

19 November 2012

Population Projections for 2012
Current demographic trends are to lead Spain to lose one tenth of its population in the coming 40 years
From 2018 onwards, there will be more deaths than births
37% of the population in 2052 will be over 64 years of age

If the current demographic trends were to continue¹, the population structure of Spain would lead us to a scenario marked by a progressive loss in inhabitants in the coming decades.

Thus, in the year 2022, Spain would have 45,0 million inhabitants, 2.5% less than in 2012. In 2052, the population of Spain would stand at 41.5 million persons, 10.2% less than at present.

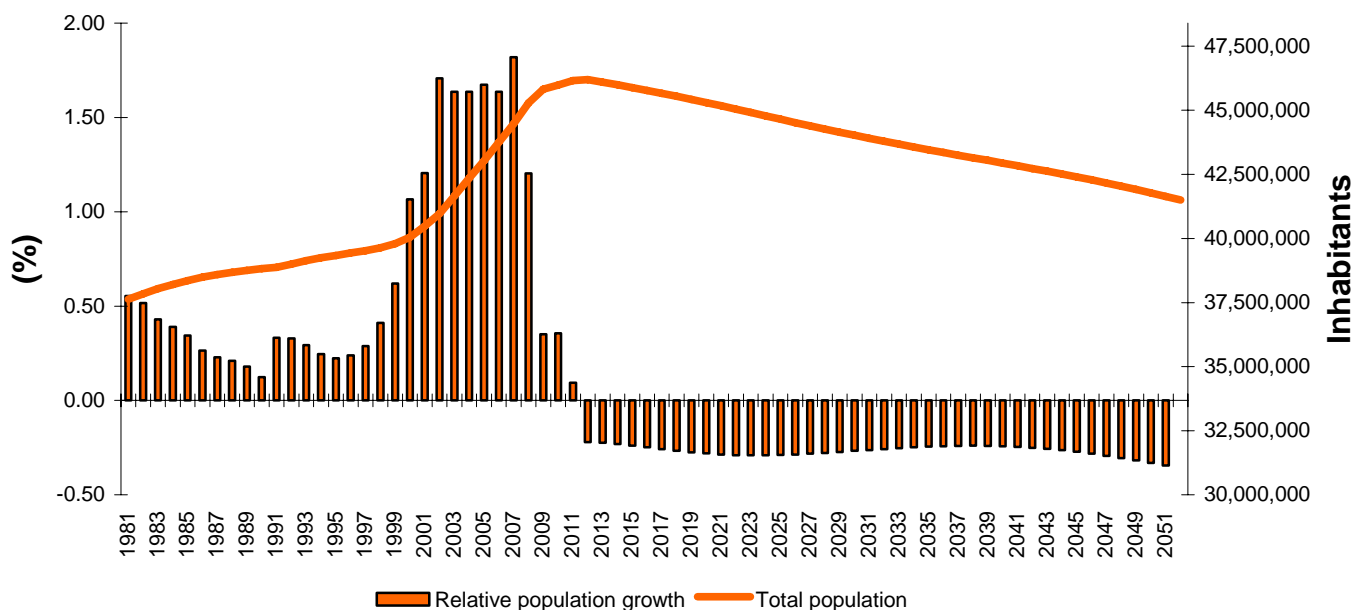
Growth of the population of Spain

Years	Resident population at 1 January	Population growth	
		Absolute	Relative (%)
2012	46,196,278		
2022	45,042,526	-1,153,752	-2.50
2032	43,792,878	-1,249,647	-2.77
2042	42,728,650	-1,064,228	-2.43
2052	41,499,216	-1,229,434	-2.88

Source: Long-Term Population Projection

¹ The population projections compiled by the INE constitute a statistical simulation of the demographic size and structure of the population that would reside in Spain in the coming years, should the current demographic trends continue. This data basically shows the effect that our current population structure and the currently observed demographic behaviour would have on the future population.

Future performance of the population of Spain



Source: 1981-2001, Intercensus Population Estimates; 2002-2012, Population Now Cast; 2012-2052, Long-Term Population Projection.

Births and deaths

In the coming years, Spain would continue to register a gradually decreasing birth rate. Thus, 375,159 babies would be born in 2021, that is, almost 20% less than last year. 7.7 million births would be registered up until 2031, or 9% less than in the last 20 years.

The decrease in births would be caused by the structure of the population pyramid, due to a progressive reduction in the number of women of childbearing age.

Therefore, the number of births would not recover again until 2030, once the effect that the birth rate crisis of the 80s and beginning of the 90s had on the female population pyramid has been overcome, though it would decrease once again from 2040 onwards. In any case, over the coming 40 years, 14.6 million children would be born, 24% less than in the last 40 years.

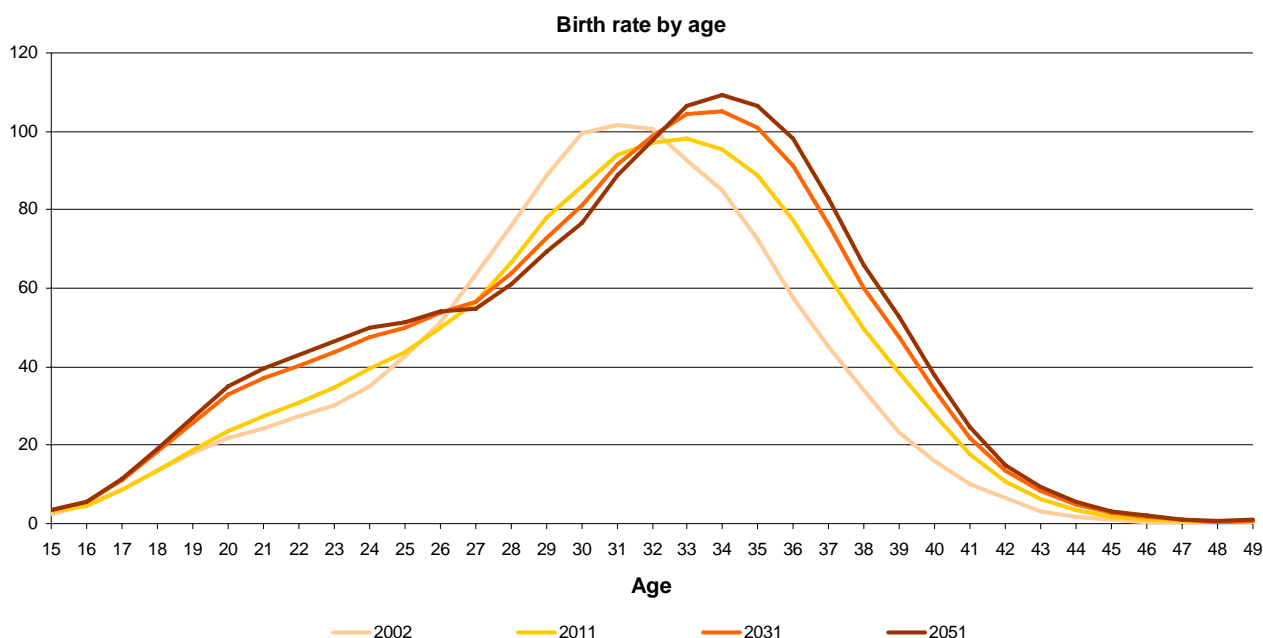
This performance of the birth rate would occur, despite fertility maintaining a slightly favourable trend in the last decade, which would lead to the average number of children per woman reaching 1.51 in 20 years, and 1.56 in 40 years, as compared with the 1.36 recorded in 2011. Likewise, with the current trend, the mean age at childbearing would continue its rising trend, reaching 31.5 years of age in 2051.

Birth rate indicators

Years	Average number of children per woman	Mean age at childbearing
2001	1.24	30.76
2011	1.36	31.43
2021	1.47	31.30
2031	1.51	31.40
2041	1.53	31.47
2051	1.56	31.52

Source: 2001-2011, Basic Demographic Indicators (preview data for 2011); 2012-2051, Long-Term Population Projection.

The evolution of the fertility rate curve, by age of the mother, shows the progressive move of childbearing toward older ages (between 35 and 40 years of age), partially compensated by higher rates of very young childbearing (between 18 and 25 years of age).



Source: 2002-2011, Basic Demographic Indicators (preview data for 2011); 2012-2051, Long-Term Population Projection.
Note: rates expressed as so many per thousand.

Should the current rates reflecting a reduction in death rates by age on the Spanish population remain unchanged, life expectancy at birth would reach 86.9 years for males and 90.7 years for females in 2051 (with an increase of almost eight years and six years, respectively). Moreover, this indicates that the difference between female life expectancy and male life expectancy would decrease by 2 years until then.

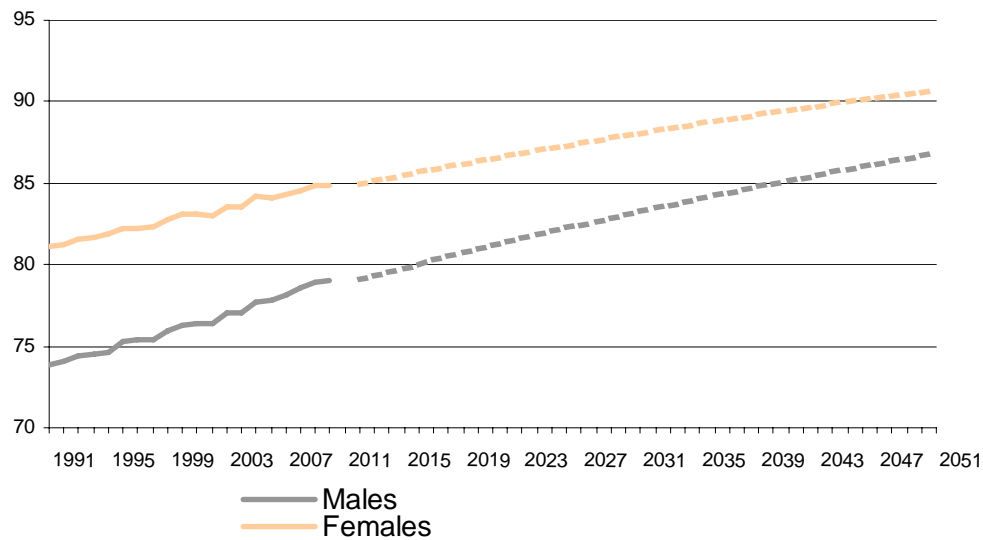
In turn, life expectancy of persons 65 years old would increase to 24.0 years for men and 27.3 years for women, almost six and five years more, respectively, than at the current time.

Mortality indicators

Years	Life Expectancy at Birth		Life Expectancy at 65 years of age	
	Males	Females	Men	Women
2001	76.30	83.07	16.85	20.85
2011	79.08	84.92	18.42	22.36
2021	81.21	86.54	19.83	23.65
2031	83.30	88.10	21.30	24.98
2041	85.18	89.50	22.71	26.18
2051	86.88	90.75	24.03	27.28

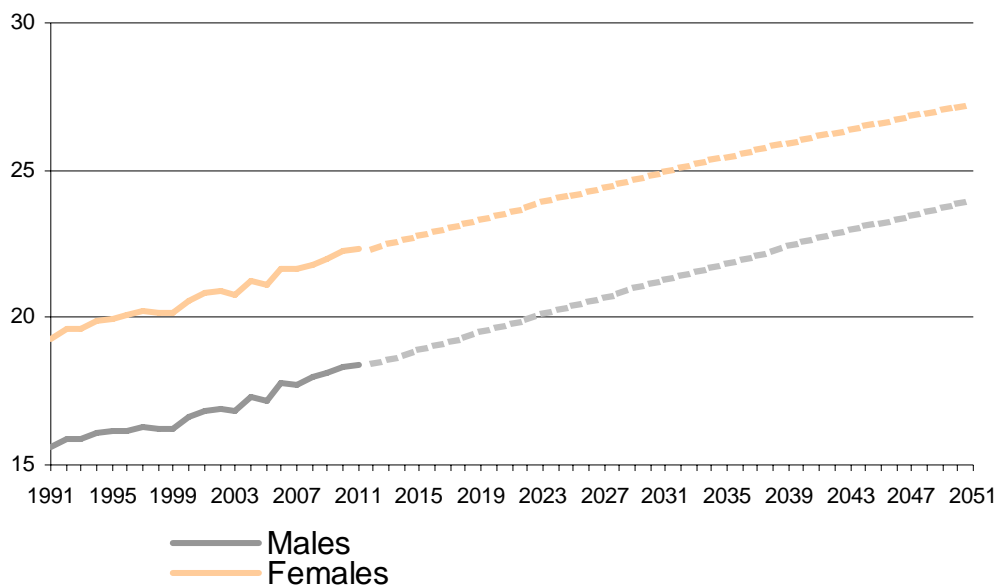
Source: 2001-2011, Basic Demographic Indicators (preview data for 2011);
2012-2051, Long-Term Population Projection.

Life expectancy at birth



Source: 1991-2011, Basic Demographic Indicators (preview data for 2011);
2012-2051, Long-Term Population Projection.

Life expectancy at 65 years of age

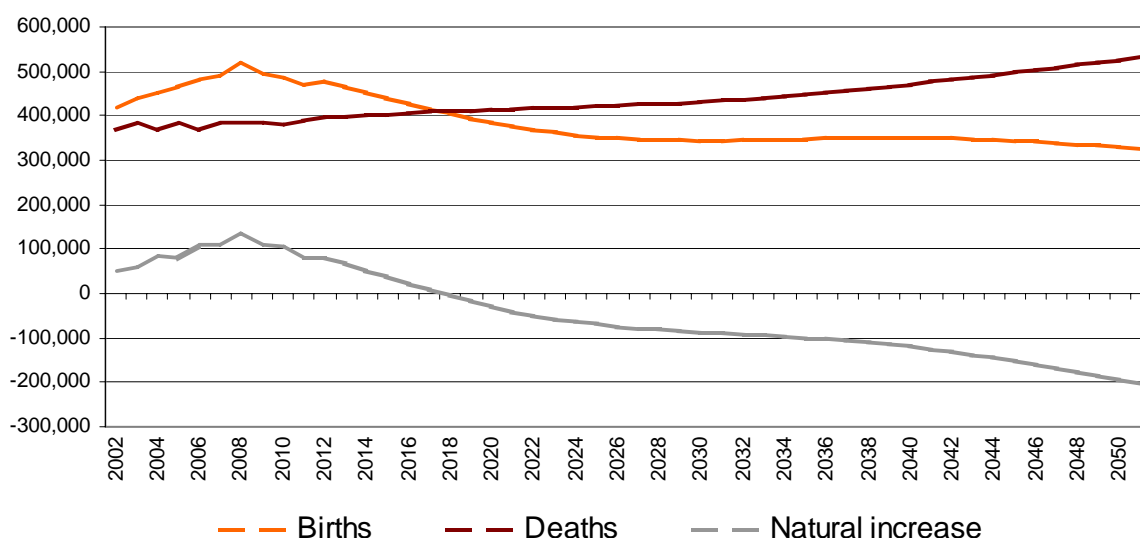


Source: 1991-2011, Basic Demographic Indicators (preview results for 2011); 2012-2051, Long-Term Population Projection.

In any case, the increasingly aged demographic structure would cause a continuous increase in the annual number of deaths. In the coming 40 years, 17.9 million persons would die in Spain, 34% more than in the last 40 years.

All considered, the balance between births and deaths would enter into a continuously decreasing dynamic. In fact, these results provide a perspective of negative natural growth as of 2018, accelerating the population decline.

Natural growth of the population of Spain



Source: 2002-2011, Vital Statistics (preview data for 2011);
2012-2051, Long-Term Population Projection.

Natural growth of the population of Spain

Years	Births	Deaths	Natural increase
2012-2021	4,236,114	4,063,804	172,311
2022-2031	3,510,481	4,245,768	-735,287
2032-2041	3,485,923	4,545,959	-1,060,037
2042-2051	3,388,839	5,055,851	-1,667,012

Source: Long-Term Population Projection.

Migratory balance

According to the latest available information, the migratory balance for the year 2012 would be negative, by 181,479 persons. It was negative in 2011 as well, by 50,090 persons.

This balance was as a result of an expected immigrant flow of 376,696 persons, which was 17.7% lower than the previous year, and an expected emigrant flow abroad of 558,175 persons, which was 9.9% higher than in 2011.

Nonetheless, the extension of the propensity to migrate to and from Spain observed today would imply a progressive, albeit slow, recovery of its migratory balance.

On the one hand, the immigration flow that Spain would receive would increase progressively in the coming years. As a whole, in the coming 10 years, Spain would receive some 3.9 million immigrants, and in the coming 40 years, the immigration flow would reach 16.7 million.

Most of the immigration would come from the European Union (4.9 million), though the population aging also expected in Europe would progressively reduce the EU migratory flow.

South America and Africa would remain the other two most important points of origin in immigration to Spain (with 3.8 and 3.5 million immigrants, respectively). Now the effects of the demographic aging of the South American countries in the medium term would cause the immigration from them to decrease in the last decade of the projected period. Conversely, African immigration would experience continuous growth in the coming years, on remaining a main source of young population.

Projected immigration flow according to origin

	2012-2021	2022-2031	2032-2041	2042-2051	2012-2051
Total	3,877,094	4,093,229	4,282,937	4,444,088	16,697,348
European Union	1,276,395	1,236,021	1,208,793	1,186,495	4,907,703
Rest of Europe	207,958	201,257	192,464	184,717	786,396
Africa	630,575	788,556	964,987	1,151,203	3,535,322
North America	131,133	138,109	143,709	147,541	560,492
Central America	315,747	353,366	381,718	399,613	1,450,444
South America	901,330	950,443	967,022	959,143	3,777,939
Asia	406,710	417,380	415,414	405,889	1,645,393
Oceania	7,246	8,097	8,830	9,487	33,661

Source: Long-Term Population Projection.

Regarding emigration, the progressive loss in the population of young adult age would result in the exit flow of the population abroad slowly decreasing over time.

Nevertheless, prolonging the current propensity to emigrate abroad would lead to 5.2 million persons leaving Spain in the next 10 years. 18.1 million persons would leave in the coming 40 years.

All considered, the migratory balance of Spain would gradually recover in the coming years, though for the whole of the next four decades, these migratory trends would lead Spain to a net population loss of 1.4 million persons.

Migratory growth

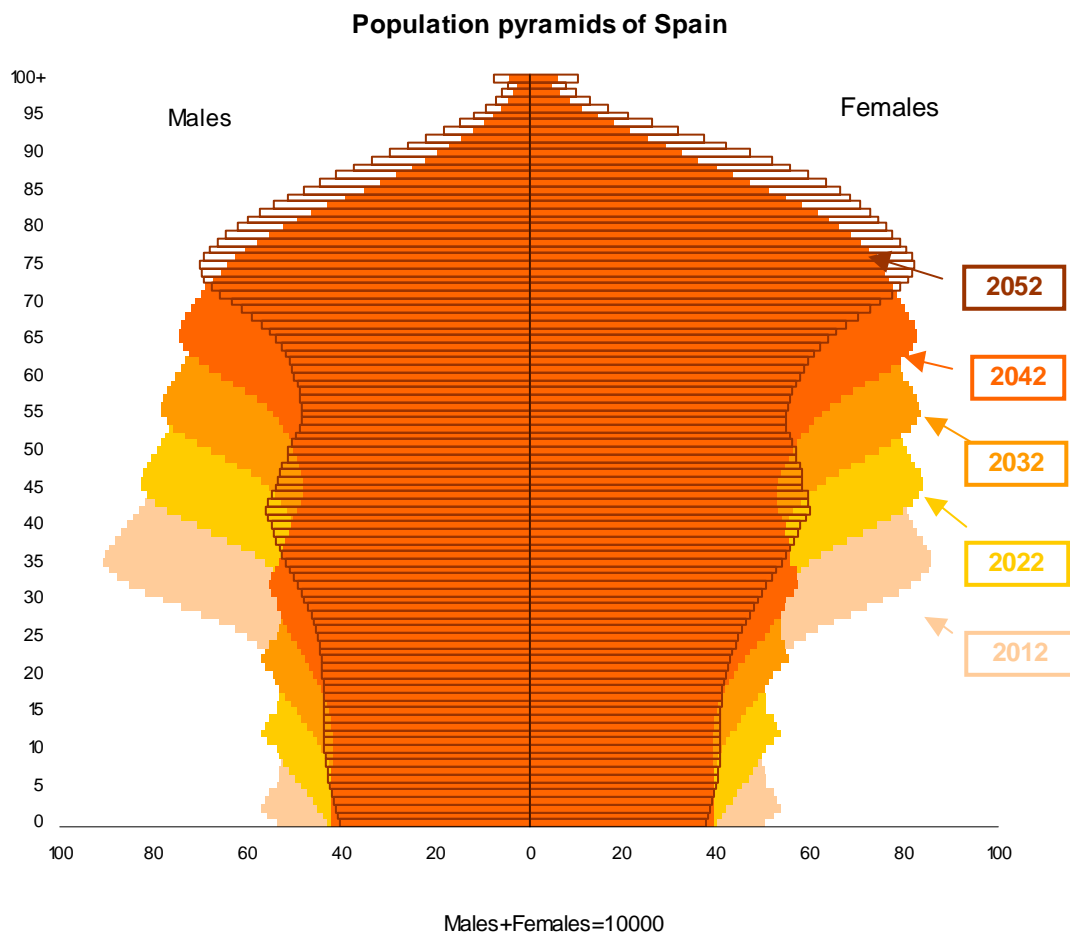
Year	Immigrants	Emigrants	Migratory Balance
2012-2021	3,877,094	5,203,157	-1,326,063
2022-2031	4,093,229	4,607,589	-514,360
2032-2041	4,282,937	4,287,128	-4,191
2042-2051	4,444,088	4,006,511	437,578

Source: Long-Term Population Projection.

Aging of the population

The simulation performed also shows the constant aging process which our demographic structure must face, and which is accelerated by the decreasing birth rate and the negative migratory balances.

The greatest population growth would be focused on the higher age groups. Specifically, in 2052, the group aged 64 years old and over would increase by 7.2 million persons (89%), and would account for 37% of the total population of Spain.



Source: Long-Term Population Projection.

Conversely, Spain would lose 9.9 million person aged 16-64 years old (32%) and almost two million in the population group aged 0 to 15 years old (26%).

Population resident in Spain, by five-year age group, at 1 January 2012 and 2052

Age groups	2012	2052	Absolute growth	Relative growth (%)
TOTAL	46,196,278	41,499,216	-4,697,062	-10.2
0 to 4 years old	2,482,803	1,657,748	-825,055	-33.2
5 to 9 years old	2,361,167	1,729,451	-631,716	-26.8
10 to 14 years old	2,182,609	1,754,826	-427,783	-19.6
15 to 19 years old	2,178,777	1,762,165	-416,612	-19.1
20 to 24 years old	2,465,000	1,809,614	-655,387	-26.6
25 to 29 years old	3,039,412	1,913,903	-1,125,509	-37.0
30 to 34 years old	3,814,880	2,076,517	-1,738,363	-45.6
35 to 39 years old	4,006,503	2,257,767	-1,748,736	-43.6
40 to 44 years old	3,765,949	2,375,833	-1,390,116	-36.9
45 to 49 years old	3,537,083	2,300,127	-1,236,956	-35.0
50 to 54 years old	3,172,846	2,189,366	-983,480	-31.0
55 to 59 years old	2,702,275	2,167,979	-534,297	-19.8
60 to 64 years old	2,457,298	2,300,071	-157,227	-6.4
65 to 69 years old	2,182,424	2,596,284	413,860	19.0
70 to 74 years old	1,737,846	3,031,001	1,293,154	74.4
75 to 79 years old	1,700,049	3,066,833	1,366,784	80.4
80 to 84 years old	1,300,518	2,685,942	1,385,425	106.5
85 to 89 years old	749,481	2,079,501	1,330,020	177.5
90 to 94 years old	283,377	1,224,782	941,405	332.2
95 to 99 years old	67,836	444,013	376,177	554.5
100 years old and over	8,143	75,494	67,351	827.1

Source: Long-Term Population Projection.

Dependency rate

In all, if the current demographic trends and behaviours were to continue in the future, in 2022, the dependency rate would rise to 58%. That is, for every 10 persons of working age, there would be almost six potentially economically inactive persons (under 16 or over 64 years of age) in Spain.

In 40 years, said dependency rate would rise to 99%, which would imply that, for each person of working age, there would practically be another not of working age.

Dependency Rates

Years	Persons over 64 years of age	Persons under 16 years of age	Total (under 16 and over 64 years of age)
2012	26.14	24.25	50.39
2022	33.30	24.81	58.11
2032	45.24	22.49	67.73
2042	62.23	24.27	86.50
2052	73.09	26.41	99.50

Source: Long-Term Population Projection.

Note:

- The dependency rate for persons over 64 years of age is defined as the quotient between the population over 64 years of age and the population over 15 and under 65 years of age, expressed as so much per hundred.
- The dependency rate for persons under 16 years of age is defined as the quotient between the population under 16 years of age and the population over 15 and under 65 years of age, expressed as so much per hundred.
- The dependency rate for persons under 16 and over 64 years of age is defined as the quotient between the population under 16 or over 64 years of age and the population over 15 and under 65 years of age, expressed as so much per hundred.

Results by Autonomous Community

The progressive decrease in the natural growth of the population (difference between births and deaths) and a negative, or very small, migratory balance, would cause all of the Autonomous Communities to lose population in the coming decade, except in Illes Balears, Canarias, Región de Murcia, Andalucía and the Autonomous Cities of Ceuta and Melilla.

Resident population at 1 January by Autonomous Community

	Year					
	2010	2011	2012	2015	2018	2022
TOTAL	45,989,016	46,152,925	46,196,278	45,885,361	45,544,834	45,042,526
Andalucía	8,206,076	8,256,297	8,286,376	8,326,539	8,351,391	8,361,785
Aragón	1,313,021	1,314,906	1,314,871	1,308,313	1,300,748	1,289,539
Asturias, Principado de	1,058,116	1,055,557	1,052,707	1,037,485	1,021,949	1,000,659
Balears, Illes	1,079,089	1,088,514	1,094,269	1,105,677	1,113,201	1,118,530
Canarias	2,088,214	2,100,235	2,114,214	2,128,068	2,136,841	2,141,497
Cantabria	577,995	578,632	578,901	574,128	568,591	560,061
Castilla y León	2,499,159	2,491,420	2,479,328	2,432,931	2,387,296	2,327,837
Castilla - La Mancha	2,035,510	2,046,717	2,050,815	2,029,109	2,006,258	1,975,120
Cataluña	7,301,132	7,333,530	7,318,520	7,179,467	7,057,257	6,913,374
Comunitat Valenciana	4,994,340	5,004,475	5,011,548	4,963,922	4,911,919	4,836,761
Extremadura	1,082,796	1,083,259	1,083,067	1,078,779	1,073,246	1,064,213
Galicia	2,738,591	2,736,636	2,728,903	2,693,312	2,655,064	2,599,579
Madrid, Comunidad de	6,335,780	6,369,167	6,387,824	6,372,274	6,347,864	6,301,368
Murcia, Región de	1,460,671	1,468,127	1,476,344	1,484,941	1,490,441	1,493,684
Navarra, Comunidad Foral de	619,013	622,125	624,606	621,923	618,385	612,603
País Vasco	2,138,590	2,140,339	2,128,398	2,084,011	2,041,172	1,984,515
Rioja, La	314,009	313,149	312,206	305,027	298,460	290,461
Ceuta	74,399	75,763	76,981	79,453	81,714	84,471
Melilla	72514	74078	76399	80001	83035	86468

Source: 2010-2012, Population Now Cast; 2012-2022 Short-Term Population Projection.

Population growth by Autonomous Community

	Absolute		Relative (%)		Annual average	
	2002-2012	2012-2022	2002-2012	2012-2022	2002-2012	2012-2022
TOTAL	5,232,034	-1,153,752	12.8	-2.5	523,203	-115,375
Andalucía	925,907	75,409	12.6	0.9	92,591	7,541
Aragón	111,211	-25,332	9.2	-1.9	11,121	-2,533
Asturias, Principado de	-9,235	-52,047	-0.9	-4.9	-924	-5,205
Balears, Illes	221,433	24,261	25.4	2.2	22,143	2,426
Canarias	335,045	27,283	18.8	1.3	33,504	2,728
Cantabria	43,986	-18,840	8.2	-3.3	4,399	-1,884
Castilla y León	24,782	-151,491	1.0	-6.1	2,478	-15,149
Castilla - La Mancha	290,653	-75,695	16.5	-3.7	29,065	-7,569
Cataluña	974,734	-405,146	15.4	-5.5	97,473	-40,515
Comunitat Valenciana	848,454	-174,787	20.4	-3.5	84,845	-17,479
Extremadura	24,919	-18,854	2.4	-1.7	2,492	-1,885
Galicia	35,170	-129,324	1.3	-4.7	3,517	-12,932
Madrid, Comunidad de	961,576	-86,456	17.7	-1.4	96,158	-8,646
Murcia, Región de	277,738	17,341	23.2	1.2	27,774	1,734
Navarra, Comunidad Foral de	68,727	-12,004	12.4	-1.9	6,873	-1,200
País Vasco	46,140	-143,883	2.2	-6.8	4,614	-14,388
Rioja, La	35,527	-21,745	12.8	-7.0	3,553	-2,175
Ceuta	5,396	7,490	7.5	9.7	540	749
Melilla	9870	10068	15	13	987	1007

Source: 2002-2012, Population Now Cast; 2012-2022 Short-Term Population Projection.

Births and deaths by Autonomous Community

In eight Autonomous Communities - Galicia, Castilla y León, Principado de Asturias, País Vasco, Aragón, Extremadura, Cantabria and La Rioja - the number of deaths would exceed the number of births between 2012 and 2021.

In addition to these, in Comunitat Valenciana, Canarias, Castilla-La Mancha, Comunidad Foral de Navarra and Cataluña, the annual natural increase would end up with negative values before the end of the decade.

Natural growth of the population by Autonomous Community

	2010	2011	2012	2015	2018	2021
TOTAL	105,018	81,083	79,656	37,306	-5,475	-40,377
Andalucía	27,730	23,820	25,932	19,239	11,806	5,268
Aragón	-254	-1,175	-754	-1,529	-2,334	-2,920
Asturias, Principado de	-4,962	-5,045	-5,192	-5,770	-6,377	-6,845
Balears, Illes	4,284	3,546	3,764	2,952	2,079	1,306
Canarias	5,504	3,875	3,803	1,668	-473	-2,398
Cantabria	109	-333	-324	-852	-1,419	-1,895
Castilla y León	-6,611	-7,309	-8,438	-10,081	-11,679	-12,910
Castilla - La Mancha	4,541	3,047	3,468	1,813	172	-1,117
Cataluña	24,668	21,105	19,433	11,351	4,122	-1,112
Comunitat Valenciana	11,555	8,873	8,484	2,706	-2,836	-7,247
Extremadura	-688	-657	-838	-1,273	-1,795	-2,258
Galicia	-7,702	-8,907	-9,213	-10,982	-13,071	-14,931
Madrid, Comunidad de	33,050	28,657	29,546	22,904	15,919	9,933
Murcia, Región de	8,063	7,023	7,116	5,555	3,969	2,685
Navarra, Comunidad Foral de	1,797	1,634	1,312	746	190	-225
País Vasco	1,807	1,005	-243	-2,681	-5,011	-6,779
Rioja, La	519	362	263	-67	-367	-584
Ceuta	656	637	676	707	714	720
Melilla	952	925	862	898	915	933

Source: 2010-2011, Vital Statistics (preview data for 2011); 2012-2021, Short-Term Population Projection.

Migratory balances abroad by Autonomous Community

Should the current trends continue, the migratory balance abroad would be negative in most of the Autonomous Communities between 2012 and 2021. This would be especially so in Cataluña (with an accumulated balance of -472,549 persons), Comunidad de Madrid (-381,632), Comunitat Valenciana (-176,027) and País Vasco (-140,171).

Canarias, Principado de Asturias, Aragón and the Autonomous City of Ceuta would be the only territories managing to maintain a positive balance in the population exchanges abroad.

Foreign migratory balance by Autonomous Community

	2010	2011	2012	2015	2018	2021
TOTAL	62,156	-50,090	-181,479	-146,838	-115,789	-88,852
Andalucía	19,301	5,699	-7,601	-5,106	-2,547	-70
Aragón	4,508	1,827	-567	-55	456	937
Asturias, Principado de	2,334	1,374	-124	227	553	845
Balears, Illes	5,565	403	-2,298	-2,022	-1,709	-1,394
Canarias	11,215	10,490	3,351	3,981	4,612	5,236
Cantabria	277	-12	-1,340	-1,073	-820	-592
Castilla y León	2,474	2,214	-2,693	-1,686	-746	105
Castilla - La Mancha	2,297	63	-4,953	-4,023	-3,085	-2,195
Cataluña	9,791	-36,313	-65,485	-52,000	-40,946	-32,131
Comunitat Valenciana	1,252	511	-22,934	-19,207	-15,774	-12,715
Extremadura	886	1,129	-237	-148	-44	73
Galicia	4,321	522	-2,703	-1,934	-1,173	-441
Madrid, Comunidad de	965	-21,952	-46,024	-40,612	-35,455	-30,810
Murcia, Región de	-656	1,095	-4,440	-3,688	-2,915	-2,183
Navarra, Comunidad Foral de	-227	-80	-2,546	-2,134	-1,750	-1,410
País Vasco	-1,352	-17,261	-18,127	-15,070	-12,592	-10,648
Rioja, La	-1,077	-720	-2,578	-2,140	-1,763	-1,444
Ceuta	472	435	169	201	240	284
Melilla	-189	486	-350	-348	-330	-300

Source: 2010-2011, Population Now Cast; 2012-2021, Short-Term Population Projection.

Migratory balances among the Autonomous Communities

Considering the exchange of population with other Autonomous Communities, worth noting would be Castilla-La Mancha, Andalucía, Castilla y León, Andalucía, Canarias, Cataluña, Aragón, Extremadura, Comunitat Valenciana and La Rioja, in addition to the Autonomous City of Ceuta, which would present a total negative balance between 2012 and 2021.

On the contrary, Comunidad de Madrid, País Vasco and Illes Balears would stand as the greatest net recipients of population coming from the rest of Spain.

Inter-Autonomous Community migratory balances

	2010	2011	2012	2015	2018	2021
Andalucía	567	-3,735	-3,464	-4,065	-4,445	-4,666
Aragón	-2,278	-1,396	-776	-822	-849	-866
Asturias, Principado de	-183	405	248	414	549	643
Balears, Illes	-419	1,216	2,800	1,977	1,401	1,015
Canarias	-4,392	-1,168	-1,976	-2,168	-2,281	-2,338
Cantabria	450	361	140	171	215	258
Castilla y León	-2,991	-6,519	-4,464	-3,514	-2,628	-1,843
Castilla - La Mancha	5,035	271	-5,637	-5,291	-4,875	-4,426
Cataluña	-398	-345	-2,692	-1,630	-1,071	-817
Comunitat Valenciana	-3,325	-3,707	-1,051	-307	303	777
Extremadura	303	-610	-230	-283	-269	-208
Galicia	1,773	-168	250	511	805	1,112
Madrid, Comunidad de	17	9,221	12,079	10,648	9,271	8,009
Murcia, Región de	-112	-559	516	309	133	-31
Navarra, Comunidad Foral de	2,005	1,192	424	305	204	117
País Vasco	2,868	4,971	3,235	3,401	3,401	3,314
Rioja, La	-236	-623	-165	-39	50	111
Ceuta	260	138	1	-132	-242	-336
Melilla	1,058	1,057	762	516	328	175

Source: 2010-2011, Population Now Cast; 2012-2021, Short-Term Population Projection.

Methodological note

The population projections compiled by the INE constitute a statistical simulation of the demographic size and structure of the population that would reside in Spain in the coming years, should the current demographic trends continue. This data basically shows the effect that our current population structure and the currently observed demographic behaviour would have on the future population.

The INE currently carries out a 10-yearly Short-Term Population Projection for the purpose of adapting to the changing demographic short term, through an ongoing update of its results regarding the most recent demographic evolution and the latest available information. This work is complemented with the Long-Term Population Projections, which are updated every three years.

This year, in 2012, results are offered to a 40-year panorama for Spain (**2012-2052 Long-Term Population Projection**) and to 10 years for the Autonomous Communities and Autonomous Cities (**2012-2022 Short-Term Population Projection**).

The general calculation methodology is based on the classical component method. The application of the said method is in response to the following schema: starting from the resident population in a certain geographical area, and the retrospective data observed for each one of the basic demographic components (mortality, fertility and migration), the idea is to obtain the figures on the resident population, corresponding to subsequent dates, under the hypotheses established on the development of these three phenomena, which are those which determine their growth and their structure by age.

The component method has been applied according to a *multiregional projection model*² which enables the total consistency of results at all territorial levels considered, and the coherence necessary between demographic flows and population stocks.

Reference date of the results: 1 January of each year in the period (2012-2052 in the case of the Long-Term Population Projection, and 2012-2022 in the case of the Short-Term Population Projection) for the population stocks; annual demographic flows for the period (2012-2051 in the case of the Long-Term Population Projection, and 2012-2021 in the case of the Short-Term Population Projection) for the demographic events.

Population scope: the population resident in Spain and in each of its Autonomous Communities and provinces (the territorial breakdown by Autonomous Community and province is only available in the 2012-2022 Short-Term Population Projection).

Territorial scope: Spain, the Autonomous Communities and provinces (the territorial breakdown by Autonomous Community and province is only available in the 2012-2022 Short-Term Population Projection).

Breakdown variables: sex, age and generation, for both population stocks and demographic events.

² Willekens, F.J. and Drewe, P. (1984) "A multiregional model for regional demographic projection", in Heide, H. y Willekens, F.J. (ed) *Demographic Research and Spatial Policy*, Academic Press, London.

Entry population: the Population Now Cast at 1 January 2012.

Detailed results

The detailed results of the Long-Term Population Projection of Spain may be viewed at:

<http://www.ine.es/jaxi/menu.do?type=pcaxis&path=%2Ft20%2Fp251&file=inebase&L=1>

The detailed results of the Short-Term Population Projection of Spain, of each Autonomous Community and of each province, as well as a summary of provincial results, may be viewed at:

<http://www.ine.es/jaxi/menu.do?type=pcaxis&path=%2Ft20%2Fp269&file=inebase&L=1>