Demographic Indicators of the Basque Country 2017-2061

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THE DEMOGRAPHIC SCENARIOS

The medium and long-term demographic scenarios are not a mere exercise in style, they are a well-established practice in statistical offices. They are used to verify the effect of varying developments in demographic phenomena (mortality, fertility rate and migration) on the size, growth components and age structure of the population. In our case, six future population scenarios were built for the Basque Country and its Provinces for the period 2016-2061.

Definition of the scenarios

To build the scenarios a central hypothesis is generated regarding the long-term development of the demographic phenomena and alternative hypotheses are formed for each of them. The central hypotheses take as a reference point the Eustat population projection for the Basque Country and its Provinces for the period 2016-2031, extending the future development trends of mortality, fertility rate and migration anticipated in the projection to the horizon of 2061. As regards mortality, two alternative hypotheses are made, one positing a lower rate of improvement in mortality rates and the other postulating more significant gains in longevity in respect of the development anticipated in the central hypothesis. Exactly the same method is used for fertility to generate hypotheses for lesser or greater recovery of the fertility rate based around the median hypothesis. Finally, for migration two alternative hypotheses are formed regarding net migration in the medium and long term relating demographic factors and labour participation.

The mortality, fertility and migration hypotheses are combined to build five alternative scenarios, in addition to the baseline scenario (Table 1). The “Baseline” scenario is constructed with the median hypotheses for development of the demographic phenomena; it is considered an extension of the population projection for the period 2016-2031 and forms the reference framework on which the remaining scenarios are structured. In the scenarios called "Var1" and "Var2" the median hypotheses for immigration and emigration are used and the alternative hypotheses for mortality and fertility are alternated: in Var1, the higher fertility hypothesis is combined with the one with lower life expectancy, while in Var2 the opposite is the case, the lower fertility hypothesis is combined with the one with longer life expectancy. The “Mig1” and “Mig2” scenarios are based on the median fertility and mortality hypotheses and the net migration from the baseline scenario is modified from 2031 onwards with the objective that the demographic factor will guarantee a figure of 1 million persons in work (Mig1) or a ratio of 1 working person for each non-working person aged 15 or over (Mig2) once high labour participation rates are attained. Finally, an instrumental scenario was created based on the median hypotheses for mortality and fertility and an assumption of no migration (“NoMig”). Its purpose is to

verify the capacity for “endogenous” population growth, while contrasting its results with those from the other scenarios allows us to quantify the effect of migration thereon.

Table 1: Parameters of the demographic scenarios for the Basque Country.

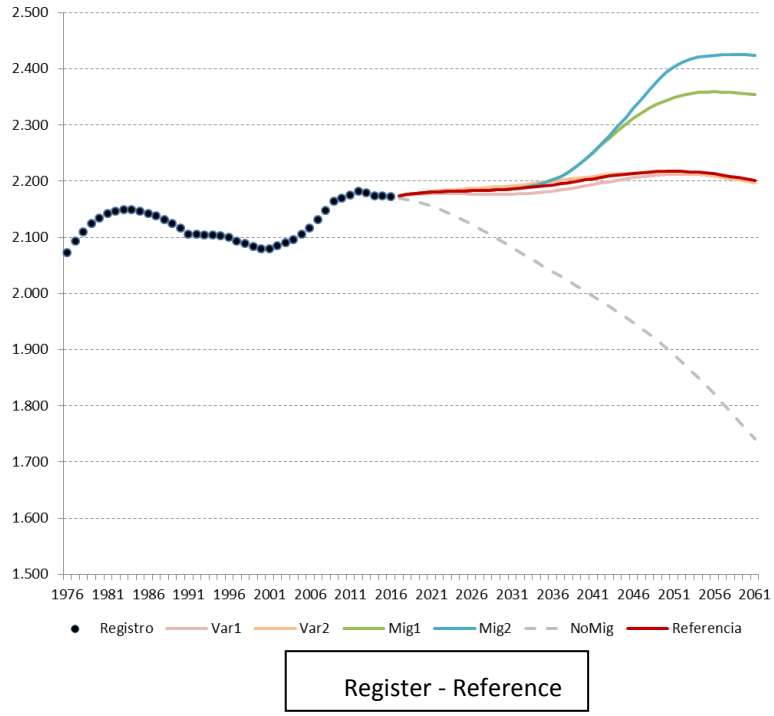
		Observado	Escenario					
			Referencia	Var1	Var2	Mig1	Mig2	NoMig
Life expectancy Men	2014-15	80,3						
	2030		83,7	82,8	84,5	83,7	83,7	83,7
	2060		88,8	85,8	91,8	88,8	88,8	88,8
Life expectancy Women	2014-15	86,2						
	2030		88,8	87,8	89,6	88,8	88,8	88,8
	2060		92,2	89,2	95,2	92,2	92,2	92,2
Average number of children	2014-15	1,36						
	2030		1,53	1,59	1,47	1,53	1,53	1,53
	2060		1,72	2,03	1,39	1,72	1,72	1,72
Net Migration (five-year average)	2011-2015	12.973						
	2016-2030		29.505	29.542	29.499	29.505	29.505	0
	2031-2060		39.247	37.584	41.070	58.640	67.795	0

Population development

The turn of the century represented a break in Basque population development by reversing the regressive demographic trends of the previous two decades to enter a period of growth which reached a maximum level of 2.18 million inhabitants in 2012, fundamentally the result of immigration from abroad and a recovery in the birth rate. More recently, the change from positive to negative natural growth and the decrease in inflows from abroad led to a slight reduction and the subsequent stabilisation of the population at 2.17 million residents at the beginning of 2016.

The baseline scenario paints a picture of relative stability for the total population of the Basque Country, with long-term figures of around 2.2 million people (Graph 1). The Var1 and Var2 scenarios lead to population development and totals similar to those in the baseline scenario as they are based on identical migration assumptions. These population totals, which are subject to profound alterations in age structure, would not be sufficient to guarantee certain employment levels or ratios on a long term basis since this requires a greater flow of immigration with the consequent increase in population to 2.35 or 2.42 million, as can be seen in the results of the Mig1 and Mig2 scenarios for 2061. The comparison with the no migration scenario (NoMig), with a reduction of more than 430,000 people between 2016 and 2061, shows that in order to maintain population figures similar to current levels, significant population inflows from migration are required, since all the scenarios are characterised by decreasing, below-replacement fertility in every year of the period.

Graph 1: Population development and projection in the Basque Country according to varying demographic scenarios, 1976-2061.



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Population age structure

Population development by broad age groups shows structural trends, due to passage through the successive ages of cohorts with major size differences (Graph).

- The population aged between 0 and 14 fluctuates between 210,000 in the no migration scenario and a maximum of 345,000, with a value of 299,000 in the baseline scenario, close to the starting value (-6,500), representing 13.6% (-0.4 pp).

- The population aged between 15 and 39 years ranges from 373,000 to 606,000 people at the end of the period, depending on migration. The baseline scenario gives a value of 542,000 (-45,000), which represents 24.6% (-2.4 pp).

- The population aged between 40 and 64 varies in 2061 between 476,500 and 714,500, with a baseline of 624,500 (-190,000) and 28.4% (-9.1 pp).

- The population aged between 65 and 84 increases to a maximum of around 590,000-600,000 people in 2047 and subsequently decreases. In 2061 they would amount to 481,000 (+90,000) according to the baseline scenario, with a variation range of 429,000-496,000, representing 21.9% (+3.9 pp).

- Finally, the population aged 85 and over is characterised by a sharp rise in numbers as the presence of larger generations combines with increased longevity and the concentration of gains of life years in these ages. In 2061 the number varies between 205,000 and 303,000 with a baseline of 254,000 (+180,000) and 11.6% (+8.2 pp).

Graph 2: Population development and projection by broad age groups in the Basque Country according to varying demographic scenarios.