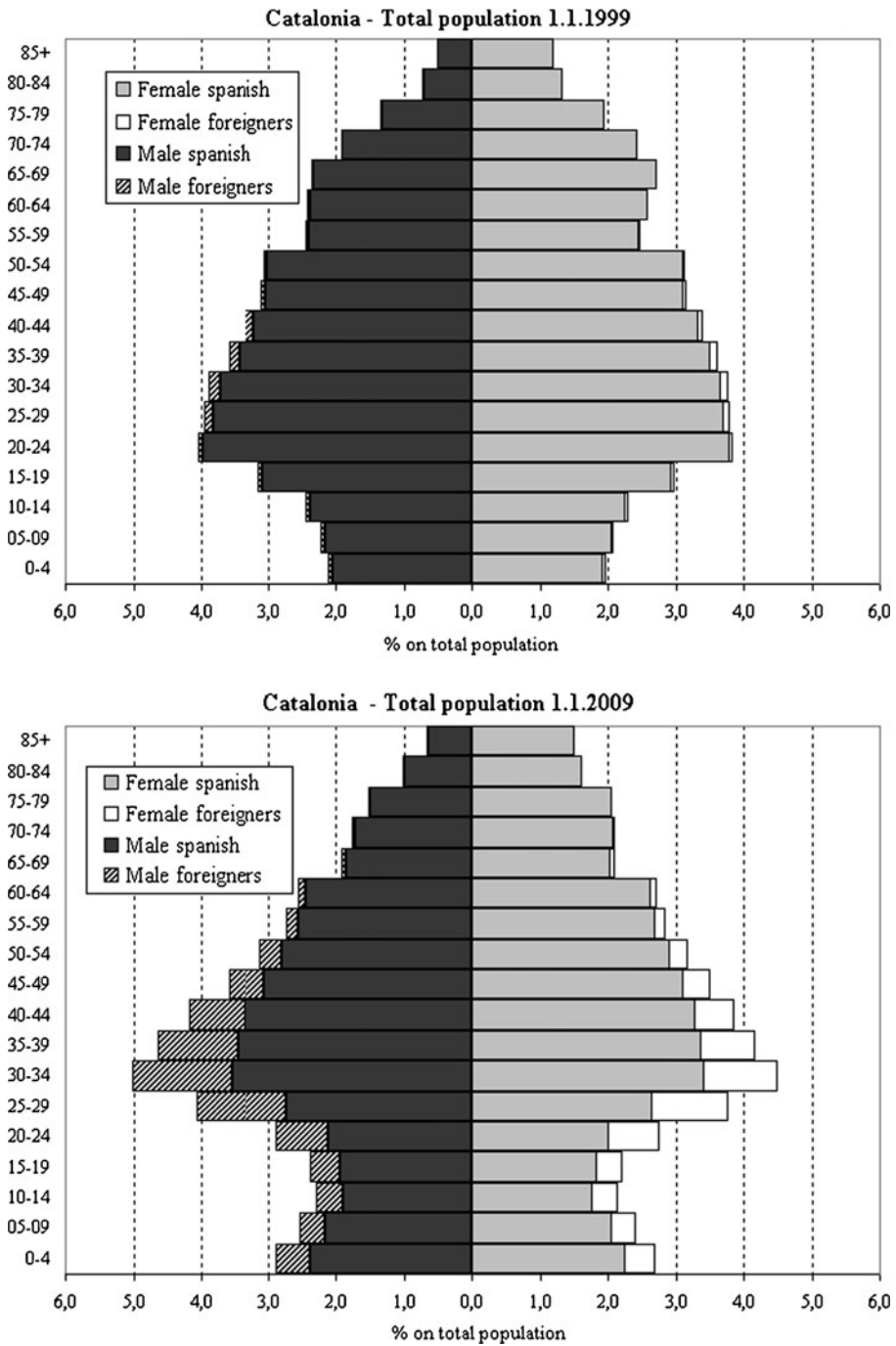


Fig. 3 Structure of the resident population by sex, age groups and nationality. Catalonia (1999–2009). INE, Padrón municipal

The increase in the very young is not only linked to the contribution of the foreign population: an endogenous component is also present in the rejuvenation. Indeed, the pyramid's base for the local population is also being enlarged by a renewal in the birth rate amongst Spanish women. This was caused by a generation of women entering the most reproductive age, which is higher than the one that preceded it and produces a higher number of births than in the past. From a short-term perspective, considering the reduction of women in this age group, a contraction in Spanish births seems probable. If such a process should occur the rejuvenation of the age structure that has taken place in the current decade may not last for long.

Economic Change and Population in the Last Decade

Occupational Structure and Recent Economic Trends

Catalonia is one of the most economically developed Spanish regions. In 2009 its GDP per capita was 26.4 % higher than the average of the 27 EU countries and 22.5 % higher than the Spanish average. After increasing slightly during the 90's, Catalonia's economy witnessed a period of great expansion between 2001 and 2007. This expansion led the GDP to a growth of 3 to 4 % per year, at a slightly lower rate than Spain as a whole but superior to the EU countries' average (Fig. 4). In 2008 the effects of the economic crisis began to be felt. This crisis almost brought the Catalan

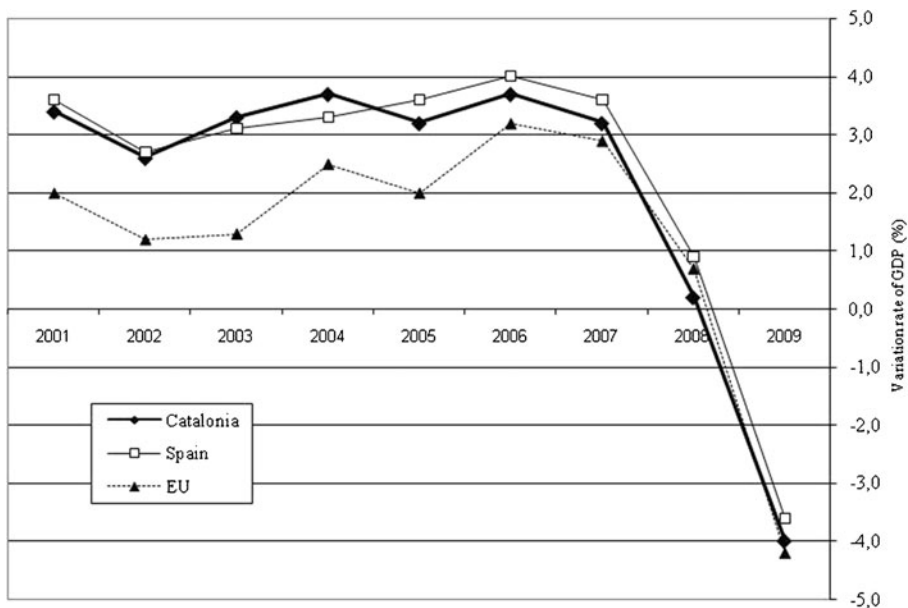


Fig. 4 Rate of change of GDP. Catalonia, Spain, European Union, 2001–09. Percentage values. Data on Catalonia, IDESCAT (Instituto de Estadística de Cataluña); data on Spain and EU, EUROSTAT

growth rate to a halt and, the following year, the GDP was reduced by 4 %, a decline similar to that of the Spain and the EU.

The economic crisis did not affect all the productive sectors with the same intensity. The GDP of the agricultural sector, which occupies just 3 % of the Catalan workforce, in the year 2000 displayed a fluctuating tendency with a growth rate of +6.8 % in 2009. The worst hit economic sector was industry, with a decrease of 12.7 % in 2009. Even during the previous years the industrial sector's performance had not been particularly satisfactory. The construction and tertiary sector drove the strong economic expansion of Catalonia until 2007. In the period 2001–2007, the service sector grew by 4–5 % yearly and in 2009 dropped by 1.1 %. The construction sector peaked in 2006 with a growth close to 8 %. In 3 years the “building-bubble” burst and in 2009 the decrease was about 6.6 %.

In absolute terms, during the early 2000s, the number of employees in Catalonia grew by more than 350,000 units (+12.8 %), two thirds of whom were concentrated in the province of Barcelona alone. The positive number mainly derives from a growth in the workers employed in the service sector, which exceeded half a million units (+32.5 %) and from a smaller increase in the building sector, whereas agriculture and industry lost over one fifth of their employees. There was a substantial absolute decrease in the industrial sector. This decrease totalled slightly less than 200,000 units and was mainly concentrated in the province of Barcelona. The province of Tarragona, with a counter-tendency with respect to the rest of the region, saw a 16.4 % growth in workers employed in industry and a slight contraction in construction work, which was expanding in the other provinces. The province of Lleida was alone in increasing its workforce employed in the sector, also owing to the use of many seasonal foreign workers. The recession had immediate effects on the unemployment rate, which had decreased during the year 2000 down to a historical minimum of

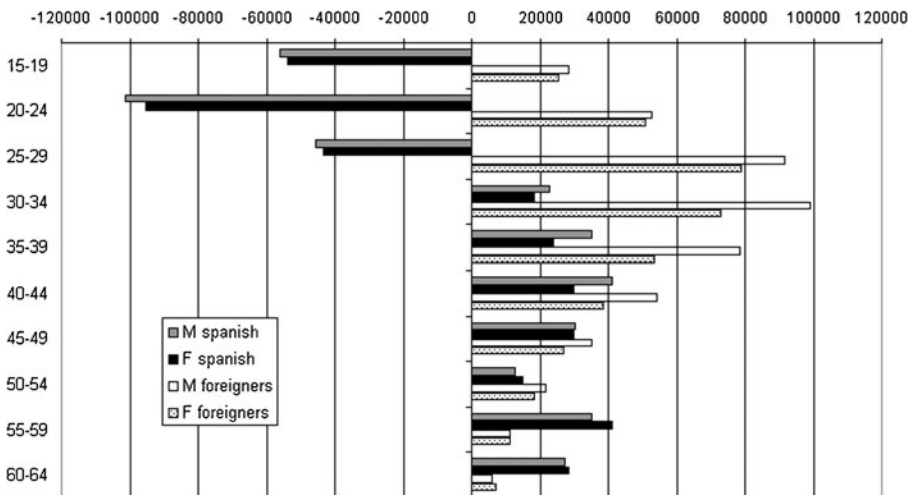


Fig. 5 Variation of the working age population by age, sex and nationality. Catalonia, 1999–2009. INE, Padrón municipal

6.5 % in 2007, and then grew to 16.2 % just 2 years later. An increase in the unemployment rate occurred in all production sectors, with heavy losses in some sectors. This was true for the construction sector which, after having contributed to the expansion phase of the Catalan economy, witnessed a rise in unemployment from 4.8 % to 23.6 % between 2007 and 2009.

Demographic Characteristics and Changes in the Working age Population

Between 1999 and 2009 the working age population in Catalonia increased by more than 850,000 units (+20 %) under the sole effect of foreign immigration (Fig. 5). The Spanish working age population remained mainly unvaried in number (−5,000 units) because of a strong diminution between 15 and 29 years and an increase between 30 and 64 years. The decrease in the number of young workers is due to the 80s and 90s generations entering the working age group. These generations were born at the end of the “baby boom” and are much less numerous than those preceding them. In 10 years the 20–29 year old Spaniards living in Catalonia diminished by about 300,000 units (−28.8 %), and were almost entirely compensated for by new foreign residents. The foreign population grew in all the age groups, especially in its male component and between 25 and 39 years (+475,000 units). The number of 30–39 year olds, both native and foreign, residing in the region increased appreciably (+14.8 %). The province of Barcelona, with half a million units more absorbed 58.6 % of the regional increase in the working age population.

In absolute terms, the growth of the workforce in the period 1999–2009 was the same as the working age population (+863,000), also due to an increase in the activity rate of more than 6 percentage points: from 56.3 % to 62.7 %. In 2009, the activity rate in Catalonia exceeded the Spanish rate by almost 3 points. In general, in 2009 the economic activity rate in Catalonia was higher than the national average for all ages—slightly less for men and the younger age groups (up to 34 years of age) and considerably more for women between 35 and 54 years of age.

The job increases occurring were also the result of a higher flexibility and uncertainty in the nature of work contracts. In 2007, 23.3 % of Catalan dependent workers had an atypical work contract, with a higher number in the under 25 s, half of whom were employed on a fixed term contract (Idescat 2007). The sharp rise in the Catalan unemployment rate in the 16 to 24 year age group that occurred between 2008 and 2009 was due also to a greater weakness in their work contracts. The unemployment rate increased by about 24 percentage points: from 13.5 % to 37.1 %. During the same period the older age groups, between 25 and 54 years, more than doubled their level of unemployment, rising to 14.7 %. It should be noted that in all age groups, Catalan unemployment is almost always lower than the national average.

The Role of Migration

Before the recent migratory wave from abroad, Catalonia in the 60s and 70s had already been a land of very strong migratory flows. Still today one fourth of the Spanish workforce in Catalonia is made up of individuals who were not born in the region (Diaz-Serrano 2010).

During the last few decades the Spanish working-age population is aging because of a slight generational exchange among the younger age groups. The beginning of foreign immigration is linked not only to simple compensation to make good a shortage in demographic terms. The presence of a dual labour market is very important too. This kind of market is characterised by “good” and “bad” work positions. The latter are less appreciated by the local workforce which has improved its level of education and today is looking for better positions.

The low level segments of the labour market tend to be filled by less qualified workers coming from non-European countries, who are complementary to the native workforce rather than competing with it. Catalan women’s work insertion has grown and it has led to an increase in the demand for domestic labour and home care for children and the elderly, often satisfied by South American immigrant women. Apart from the services to people, tourism, construction and intensive agriculture are the sectors where foreign immigrants prevail. These sectors are characterised by low wages and are highly seasonal (Domingo and Gil 2007).

Foreigners in Spain display a higher insertion in the labour market than Spanish. The activity rates in Catalonia in 2008 are respectively 77.2 % and 63.2 %. The immigrants coming from non-EU countries are more active than those coming from the EU. A large gap between the sexes in the level of labour participation is valid also for foreigners. This is more perceptible in Catalonia than in the rest of the country, probably because of the large number of Moroccan women, who are normally dedicated to family work rather than to the labour market. The distribution of foreign workers by economic sector in Catalonia shows a strong presence of men in two sectors most severely hit by the recession: construction (33.7 %) and industry (23.7 %). Instead, foreign women are more concentrated in the macro-sector of services (85.2 %). The foreign citizens are more often employed as dependents compared to the Spanish (88.2 and 73.1 %) and work with temporary contracts (44 versus 14.2 % of locals). These contracts, in a phase of economic instability, give less guarantee of job stability. The immigrants employed in weaker labour market

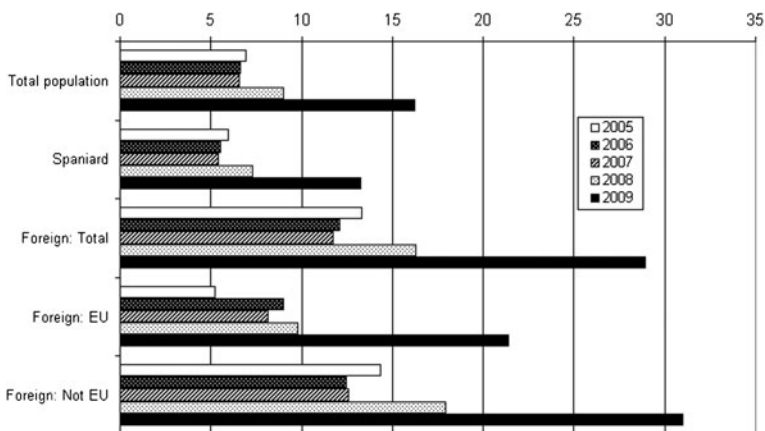


Fig. 6 Unemployment rates by nationality, Catalonia, 2005–09 (%). INE, Economically Active Population Survey (EAPS)

segments are also more exposed to its fluctuations. The trend of the activity rates between 2005 and 2009 confirms a higher precariousness within the Catalan labour market for non-EU workers. In 2005, when the Spanish economy was still at the peak of its expansion, the unemployment rate of non-EU citizens was already at its highest level when compared to EU foreigners (14,3 versus 5.2 %) (Fig. 6).

In 2007 the percentage of unemployed among the EU workers grew, probably also due to the strong flow of new EU citizens coming from Central Eastern Europe, mainly Romanians, who often entered the weak productive sectors in the region. Finally, in 2008–09, the recession hit the non-EU immigrants hard. They had to face an increase in unemployment as high as 17.9 % in 2008 and 31 % in 2009.

Looking Ahead: Expectations for the Future

The General Framework

Within the scope of the Demifer project, in which an in-depth analysis was made of 12 regional case studies, that of Catalonia is an interesting example of the close relations between demography, migration and economic trends. These relations vary according to the context although in general they seem to be related to more complex patterns linked to historic trends and socio-economic differences. In addition to Catalonia, Piedmont is another of the case studies in the Demifer project in which the importance of a long-term perspective in analysing the local situation is particularly significant (Gesano 2010). In these two areas, an alternation of phases of economic growth, slowdown and restructuring are observed. These long economic cycles, as well as the short economic cycles, are linked to processes of emigration and immigration. In actual fact, the economic system encounters a demographic system that is very slow to react through natural growth, so it tends to call for migration as a way to satisfy the demand for labour. Above all, major cities and agglomerations attract working age immigrants to offset a shrinking and ageing working age population.

In brief, several factors co-occur to produce changes in the size and structure of the labour force in a given area. On the one hand, past demographic trends continue to be active, determining the size of the generations and possibly setting the conditions for an influx of immigrants to compensate any structural imbalances. On the other, changes in the society have led to greater workplace participation by women and have delayed the entry of young people to the labour market.

Nevertheless, these factors, although important in themselves, are not enough to explain why certain regions succeed in sustaining a significant economic role regardless of the prevailing demographic and economic situation. In all likelihood an important role is played by a number of basic factors, such as the historical and cultural heritage of a territory and its geographic location. Nor should a series of economic conditions be overlooked (such as the availability of resources and the capacity to innovate), or institutional (efficacy and efficiency of the administrative apparatus) and social (cohesiveness and civic spirit) factors which facilitate a more positive reactivity even in the case of less favourable economic cycles.

The Current Situation

The effects of the recession on the Catalan labour market have been considerable and have increased the unemployment rates to levels that only a few years ago were unimaginable. The crisis has hit young people and immigrants the hardest, as they are the more fragile subjects, often employed with atypical and very flexible work contracts. It is obviously very difficult to predict how long the recession and its effects will last. In the short term, it is easy to think of a diminution in foreign migratory inflow, as recent data show, and an increase in return migrations, also stimulated by “ad hoc” governmental programs, on the results of which only scanty data are available for the time being.⁶ It is also likely that, as well as reducing the number of entrances, the economic crisis is also changing the composition of the flows, as is indicated by the increase in the number of applications for family reunification permits from 7.6 % in 2008 to around 10 % in the 3 years 2009–2011 (Gobierno de España 2012).

Moreover, another type of flow is emerging which could conceivably further alter the foreign net migration figures. The explosion of the unemployment rate means that young highly educated Spaniards are increasingly turning to the labour market of the Central-Northern European countries. This process is hard to quantify as it comprises flows that are often either temporary or circular and that are frequently not included in population register data.

A Perspective on the Future

Some help in inferring the possible future of Catalonia’s population can be sought from the results of the DEMIFER project, which has developed four policy scenarios of demographic development (de Beer et al. 2010). The “Expanding Market Europe” and “Growing Social Europe” scenarios predict an improvement in economic and social conditions in the European regions and, as a consequence, an expansive demographic dynamic. Conversely, the “Challenged Market Europe” and “Limited Social Europe” scenarios predict a less positive socio-economic future, which may have some negative repercussions on population evolution.

The Demifer scenarios link the political measures to the demographic effects through two policy variation axes: an Economy-Environment axis and a Distribution-Fairness axis. Along the Economy-Environment axis, in the two extreme situations, we pass from the attainment of the objective to failure to achieve a sustainable economic growth. The Distribution-Fairness axis is instead characterized, on the one hand, by policies that pursue social solidarity objectives, and on the other by policies aimed at enhancing market competitiveness levels.

The hypotheses identify two pairs of scenarios which have quite evident polarized results. The two demographically expansive scenarios—“Expanding Market Europe”

⁶ In November 2008 Spain enacted a law on the voluntary return of unemployed immigrants to their country of origin. On the basis of a first evaluation of the programme in November 2009, around 9,000 immigrant workers were involved, namely only 10 % of the target planned by the Spanish government (Gobierno de España 2009).

and “Growing Social Europe”, share the hypothesis of growth enabled by technical and social innovation, while differing as to the degree of Distribution-Fairness, passing from the collectivism of the “Growing Social Europe” to the individualism of the “Expanding Market Europe”. Conversely, the two scenarios of slower growth both postulate a growth limited by environmental constraints, associated with an outlook in which the focus is on market expansion in the case of the “Challenged Market Europe” scenario and on solidarity principles in the case of the “Limited Social Europe” scenario.

The two expansion scenarios forecast a substantial growth in the Catalan population. This increase could lead to 9 million inhabitants by 2050, with a growth of more than 2 million residents, which would be almost one third more than the 2005 population. Both the less optimistic scenarios foresee a weaker demographic growth in the region so that the population in 2050 will grow by about 0.5 million residents to a total lower than 7.5 million inhabitants (Fig. 7).

If we concentrate our attention on the structure of the labour force by sex and age in 2050 following the two “extreme” scenarios (“Expanding Market Europe” and “Limited Social Europe”), the differences are quite apparent (Fig. 8). Although both scenarios agree on the ageing of the active population, in the case of Catalonia being involved in a continental economic expansion, an increase in the workforce by about 260,000 units should occur, but with a loss of almost 150,000 workers between 25 and 39 years of age. The Limited Social Europe scenario, instead, foresees a strong decrease in the active population (−760,000 units), two thirds of which concentrated among the young adults (20–34) and a more substantial ageing of the age structure. Hence, in the long term, all the scenarios agree in forecasting a relatively strong decrease in the number of young adults within the workforce. The age group between 25 and 34 years is now the most numerous amongst the active population and a strong contraction in it may well lead to the arrival of new international migrants with a compensative function.

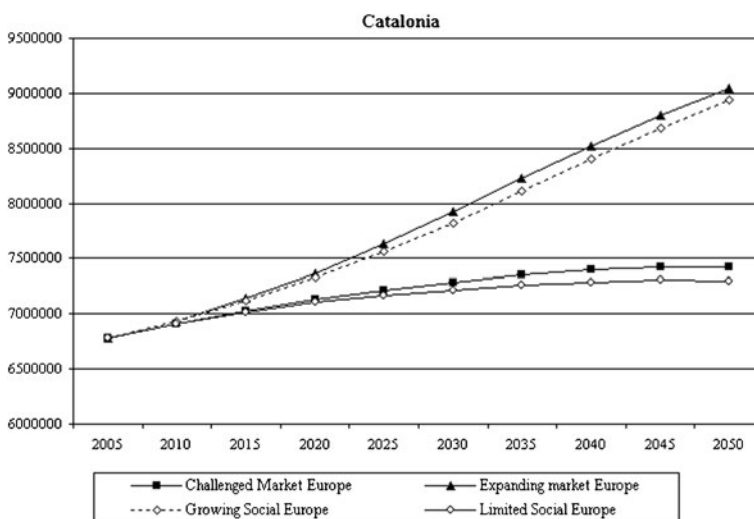


Fig. 7 DEMIFER policy scenarios. Total population of Catalonia, 2005–50. DEMIFER project

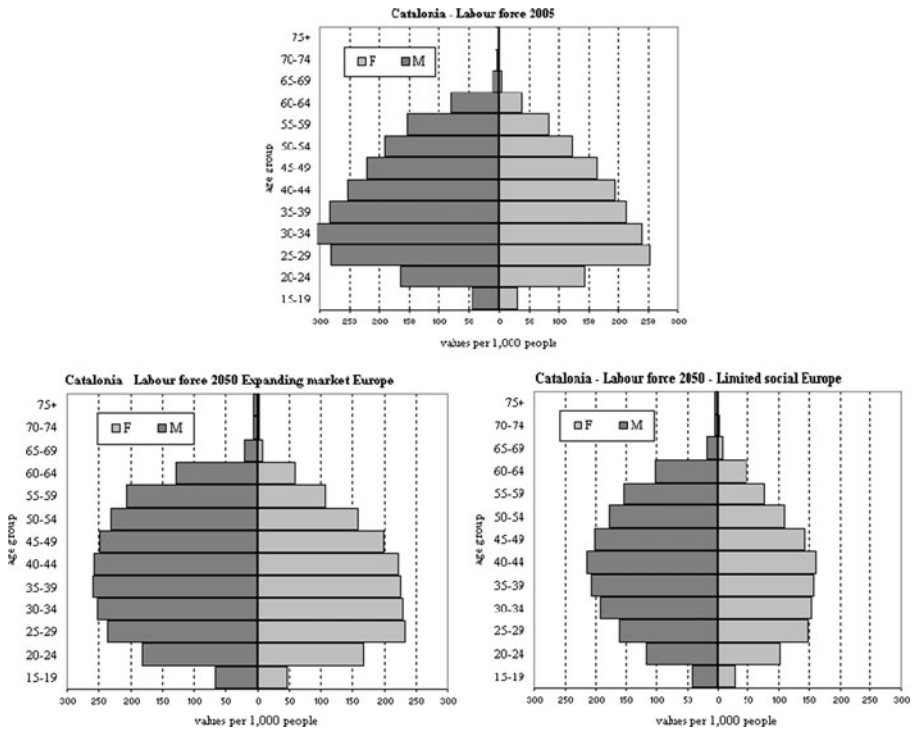


Fig. 8 DEMIFER policy scenarios. Age structure of population by sex and age groups. Catalonia, 2005–50. per 1,000 people. DEMIFER project

In general, the Demifer project has indicated that should the current demographic and migratory trends continue in the EU countries, over the next few decades the population of working age is liable to decrease and the regional differences to increase. Policies aimed at enhancing European competitiveness and regional cohesion could have an effect on the demographic dynamic and would have a greater chance of attaining their objectives if they are combined with social measures addressing different environments: education, housing, from the integration of the immigrants to attention dedicated to environmental quality.

Regardless of the economic and social future of Europe, the future demographic trends of Catalonia will surely be affected by its demographic history. The similarities in long-term trends of the Catalan population with that of many European regions are quite evident, just as it is evident that the economic crisis has initiated a change whose duration is difficult to predict. The demographic history of Catalonia also highlights the role that migration plays in supporting the development of regions that have historically been the outposts of European society. The demand for new immigration flows is closely linked to the demographic structure of these regions which reflects a history of traditionally low fertility. The timing and size of future migration are uncertain, but they will be the result of the continuous interplay between demographic and economic trends.

In this respect, it is worth noting that the current economic crisis has already become a turning point for the migration flows of the region. In fact, in a very short

period of time the main migratory trends of the last decade are completely reversed. Arrivals from non-EU countries are significantly reduced, return migration is greater than before and Nationals migration towards other EU regions has increased. The worsening of the economic situation is going to deepen these changes in migration trends. This kind of reversal is not new for Catalonia, whose history is characterized by alternating periods of high and low migration.

As a matter of fact, it is not possible to state when (and if) Catalonia will return to be the attractive region it was before the crisis. In the long term, the actual development of the Catalan population should probably stay within the large range described by the four policy scenarios of the DEMIFER project. However, the fast and unexpected change in migratory trends of Catalonia caused by the economic crisis has confirmed the need to have different looks to the future of a population. In fact, long term scenarios are useful to assess the demographic impact of different political strategies, as well as short and mid-term projections are necessary to take into account the sudden changes of economic trends.

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