

7 October 2010

Short-Term Population Projection for Spain, 2010-2020

If the current demographic trends continue, the population will grow 2.7% by 2020, as compared with the 14.8% recorded the last decade

The population will decrease in Principado de Asturias, País Vasco, Castilla y León, Galicia and La Rioja

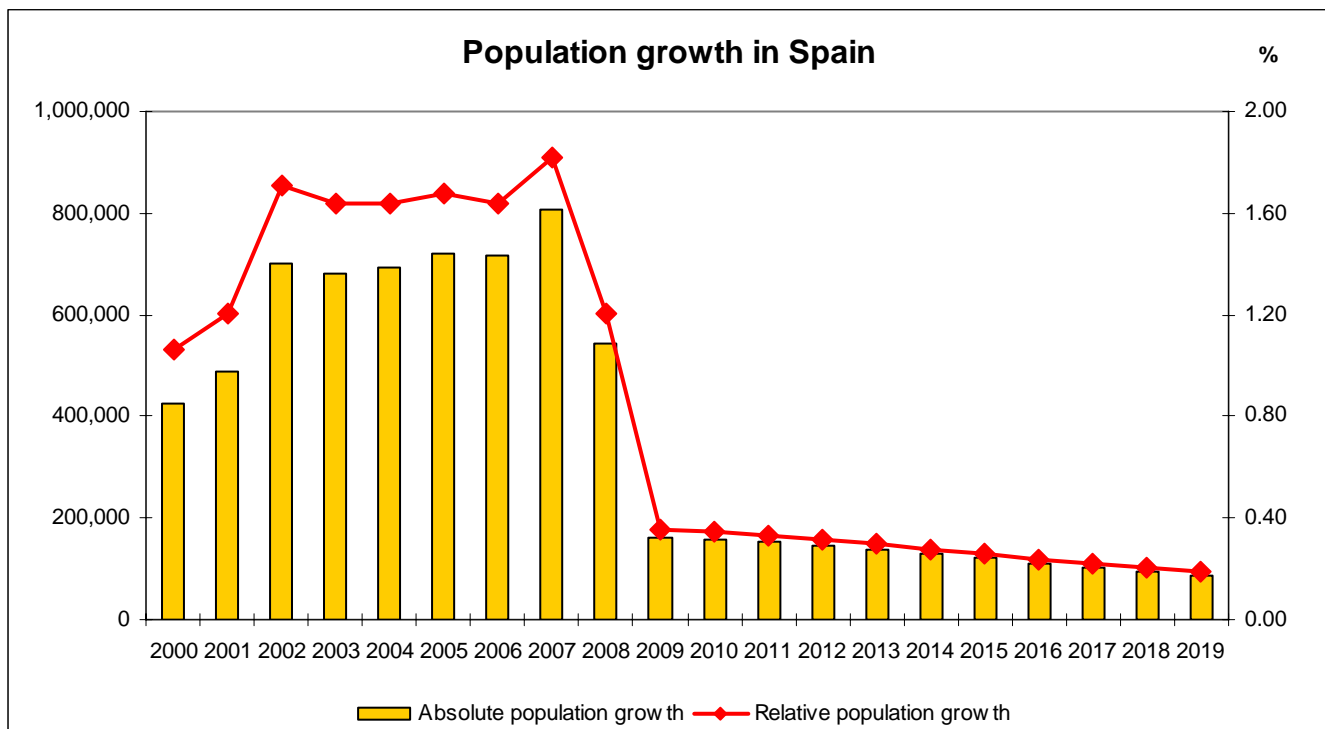
In the coming years, Spain would maintain an annual demographic growth rate with levels under 0.35%, and with a slightly descending trend. In this way, after some years of elevated demographic growth, Spain would reach somewhat more than 47 million inhabitants in the year 2020, if the current demographic trends continued.

Thus, **during the 2010-2019 period, the resident population would grow by 1.2 million persons (2.7%)**, as compared with the 5.9 million person increase (14.8%) experienced in the first decade of the 21st century. As an annual average, demographic growth would be of 124,591 inhabitants, much less than the 593,931 from the last decade.

Population growth in Spain

Years	Resident population at 1 January	Population growth	
		Absolute	Relative (%)
2000	40,049,708	427,015	1.07
2001	40,476,723	487,521	1.20
2002	40,964,244	699,458	1.71
2003	41,663,702	681,640	1.64
2004	42,345,342	692,693	1.64
2005	43,038,035	720,215	1.67
2006	43,758,250	716,381	1.64
2007	44,474,631	808,628	1.82
2008	45,283,259	544,913	1.20
2009	45,828,172	160,844	0.35
2010	45,989,016	158,424	0.34
2011	46,147,440	153,018	0.33
2012	46,300,458	146,335	0.32
2013	46,446,793	138,601	0.30
2014	46,585,394	130,115	0.28
2015	46,715,509	121,200	0.26
2016	46,836,709	112,172	0.24
2017	46,948,880	103,382	0.22
2018	47,052,263	95,098	0.20
2019	47,147,361	87,564	0.19
2020	47,234,924		

Source: 2000-2001, Intercensal Population Estimates; 2002-2010 Population Now Cast; 2010-2020, Short-Term Population Projection.



Source: 2000-2001, Intercensal Population Estimates; 2002-2009, Population Now Cast; 2010-2019, Short-Term Population Projection.

Natural growth

In 2009, Spain would have opened a period of continuous descent in the number of births, after the maximum of 518,503 reached in 2008 (a figure not observed since 1981). This gradual decrease in the birth rate is determined by the structure itself of our population pyramid, with less numerous generations of women being of childbearing age, these women having been born during the birth rate crisis of the 80s and the beginning of the 90s.

This evolution in the birth rate would take place, even if the favourable trend in fertility from the last decade were to continue. Thus, **the average number of children per woman would reach 1.51 in 2019, as compared with 1.40 in 2009**. These same tendencies would lead to a stabilisation of the average age at maternity, of approximately 31 years old, for the coming years.

In turn, in the case of maintaining the currently observed reduction in the incidence of mortality, **life expectancy at birth would increase for both males** (by 1.7 years, to 80.1 years) **and females** (by 1.5 years, to 86.1 years). Moreover, life expectancy of those persons turning 65 years of age would increase by more than one year for each sex (up to 19.1 years for men and 23.1 years for women) in the next 10 years.

Nevertheless, despite these continuous improvements in life expectancy, the number of deaths of residents in Spain would continue with its growing trend, at an average rate of some 3,000 more each year, due to the progressive ageing of the population structure.

Therefore, the natural growth of the population of Spain would gradually slow, after having reached a 25-year high in 2008 (134,305). The difference between births and deaths, would thus barely exceed the zero balance in the horizon of 2019 (with 6,180).

Natural growth of the population of Spain

Years	Births	Deaths	Natural growth	Gross rates per 1000 inhabitants		
				Birth rate	Mortality rate	Natural growth
2000	396,626	357,788	38,838	9.90	8.93	0.97
2001	405,313	357,580	47,733	9.95	8.78	1.17
2002	417,688	366,046	51,642	10.11	8.86	1.25
2003	440,531	382,455	58,076	10.49	9.11	1.38
2004	453,172	369,564	83,608	10.61	8.66	1.96
2005	464,811	385,056	79,755	10.71	8.87	1.84
2006	481,295	369,391	111,904	10.92	8.38	2.54
2007	491,138	383,249	107,889	10.94	8.54	2.40
2008	518,503	384,198	134,305	11.37	8.43	2.95
2009	492,931	383,486	109,445	10.73	8.35	2.38
2010	499,134	395,526	103,608	10.83	8.60	2.23
2011	494,512	399,353	95,159	10.70	8.65	2.04
2012	488,509	403,134	85,375	10.53	8.71	1.83
2013	481,335	406,813	74,522	10.35	8.76	1.59
2014	473,263	410,333	62,929	10.14	8.81	1.34
2015	464,612	413,657	50,955	9.93	8.85	1.08
2016	455,735	416,788	38,947	9.72	8.90	0.82
2017	446,974	419,687	27,287	9.51	8.94	0.57
2018	438,655	422,381	16,275	9.31	8.98	0.34
2019	431,046	424,866	6,180	9.13	9.01	0.12

Source: 2000-2008, Vital Statistics; 2009, provisional results of the Vital Statistics; 2010-2019, Short-Term Population Projection.

Migratory growth

According to the latest available information, **the immigration flow in 2010 would reach a level of nearly 460,000 immigrants**, slightly lower than that observed in 2009. Said figure would imply a reduction of 54.4% with regard to the million persons who entered Spain from abroad in 2007.

Moreover, the projection is made maintaining, at a constant level, for the next ten years, both the immigration flow and the tendency of the population to emigrate abroad, forecast to-date for 2010. This would yield a foreign migratory balance of 684,672 persons during the 2010-2019 period, standing below 80,000 persons in almost all of the years for said period.

Projected foreign migration for Spain

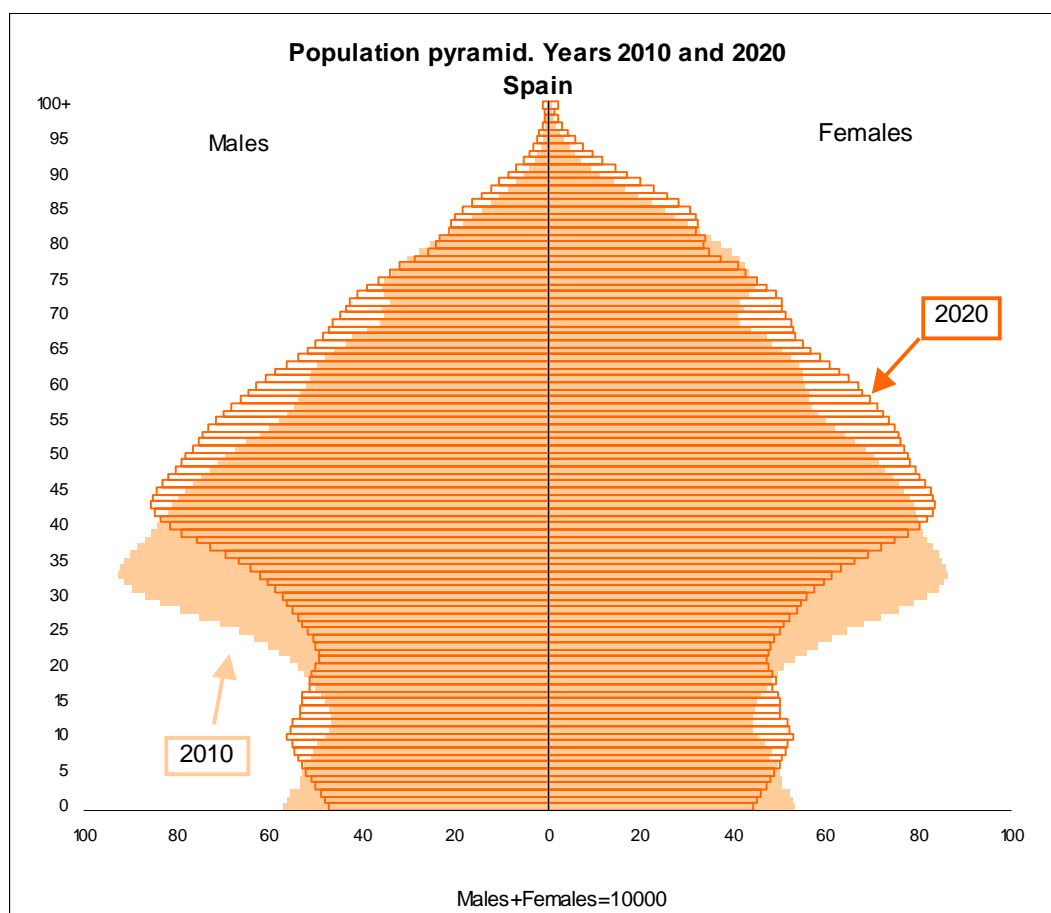
Year	Immigrants	Emigrants	Migratory balance
2010	460,000	405,184	54,816
2011	460,000	402,140	57,860
2012	460,000	399,040	60,960
2013	460,000	395,921	64,079
2014	460,000	392,815	67,185
2015	460,000	389,755	70,245
2016	460,000	386,775	73,225
2017	460,000	383,905	76,095
2018	460,000	381,177	78,823
2019	460,000	378,616	81,384

Source: 2010-2020, Short-Term Population Projection.

Dependency rate

The drop in the annual number of births would cause a decrease in the population aged 0 to four years old resident in our country, by 214,681 children (8.7%) in the next 10 years. Nevertheless, the positive evolution of the birth rate in the last 15 years would result in the population aged 5 to 15 years old registering, in 2020, an increase of 618,204 children (12.8%), as compared with its current volume.

On the other hand, the aging of the population pyramid would cause a reduction in persons of working age (16 to 64 years old) of almost half-a-million persons (1.6%) in 10 years. Simultaneously, **the group of persons aged 64 years old and over would experience the most noteworthy increase, with 1.3 million persons more in 2020 (17.1%), reaching 19.2% of the total population.**



Source: 2010-2020, Short-Term Population Projection.

Considering all of the above, the **dependency rate** (understood to be the quotient, as a percentage, of the population under 16 years old or over 64 years old, and the population aged 16 to 64 years old) **would increase six points** in the next 10 years, **to 55.1%.**

Dependency rates

Years	Over 64 years old	Under 16 years old	Total (under 16 years old and over 64 years old)
2000	24.93	23.98	48.91
2001	25.11	23.52	48.63
2002	25.18	23.24	48.43
2003	25.05	23.10	48.15
2004	24.97	23.05	48.02
2005	24.81	22.93	47.75
2006	24.63	22.86	47.49
2007	24.55	22.86	47.41
2008	24.49	22.98	47.47
2009	24.61	23.20	47.81
2010	25.03	23.60	48.63
2011	25.49	23.93	49.42
2012	25.98	24.27	50.25
2013	26.48	24.59	51.07
2014	26.96	24.88	51.85
2015	27.44	25.13	52.57
2016	27.92	25.30	53.22
2017	28.37	25.39	53.75
2018	28.81	25.40	54.21
2019	29.29	25.39	54.68
2020	29.79	25.30	55.09

Source: 2000-2010, Basic Demographic Indicators; 2010-2020, Short-Term Population Projection.

Demographic evolution by Autonomous Community

The drop in the immigration flow from abroad, and the population aging itself, would reduce the potential for demographic growth in all of the regions of Spain.

In fact, the extension of the currently observed demographic trends over the next 10 years would yield **population decreases in five Autonomous Communities**: Principado de Asturias (-3.2%), País Vasco (-2.0%), Castilla y León (-1.9%), Galicia (-1.6%) and La Rioja (-1.3%). In most of them, the number of births would be clearly surpassed by the number of deaths.

As a matter of fact, in seven Autonomous Communities, the natural increase for the 2010-2019 period would be negative, with the cases of Galicia (-108,211), Castilla y León (-92,933) and Principado de Asturias (-57,244) of particular note.

At the opposite end of the spectrum would be Castilla-La Mancha (6.4%), Illes Balears (6.4%), Murcia (6.0%), Comunidad Foral de Navarra (5.5%), Comunidad de Madrid (5.4%) and Andalucía (5.0%), in addition to the autonomous cities of Ceuta and Melilla, with population growth greater than 5% in all of them.

Population growth by Autonomous Community

Autonomous Community	Resident population at 1 January			Absolute		Relative (%)		Annual average	
	2000	2010	2020	2000-2009	2010-2019	2000-2009	2010-2019	2000-2009	2010-2019
National total	40,049,708	45,989,016	47,234,924	5,939,308	1,245,909	14.83	2.71	593,931	124,591
Andalucía	7,241,668	8,206,076	8,616,039	964,408	409,963	13.32	5.00	96,441	40,996
Aragón	1,196,027	1,313,021	1,369,998	116,994	56,977	9.78	4.34	11,699	5,698
Asturias (Principado de)	1,063,156	1,058,116	1,023,971	-5,040	-34,145	-0.47	-3.23	-504	-3,414
Balears (Illes)	822,337	1,079,089	1,147,803	256,752	68,714	31.22	6.37	25,675	6,871
Canarias	1,678,799	2,088,214	2,161,130	409,415	72,916	24.39	3.49	40,942	7,292
Cantabria	531,072	577,995	596,594	46,923	18,600	8.84	3.22	4,692	1,860
Castilla y León	2,464,303	2,499,159	2,452,298	34,856	-46,861	1.41	-1.88	3,486	-4,686
Castilla-La Mancha	1,728,782	2,035,510	2,166,289	306,728	130,779	17.74	6.42	30,673	13,078
Cataluña	6,216,683	7,301,132	7,356,953	1,084,449	55,821	17.44	0.76	108,445	5,582
Comunitat Valenciana	4,009,994	4,994,340	5,115,380	984,346	121,040	24.55	2.42	98,435	12,104
Extremadura	1,057,277	1,082,796	1,086,024	25,519	3,228	2.41	0.30	2,552	323
Galicia	2,684,551	2,738,591	2,694,345	54,040	-44,246	2.01	-1.62	5,404	-4,425
Madrid (Comunidad de)	5,185,931	6,335,780	6,679,099	1,149,849	343,319	22.17	5.42	114,985	34,332
Murcia (Región de)	1,148,150	1,460,671	1,548,183	312,521	87,512	27.22	5.99	31,252	8,751
Navarra (Comunidad Foral de)	546,692	619,013	652,801	72,321	33,788	13.23	5.46	7,232	3,379
País Vasco	2,070,279	2,138,590	2,095,999	68,311	-42,591	3.30	-1.99	6,831	-4,259
Rioja (La)	267,911	314,009	310,046	46,098	-3,963	17.21	-1.26	4,610	-396
Ceuta	71,110	74,399	80,686	3,289	6,287	4.63	8.45	329	629
Melilla	64,986	72,514	81,285	7,528	8,770	11.58	12.09	753	877

Source: 2000, Intercensal Population Estimates; 2002-2010, Population Now Cast; 2010-2020, Short-Term Population Projection.

Projected natural growth by Autonomous Community

Autonomous Community	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
National total	103,608	95,159	85,375	74,522	62,929	50,955	38,947	27,287	16,275	6,180
Andalucía	29,547	29,476	28,095	26,451	24,600	22,603	20,528	18,442	16,408	14,480
Aragón	-292	-598	-724	-881	-1,058	-1,247	-1,438	-1,620	-1,785	-1,925
Asturias (Principado de)	-4,731	-5,034	-5,209	-5,407	-5,619	-5,837	-6,054	-6,263	-6,458	-6,633
Balears (Illes)	4,601	4,266	4,010	3,740	3,463	3,184	2,909	2,643	2,392	2,160
Canarias	5,568	4,994	4,257	3,504	2,746	1,990	1,247	525	-171	-834
Cantabria	14	-105	-197	-311	-443	-589	-743	-898	-1,048	-1,190
Castilla y León	-6,911	-7,569	-8,031	-8,530	-9,053	-9,581	-10,103	-10,602	-11,067	-11,487
Castilla-La Mancha	4,407	3,683	3,452	3,167	2,845	2,500	2,146	1,800	1,472	1,174
Cataluña	22,653	21,168	19,345	17,412	15,435	13,479	11,598	9,854	8,292	6,944
Comunitat Valenciana	12,494	11,872	10,567	9,148	7,657	6,139	4,637	3,195	1,847	621
Extremadura	-387	-753	-913	-1,090	-1,280	-1,479	-1,682	-1,882	-2,071	-2,251
Galicia	-7,820	-8,658	-9,162	-9,736	-10,377	-11,063	-11,780	-12,503	-13,216	-13,895
Madrid (Comunidad de)	32,728	31,511	30,127	28,566	26,876	25,107	23,312	21,549	19,867	18,311
Murcia (Región de)	8,235	8,270	7,936	7,564	7,163	6,746	6,328	5,921	5,539	5,193
Navarra (Comunidad Foral de)	1,464	1,372	1,258	1,126	982	830	677	530	392	268
País Vasco	152	-418	-1,051	-1,740	-2,461	-3,191	-3,911	-4,595	-5,231	-5,803
Rioja (La)	524	419	343	263	179	95	13	-63	-132	-192
Ceuta	614	609	614	617	617	614	611	606	602	598
Melilla	751	655	658	659	658	656	652	648	644	640

Source: 2010-2020, Short-Term Population Projection.

Regarding the migratory component, in the case of maintaining the current levels, foreign migration would have a contribution to the demographic growth of each Autonomous Community significantly lower than that registered in previous years. In fact, overall for the 2010-2019 period, the Autonomous Communities of Cataluña, País Vasco and La Rioja would present a negative foreign balance.

In recent years, a noteworthy change has been observed in the trend of interprovincial migratory balances. Especially significant are the cases of Illes Balears, Cataluña, Comunitat Valenciana, Comunidad de Madrid and Canarias. The results of the production reflect this trend.

Foreign migratory balances

Autonomous Community	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Andalucía	57,376	55,038	78,029	74,465	60,835	80,742	44,809	22,343	16,417	16,499	16,601	16,722	16,859	17,009	17,167	17,331	17,496	17,659
Aragón	15,593	13,017	15,969	18,027	19,801	28,635	14,005	3,887	7,161	7,196	7,232	7,271	7,311	7,351	7,392	7,432	7,472	7,509
Asturias (Principado de)	4,957	4,406	4,263	4,281	4,495	7,520	5,195	2,376	1,821	1,870	1,919	1,967	2,015	2,062	2,108	2,152	2,194	2,235
Balears (Illes)	21,160	17,790	16,083	16,281	19,123	21,708	13,728	5,874	4,520	4,481	4,451	4,428	4,412	4,402	4,396	4,394	4,394	4,394
Canarias	29,747	28,222	30,301	27,134	27,955	32,427	22,635	10,402	9,880	9,907	9,938	9,973	10,011	10,051	10,093	10,135	10,178	10,219
Cantabria	2,757	3,034	3,557	3,422	4,236	5,626	4,013	1,615	1,380	1,398	1,419	1,440	1,463	1,487	1,511	1,535	1,559	1,581
Castilla y León	14,527	12,634	15,922	15,224	21,078	29,183	7,634	1,745	4,495	4,674	4,853	5,032	5,209	5,382	5,550	5,712	5,866	6,013
Castilla-La Mancha	20,572	18,031	21,450	20,680	30,002	35,999	10,994	1,695	6,380	6,392	6,417	6,454	6,499	6,551	6,609	6,670	6,732	6,794
Cataluña	123,778	95,903	95,324	75,576	77,384	98,171	43,450	-18,747	-13,076	-11,649	-10,260	-8,920	-7,637	-6,419	-5,272	-4,203	-3,215	-2,312
Comunitat Valenciana	84,403	73,410	71,906	60,653	69,440	77,259	13,320	-6,852	1,362	1,675	1,999	2,332	2,670	3,011	3,349	3,681	4,003	4,310
Extremadura	2,912	3,416	3,886	3,882	4,620	6,474	1,797	1,293	1,195	1,207	1,222	1,239	1,259	1,280	1,302	1,325	1,348	1,371
Galicia	14,903	13,445	13,331	11,987	14,790	17,054	10,565	2,923	4,080	4,178	4,282	4,388	4,496	4,606	4,715	4,823	4,929	5,032
Madrid (Comunidad de)	132,388	107,138	80,579	64,229	94,186	106,002	48,506	10,740	8,551	8,915	9,307	9,719	10,143	10,571	10,996	11,413	11,813	12,191
Murcia (Región de)	25,052	22,500	21,057	19,489	18,452	18,639	9,572	2,771	2,405	2,480	2,562	2,649	2,740	2,833	2,926	3,018	3,105	3,188
Navarra (Comunidad Foral de)	6,053	5,115	3,910	3,413	5,395	7,873	4,228	530	864	893	923	952	980	1,007	1,032	1,056	1,077	1,095
País Vasco	4,180	4,298	7,075	8,567	11,655	11,056	4,438	-3,540	-1,600	-1,314	-1,037	-770	-514	-270	-40	175	375	559
Rioja (La)	4,612	3,532	2,164	-1,787	155	4,111	-154	-1,176	-1,324	-1,234	-1,149	-1,069	-993	-922	-855	-793	-736	-683
Ceuta	6	115	121	164	533	230	371	426	160	158	156	155	153	152	151	150	149	148
Melilla	-784	-1,182	-699	1,761	1,193	1,149	702	290	146	135	126	117	109	102	95	89	84	80

Source: 2010-2020, Short-Term Population Projection.

Migratory balances between Autonomous Communities

Autonomous Community	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Andalucía	4,434	11,728	14,807	14,745	7,164	2,583	-1,817	1,383	882	891	898	914	934	956	983	1,013	1,040	1,063
Aragón	-613	-433	614	516	-348	618	910	-2,076	-301	-343	-384	-423	-461	-500	-538	-574	-611	-647
Asturias (Principado de)	-2,365	-856	-938	-842	-738	821	2,018	554	-279	-139	-4	124	248	364	470	569	659	742
Balears (Illes)	5,017	-1,524	-1,638	1,065	3,510	4,159	3,697	35	-104	-337	-542	-726	-892	-1,038	-1,168	-1,279	-1,379	-1,461
Canarias	2,295	1,485	925	131	-427	-2,399	-6,256	-6,919	-5,337	-5,307	-5,271	-5,225	-5,173	-5,119	-5,061	-5,001	-4,935	-4,866
Cantabria	1,478	2,328	1,596	1,109	1,374	1,899	1,171	459	1,034	1,001	972	948	927	911	899	889	881	875
Castilla y León	-4,518	-4,006	-3,650	-3,039	-1,945	-4,147	-4,470	-3,093	-2,081	-1,744	-1,409	-1,082	-770	-469	-181	90	347	588
Castilla-La Mancha	9,512	13,818	13,967	17,218	18,552	14,829	13,570	7,197	5,076	4,725	4,411	4,124	3,870	3,644	3,441	3,266	3,108	2,968
Cataluña	886	278	-4,037	-11,853	-12,605	-11,334	-5,228	-2,708	-1,697	-1,650	-1,632	-1,633	-1,655	-1,701	-1,752	-1,820	-1,890	-1,965
Comunitat Valenciana	16,163	16,330	17,192	15,879	13,663	14,388	494	-5,599	1,893	2,047	2,187	2,317	2,436	2,545	2,641	2,725	2,802	2,877
Extremadura	-2,477	-590	121	-856	216	-989	-245	1,854	106	173	241	311	385	457	533	609	687	766
Galicia	-3,955	-3,699	-2,144	-178	-1,657	-1,294	3,046	5,052	1,036	1,219	1,398	1,579	1,758	1,938	2,118	2,293	2,466	2,631
Madrid (Comunidad de)	-20,729	-30,623	-36,177	-35,190	-25,380	-17,796	-11,605	-3,483	-162	-510	-876	-1,258	-1,643	-2,022	-2,402	-2,770	-3,132	-3,478
Murcia (Región de)	543	-181	3,538	5,572	2,544	-777	479	1,946	-789	-819	-848	-878	-909	-940	-973	-1,007	-1,042	-1,081
Navarra (Comunidad Foral de)	193	107	173	515	750	2,163	2,331	1,779	1,766	1,704	1,643	1,583	1,524	1,467	1,410	1,356	1,304	1,254
País Vasco	-4,212	-3,541	-3,581	-3,940	-4,806	-3,665	857	2,176	-1,531	-1,378	-1,237	-1,110	-994	-891	-801	-722	-652	-591
Rioja (La)	274	1,016	999	196	545	1,177	581	-693	283	328	368	405	434	462	486	509	526	543
Ceuta	-890	-862	-981	-665	-151	-410	145	858	-54	-75	-94	-114	-131	-149	-163	-177	-188	-200
Melilla	-1,036	-775	-786	-383	-261	174	322	1,278	257	214	178	144	113	83	56	30	6	-18

Source: 2010-2020, Short-Term Population Projection.

Methodological note

The Long-Term Population Projection for Spain compiled by the INE constitutes a statistical simulation of the demographic size and structure of the population resident in Spain, its Autonomous Communities and provinces during the forthcoming 10 years, **should the currently observed demographic trends and behaviour continue.**

In this way, these results basically show the effect that would be had, in the immediate future, by the recently observed evolution of fertility, mortality and migration in each one of these territories.

A population projection consists of a statistical simulation of the population to reside in a specific territory at some point in the future, based on a series of evolution hypotheses for each basic demographic phenomenon, determining the volume and structure thereof: fertility, mortality and migration. The validity of its results is logically conditioned by the aforementioned hypotheses being borne out in reality.

Each year, the INE prepares Short-Term Population Projections (for the following 10 years) for the purpose of adapting to the changing situation of Spanish demographics, through the continuous updating of their results regarding the most recent demographic development and the latest available information. This work is complemented with the Long-Term Population Projections, which are updated every three years.

Both statistical operations have the objective of showing the future evolution of the size and structure of the population that will reside in Spain in the coming years, should the currently observed demographic trends and behaviour continue. The National Statistics Institute is now disseminating the results of the Short-Term Population Projection for Spain, 2010-2020.

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*¹ 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 of the 2010-2020 period for population stocks; annual demographic flows of the 2010-2019 period for demographic events.

¹ Willekens, F.J. and Drewe, P. (1984) "A multiregional model for regional demographic projection", in Heide, H. and Willekens, F.J. (ed) *Demographic Research and Spatial Policy*, Academic Press, London.

Population scope: the population resident in Spain and in each of its Autonomous Communities and provinces.

Territorial scope: Spain, Autonomous Communities and provinces.

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

Entry population: the Population Now Cast at 1 January 2010.

Provincial results

The provincial and remaining detailed results of the Short-Term Population Projection may be viewed at:

<http://www.ine.es/jaxi/menu.do?type=pcaxis&path=%2Ft20%2Fp269%2F2010-2020&file=pcaxis&L=1>