

Portuguese Life Table

2017 - 2019

Life expectancy was 80.93 years at birth and 19.61 years at age 65

Life expectancy at birth was estimated at 80.93 years. In 2017-2019, men and women could expect to live up to 77.95 years and 83.51 years, respectively. Compared with 2016-2018, it represents an increase of about 2 months for men and 1 month for women.

Within a decade, there was a gain of 1.99 years of life for the total population, 2.11 years for men and 1.64 years for women. This increase in female life expectancy at birth resulted mainly from a reduction in mortality among those aged 60 years and over. For men, these gains were mainly due to the decrease of mortality below 60 years.

Life expectancy at age 65 attained 19.61 years for the total population. A man aged 65 years could expect to live another 17.70 years, and a woman aged 65 another 21.00 years, which represents a gain of 1.22 years and 1.26 years, respectively, in the last ten years.

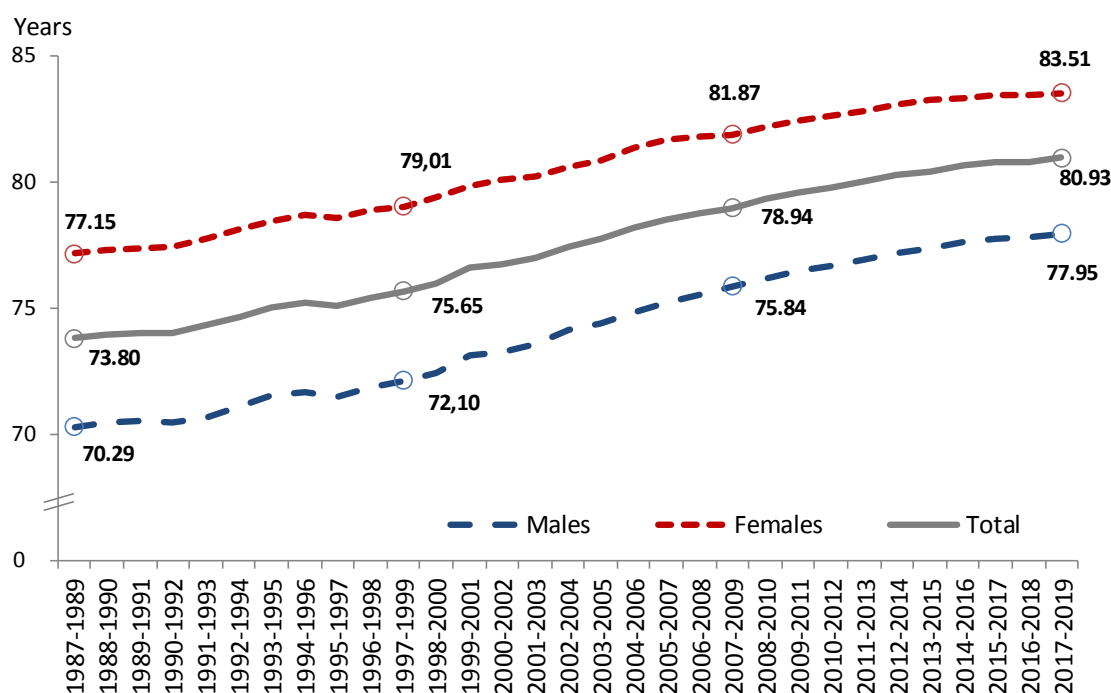
Statistics Portugal releases the 2017-2019 complete life tables for Portugal, by sex and for the total resident population, providing the official values of life expectancy for the same period.

Life expectancy at birth increased to 80.93 years

Life expectancy at birth for both males and females was estimated at 80.93 years. At birth, men and women could expect to live up to 77.95 years and 83.51 years respectively. Compared to the estimated values for 2016-2018, it represents an increase of 0.17 years (2.04 months) and 0.08 years (0.96 months), respectively, and a rise in longevity gains compared to 2016-2018 (0.48 and 0.24 months, respectively, for men and women).

In the last decade, life expectancy at birth in Portugal has increased by 1.99 years, an increase of 2.11 years for males and 1.64 years for females, when compared with the values for 2007–2009 (75.84 and 81.87 years, respectively).

Life expectancy at birth, Portugal, 1987-1989 to 2017-2019



The increase in female life expectancy at birth over the last ten years resulted mainly from a reduction in mortality among those aged 60 years and over. For men, the increase in life expectancy at birth was mainly due to the reduction of mortality below 60 years, particularly among those aged 35 to 54¹.

Women continue to live longer than men, but the gap has been gradually narrowing, from 6.03 years in 2007-2009 to 5.56 years in 2017-2019.

In 2017-2019, it is estimated that 37.6% of male live births and 58.6% of female live births will survive to age 85 if they experience the respective age-specific mortality rates of this time period for the rest of their life. In 2007-2009, these values were, respectively, 29.9% and 50.6%, for men and women².

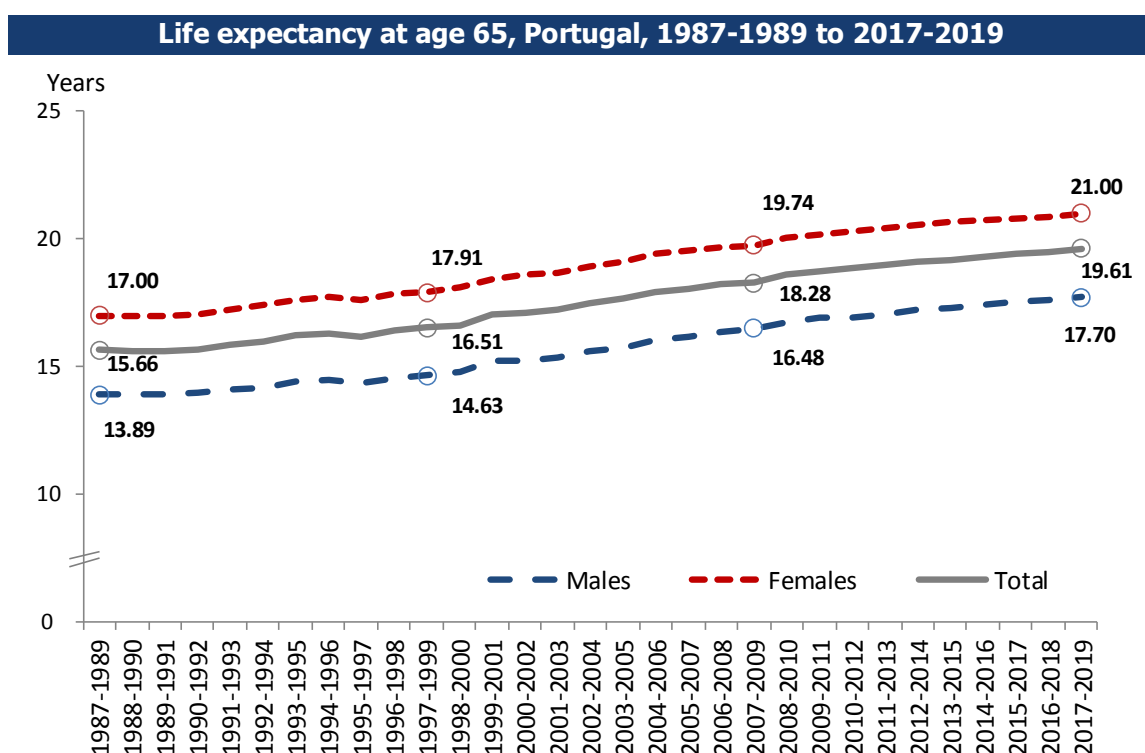
¹ Results based on the decomposition of the difference in life expectancy at birth between 2007-2009 and 2017-2019 (see technical note).

² Values are taken from the survival function (l_x) of the life table (see technical note).

Life expectancy at age 65 increased to 19.61 years

Life expectancy at age 65 attained 19.61 years for the total population, 17.70 years for men and 21.00 for women. In 2017-2019 the increase in life expectancy at age 65 was the same for both men and women (+ 0.12 years, that is, 1.44 months), thus maintaining the gap of 3.30 years between males and females compared to the estimated values for 2016-2018.

Over the last ten years, life expectancy at age 65 has risen by 1.22 years for males and by 1.26 years for females.



In 2017-2019, the majority of all deaths (65.8%) occurred among those aged 80 years and over. Approximately half of deaths for men (55.7%) and about three quarters for women (75.4%) concentrated in that age group. The most common age at death was 86 for men and 88 years for women. Ten years ago, it was 85 years for men and 87 for women³.

³ Death values considered here are taken from the life table function d_x (see technical note).

Complete Life Table for Portugal 2017 - 2019 (Both sexes)

Age (x)	Probability of dying (qx)	Survivors at exact age x (lx)	Deaths between exact ages x and x+1 (dx)	Person-years lived between exact ages x and x+1 (Lx)	Person-years lived above age x (Tx)	Life expectancy (ex)
1	2	3	4	5	6	7
0	0.002922	100,000	292	99,819	8,092,889	80.93
1	0.000293	99,708	29	99,693	7,993,070	80.16
2	0.000150	99,679	15	99,671	7,893,377	79.19
3	0.000106	99,664	11	99,658	7,793,706	78.20
4	0.000138	99,653	14	99,646	7,694,048	77.21
5	0.000098	99,639	10	99,634	7,594,401	76.22
6	0.000059	99,629	6	99,627	7,494,767	75.23
7	0.000087	99,624	9	99,619	7,395,141	74.23
8	0.000066	99,615	7	99,612	7,295,521	73.24
9	0.000081	99,608	8	99,604	7,195,910	72.24
10	0.000085	99,600	9	99,596	7,096,305	71.25
11	0.000090	99,592	9	99,587	6,996,709	70.25
12	0.000121	99,583	12	99,577	6,897,122	69.26
13	0.000091	99,571	9	99,566	6,797,545	68.27
14	0.000104	99,562	10	99,557	6,697,979	67.27
15	0.000163	99,551	16	99,543	6,598,422	66.28
16	0.000195	99,535	19	99,525	6,498,879	65.29
17	0.000143	99,516	14	99,509	6,399,354	64.30
18	0.000243	99,501	24	99,489	6,299,845	63.31
19	0.000321	99,477	32	99,461	6,200,356	62.33
20	0.000304	99,445	30	99,430	6,100,894	61.35
21	0.000331	99,415	33	99,399	6,001,464	60.37
22	0.000294	99,382	29	99,368	5,902,065	59.39
23	0.000388	99,353	39	99,334	5,802,698	58.40
24	0.000346	99,314	34	99,297	5,703,364	57.43
25	0.000414	99,280	41	99,259	5,604,067	56.45
26	0.000355	99,239	35	99,221	5,504,808	55.47
27	0.000412	99,204	41	99,183	5,405,586	54.49
28	0.000424	99,163	42	99,142	5,306,403	53.51
29	0.000505	99,121	50	99,096	5,207,262	52.53
30	0.000536	99,071	53	99,044	5,108,166	51.56
31	0.000541	99,017	54	98,991	5,009,122	50.59
32	0.000498	98,964	49	98,939	4,910,131	49.62
33	0.000610	98,915	60	98,885	4,811,192	48.64
34	0.000705	98,854	70	98,820	4,712,307	47.67
35	0.000678	98,785	67	98,751	4,613,488	46.70
36	0.000568	98,718	56	98,690	4,514,737	45.73
37	0.000640	98,662	63	98,630	4,416,047	44.76
38	0.000838	98,598	83	98,557	4,317,417	43.79
39	0.000954	98,516	94	98,469	4,218,860	42.82
40	0.000974	98,422	96	98,374	4,120,391	41.86
41	0.001198	98,326	118	98,267	4,022,017	40.90
42	0.001321	98,208	130	98,143	3,923,750	39.95
43	0.001468	98,079	144	98,007	3,825,606	39.01
44	0.001556	97,935	152	97,858	3,727,600	38.06
45	0.001721	97,782	168	97,698	3,629,742	37.12
46	0.002006	97,614	196	97,516	3,532,044	36.18
47	0.002252	97,418	219	97,308	3,434,528	35.26
48	0.002548	97,199	248	97,075	3,337,219	34.33
49	0.002830	96,951	274	96,814	3,240,145	33.42

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Complete Life Table for Portugal 2017 - 2019 (Both sexes)

Age (x)	Probability of dying (qx)	Survivors at exact age x (lx)	Deaths between exact ages x and x+1 (dx)	Person-years lived between exact ages x and x+1 (Lx)	Person-years lived above age x (Tx)	Life expectancy (ex)
1	2	3	4	5	6	7
50	0.002950	96,677	285	96,534	3,143,331	32.51
51	0.003433	96,391	331	96,226	3,046,797	31.61
52	0.003700	96,060	355	95,883	2,950,571	30.72
53	0.003989	95,705	382	95,514	2,854,688	29.83
54	0.004045	95,323	386	95,130	2,759,174	28.95
55	0.004691	94,938	445	94,715	2,664,044	28.06
56	0.004774	94,492	451	94,267	2,569,329	27.19
57	0.005211	94,041	490	93,796	2,475,062	26.32
58	0.005755	93,551	538	93,282	2,381,266	25.45
59	0.006323	93,013	588	92,719	2,287,984	24.60
60	0.006855	92,425	634	92,108	2,195,265	23.75
61	0.007447	91,791	684	91,449	2,103,157	22.91
62	0.007776	91,107	708	90,753	2,011,708	22.08
63	0.008240	90,399	745	90,027	1,920,955	21.25
64	0.009196	89,654	824	89,242	1,830,928	20.42
65	0.009670	88,830	859	88,400	1,741,686	19.61
66	0.009988	87,971	879	87,531	1,653,286	18.79
67	0.010904	87,092	950	86,617	1,565,755	17.98
68	0.011929	86,142	1,028	85,628	1,479,138	17.17
69	0.013386	85,115	1,139	84,545	1,393,509	16.37
70	0.014510	83,975	1,218	83,366	1,308,964	15.59
71	0.015491	82,757	1,282	82,116	1,225,598	14.81
72	0.017245	81,475	1,405	80,772	1,143,482	14.03
73	0.019137	80,070	1,532	79,304	1,062,710	13.27
74	0.021660	78,538	1,701	77,687	983,406	12.52
75	0.024252	76,836	1,863	75,905	905,719	11.79
76	0.026323	74,973	1,974	73,986	829,815	11.07
77	0.029651	72,999	2,165	71,917	755,828	10.35
78	0.033082	70,835	2,343	69,663	683,911	9.66
79	0.038984	68,492	2,670	67,156	614,248	8.97
80	0.043068	65,821	2,835	64,404	547,092	8.31
81	0.048985	62,987	3,085	61,444	482,688	7.66
82	0.055265	59,901	3,310	58,246	421,244	7.03
83	0.065571	56,591	3,711	54,735	362,998	6.41
84	0.078839	52,880	4,169	50,796	308,262	5.83
85	0.096367	48,711	4,694	46,364	257,467	5.29
86	0.113556	44,017	4,998	41,518	211,103	4.80
87	0.132867	39,018	5,184	36,426	169,585	4.35
88	0.153639	33,834	5,198	31,235	133,159	3.94
89	0.176448	28,636	5,053	26,110	101,924	3.56
90	0.203451	23,583	4,798	21,184	75,814	3.21
91	0.230503	18,785	4,330	16,620	54,630	2.91
92	0.259825	14,455	3,756	12,577	38,010	2.63
93	0.291388	10,699	3,118	9,141	25,432	2.38
94	0.325124	7,582	2,465	6,349	16,292	2.15
95	0.360923	5,117	1,847	4,193	9,943	1.94
96	0.398627	3,270	1,303	2,618	5,749	1.76
97	0.438032	1,966	861	1,536	3,131	1.59
98	0.478886	1,105	529	840	1,595	1.44
99	0.520889	576	300	426	755	1.31
100	0.563697	276	156	198	329	1.19

Complete Life Table for Portugal 2017 - 2019 (Males)

Age (x)	Probability of dying (qx)	Survivors at exact age x (lx)	Deaths between exact ages x and x+1 (dx)	Person-years lived between exact ages x and x+1 (Lx)	Person-years lived above age x (Tx)	Life expectancy (ex)
1	2	3	4	5	6	7
0	0.003179	100,000	318	99,802	7,795,320	77.95
1	0.000303	99,682	30	99,667	7,695,518	77.20
2	0.000146	99,652	15	99,645	7,595,851	76.22
3	0.000092	99,637	9	99,633	7,496,206	75.23
4	0.000188	99,628	19	99,619	7,396,574	74.24
5	0.000124	99,609	12	99,603	7,296,955	73.26
6	0.000063	99,597	6	99,594	7,197,352	72.26
7	0.000060	99,591	6	99,588	7,097,758	71.27
8	0.000060	99,585	6	99,582	6,998,170	70.27
9	0.000099	99,579	10	99,574	6,898,588	69.28
10	0.000069	99,569	7	99,565	6,799,015	68.28
11	0.000128	99,562	13	99,556	6,699,449	67.29
12	0.000123	99,549	12	99,543	6,599,893	66.30
13	0.000084	99,537	8	99,533	6,500,350	65.31
14	0.000111	99,529	11	99,523	6,400,817	64.31
15	0.000146	99,518	14	99,510	6,301,294	63.32
16	0.000281	99,503	28	99,489	6,201,784	62.33
17	0.000192	99,475	19	99,466	6,102,294	61.34
18	0.000366	99,456	36	99,438	6,002,829	60.36
19	0.000447	99,420	44	99,398	5,903,391	59.38
20	0.000395	99,375	39	99,356	5,803,993	58.40
21	0.000462	99,336	46	99,313	5,704,638	57.43
22	0.000367	99,290	36	99,272	5,605,324	56.45
23	0.000514	99,254	51	99,228	5,506,052	55.47
24	0.000494	99,203	49	99,178	5,406,824	54.50
25	0.000525	99,154	52	99,128	5,307,646	53.53
26	0.000547	99,102	54	99,075	5,208,518	52.56
27	0.000580	99,047	57	99,019	5,109,444	51.59
28	0.000585	98,990	58	98,961	5,010,425	50.62
29	0.000712	98,932	70	98,897	4,911,464	49.64
30	0.000764	98,862	76	98,824	4,812,567	48.68
31	0.000717	98,786	71	98,751	4,713,743	47.72
32	0.000686	98,715	68	98,681	4,614,992	46.75
33	0.000724	98,648	71	98,612	4,516,311	45.78
34	0.000882	98,576	87	98,533	4,417,699	44.82
35	0.000972	98,489	96	98,441	4,319,166	43.85
36	0.000708	98,393	70	98,359	4,220,725	42.90
37	0.000890	98,324	88	98,280	4,122,366	41.93
38	0.001087	98,236	107	98,183	4,024,086	40.96
39	0.001307	98,130	128	98,065	3,925,903	40.01
40	0.001294	98,001	127	97,938	3,827,838	39.06
41	0.001587	97,874	155	97,797	3,729,900	38.11
42	0.001724	97,719	168	97,635	3,632,103	37.17
43	0.002076	97,551	203	97,449	3,534,468	36.23
44	0.002136	97,348	208	97,244	3,437,019	35.31
45	0.002442	97,140	237	97,022	3,339,775	34.38
46	0.002813	96,903	273	96,767	3,242,753	33.46
47	0.003157	96,630	305	96,478	3,145,987	32.56
48	0.003445	96,325	332	96,159	3,049,509	31.66
49	0.004010	95,993	385	95,801	2,953,350	30.77

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Complete Life Table for Portugal 2017 - 2019 (Males)

Age (x)	Probability of dying (qx)	Survivors at exact age x (lx)	Deaths between exact ages x and x+1 (dx)	Person-years lived between exact ages x and x+1 (Lx)	Person-years lived above age x (Tx)	Life expectancy (ex)
1	2	3	4	5	6	7
50	0.004137	95,609	396	95,411	2,857,549	29.89
51	0.005144	95,213	490	94,968	2,762,138	29.01
52	0.005248	94,723	497	94,475	2,667,170	28.16
53	0.005959	94,226	562	93,945	2,572,695	27.30
54	0.005890	93,665	552	93,389	2,478,750	26.46
55	0.006826	93,113	636	92,795	2,385,361	25.62
56	0.006991	92,477	646	92,154	2,292,566	24.79
57	0.007703	91,831	707	91,477	2,200,412	23.96
58	0.008599	91,123	784	90,732	2,108,935	23.14
59	0.009375	90,340	847	89,916	2,018,203	22.34
60	0.010073	89,493	901	89,042	1,928,286	21.55
61	0.010976	88,592	972	88,105	1,839,244	20.76
62	0.011873	87,619	1,040	87,099	1,751,139	19.99
63	0.012205	86,579	1,057	86,051	1,664,040	19.22
64	0.013674	85,522	1,169	84,937	1,577,989	18.45
65	0.014164	84,353	1,195	83,755	1,493,052	17.70
66	0.014597	83,158	1,214	82,551	1,409,296	16.95
67	0.015756	81,944	1,291	81,298	1,326,745	16.19
68	0.017442	80,653	1,407	79,950	1,245,447	15.44
69	0.018998	79,246	1,506	78,493	1,165,497	14.71
70	0.020752	77,741	1,613	76,934	1,087,004	13.98
71	0.022655	76,127	1,725	75,265	1,010,070	13.27
72	0.024418	74,403	1,817	73,494	934,805	12.56
73	0.026890	72,586	1,952	71,610	861,311	11.87
74	0.029852	70,634	2,109	69,580	789,700	11.18
75	0.033690	68,526	2,309	67,371	720,121	10.51
76	0.035484	66,217	2,350	65,042	652,749	9.86
77	0.039474	63,867	2,521	62,607	587,707	9.20
78	0.043708	61,346	2,681	60,006	525,100	8.56
79	0.051151	58,665	3,001	57,164	465,095	7.93
80	0.056063	55,664	3,121	54,104	407,930	7.33
81	0.063504	52,543	3,337	50,875	353,827	6.73
82	0.071199	49,207	3,503	47,455	302,952	6.16
83	0.084528	45,703	3,863	43,772	255,497	5.59
84	0.101374	41,840	4,241	39,719	211,725	5.06
85	0.123483	37,599	4,643	35,277	172,006	4.57
86	0.143897	32,956	4,742	30,585	136,728	4.15
87	0.166273	28,214	4,691	25,868	106,144	3.76
88	0.189597	23,522	4,460	21,293	80,276	3.41
89	0.214675	19,063	4,092	17,017	58,983	3.09
90	0.244008	14,970	3,653	13,144	41,967	2.80
91	0.272541	11,317	3,084	9,775	28,823	2.55
92	0.303039	8,233	2,495	6,986	19,048	2.31
93	0.335433	5,738	1,925	4,776	12,062	2.10
94	0.369617	3,813	1,409	3,109	7,286	1.91
95	0.405451	2,404	975	1,917	4,178	1.74
96	0.442756	1,429	633	1,113	2,261	1.58
97	0.481316	796	383	605	1,148	1.44
98	0.520878	413	215	306	544	1.32
99	0.561152	198	111	142	238	1.20
100	0.601819	87	52	61	96	1.1

Complete Life Table for Portugal 2017 - 2019 (Females)

Age (x)	Probability of dying (qx)	Survivors at exact age x (lx)	Deaths between exact ages x and x+1 (dx)	Person-years lived between exact ages x and x+1 (Lx)	Person-years lived above age x (Tx)	Life expectancy (ex)
1	2	3	4	5	6	7
0	0.002654	100,000	265	99,837	8,350,694	83.51
1	0.000283	99,735	28	99,721	8,250,856	82.73
2	0.000153	99,706	15	99,699	8,151,136	81.75
3	0.000121	99,691	12	99,685	8,051,437	80.76
4	0.000086	99,679	9	99,675	7,951,752	79.77
5	0.000071	99,670	7	99,667	7,852,077	78.78
6	0.000055	99,663	5	99,661	7,752,410	77.79
7	0.000114	99,658	11	99,652	7,652,749	76.79
8	0.000072	99,647	7	99,643	7,553,097	75.80
9	0.000062	99,639	6	99,636	7,453,454	74.80
10	0.000103	99,633	10	99,628	7,353,818	73.81
11	0.000051	99,623	5	99,620	7,254,190	72.82
12	0.000119	99,618	12	99,612	7,154,570	71.82
13	0.000098	99,606	10	99,601	7,054,958	70.83
14	0.000097	99,596	10	99,591	6,955,356	69.84
15	0.000181	99,587	18	99,578	6,855,765	68.84
16	0.000105	99,569	10	99,563	6,756,187	67.85
17	0.000092	99,558	9	99,554	6,656,624	66.86
18	0.000115	99,549	11	99,543	6,557,071	65.87
19	0.000190	99,538	19	99,528	6,457,527	64.88
20	0.000212	99,519	21	99,508	6,357,999	63.89
21	0.000196	99,498	20	99,488	6,258,491	62.90
22	0.000219	99,478	22	99,467	6,159,004	61.91
23	0.000259	99,456	26	99,443	6,059,537	60.93
24	0.000198	99,430	20	99,421	5,960,093	59.94
25	0.000303	99,411	30	99,396	5,860,673	58.95
26	0.000164	99,381	16	99,372	5,761,277	57.97
27	0.000245	99,364	24	99,352	5,661,904	56.98
28	0.000264	99,340	26	99,327	5,562,552	56.00
29	0.000299	99,314	30	99,299	5,463,225	55.01
30	0.000313	99,284	31	99,269	5,363,926	54.03
31	0.000370	99,253	37	99,235	5,264,658	53.04
32	0.000317	99,216	31	99,201	5,165,423	52.06
33	0.000502	99,185	50	99,160	5,066,222	51.08
34	0.000538	99,135	53	99,109	4,967,062	50.10
35	0.000405	99,082	40	99,062	4,867,954	49.13
36	0.000439	99,042	43	99,020	4,768,892	48.15
37	0.000411	98,998	41	98,978	4,669,872	47.17
38	0.000609	98,958	60	98,927	4,570,894	46.19
39	0.000630	98,897	62	98,866	4,471,966	45.22
40	0.000682	98,835	67	98,801	4,373,100	44.25
41	0.000841	98,768	83	98,726	4,274,299	43.28
42	0.000952	98,684	94	98,638	4,175,573	42.31
43	0.000914	98,591	90	98,546	4,076,936	41.35
44	0.001031	98,500	102	98,450	3,978,390	40.39
45	0.001069	98,399	105	98,346	3,879,940	39.43
46	0.001276	98,294	125	98,231	3,781,594	38.47
47	0.001428	98,168	140	98,098	3,683,363	37.52
48	0.001729	98,028	169	97,943	3,585,265	36.57
49	0.001753	97,859	172	97,773	3,487,322	35.64

(continues)

Complete Life Table for Portugal 2017 - 2019 (Females)

Age (x)	Probability of dying (qx)	Survivors at exact age x (lx)	Deaths between exact ages x and x+1 (dx)	Person-years lived between exact ages x and x+1 (Lx)	Person-years lived above age x (Tx)	Life expectancy (ex)
1	2	3	4	5	6	7
50	0.001877	97,687	183	97,595	3,389,549	34.70
51	0.001900	97,504	185	97,411	3,291,953	33.76
52	0.002309	97,318	225	97,206	3,194,542	32.83
53	0.002225	97,094	216	96,986	3,097,336	31.90
54	0.002401	96,878	233	96,761	3,000,351	30.97
55	0.002791	96,645	270	96,510	2,903,589	30.04
56	0.002802	96,375	270	96,240	2,807,079	29.13
57	0.002982	96,105	287	95,962	2,710,839	28.21
58	0.003212	95,819	308	95,665	2,614,877	27.29
59	0.003624	95,511	346	95,338	2,519,212	26.38
60	0.004017	95,165	382	94,974	2,423,875	25.47
61	0.004338	94,782	411	94,577	2,328,901	24.57
62	0.004200	94,371	396	94,173	2,234,324	23.68
63	0.004797	93,975	451	93,750	2,140,151	22.77
64	0.005322	93,524	498	93,275	2,046,401	21.88
65	0.005839	93,026	543	92,755	1,953,126	21.00
66	0.006034	92,483	558	92,204	1,860,371	20.12
67	0.006706	91,925	616	91,617	1,768,167	19.23
68	0.007181	91,309	656	90,981	1,676,550	18.36
69	0.008658	90,653	785	90,261	1,585,570	17.49
70	0.009408	89,868	846	89,445	1,495,309	16.64
71	0.009743	89,023	867	88,589	1,405,864	15.79
72	0.011617	88,155	1,024	87,643	1,317,275	14.94
73	0.013160	87,131	1,147	86,558	1,229,632	14.11
74	0.015393	85,985	1,324	85,323	1,143,074	13.29
75	0.017106	84,661	1,448	83,937	1,057,751	12.49
76	0.019495	83,213	1,622	82,402	973,814	11.70
77	0.022429	81,591	1,830	80,675	891,413	10.93
78	0.025472	79,760	2,032	78,745	810,737	10.16
79	0.030441	77,729	2,366	76,546	731,992	9.42
80	0.034198	75,363	2,577	74,074	655,447	8.70
81	0.039356	72,785	2,865	71,353	581,373	7.99
82	0.045024	69,921	3,148	68,347	510,020	7.29
83	0.055680	66,773	3,718	64,914	441,673	6.61
84	0.070148	63,055	4,423	60,843	376,759	5.98
85	0.090179	58,632	5,287	55,988	315,916	5.39
86	0.108425	53,344	5,784	50,452	259,928	4.87
87	0.128753	47,560	6,124	44,499	209,475	4.40
88	0.150022	41,437	6,216	38,329	164,977	3.98
89	0.173176	35,220	6,099	32,171	126,648	3.60
90	0.200872	29,121	5,850	26,196	94,477	3.24
91	0.227809	23,272	5,301	20,621	68,281	2.93
92	0.257035	17,970	4,619	15,661	47,660	2.65
93	0.288524	13,351	3,852	11,425	31,999	2.40
94	0.322211	9,499	3,061	7,969	20,574	2.17
95	0.357988	6,438	2,305	5,286	12,606	1.96
96	0.395701	4,133	1,636	3,316	7,320	1.77
97	0.435145	2,498	1,087	1,954	4,004	1.60
98	0.476069	1,411	672	1,075	2,050	1.45
99	0.518175	739	383	548	975	1.32
100	0.561114	356	200	256	427	1.2

Technical note:

The life table is a mathematical model of demographic analysis composed by a set of functions which provide a basis for measuring longevity in a given population and for making probabilistic judgments about the evolution of mortality with age and time. It is based on age-specific probabilities of dying estimates obtained from the observed number of deaths and the estimated population exposed to the risk of death in a given period of time, for which it is a period life table. Thus, the life table functions represent the experience of a hypothetical cohort of 100,000 live births (called the radix of the table) through their entire life under the assumption that they are subject to the observed schedule of age-specific mortality rates in a given period of time. The life table for Portugal is referred to as a complete since it contains data for every single year of age from birth to the last applicable age.

The functions of the complete life table are:

- Probability of dying (q_x): Probability that a person aged x exactly will die before reaching age $(x + 1)$;
- Survivors at exact age x (l_x): Number of survivors to exact age x of the initial cohort of 100,000 live births (radix of the table);
- Deaths between the exact ages x and $(x + 1)$ (d_x): Number of the initial cohort dying between the exact ages x and $(x + 1)$;
- Person-years lived between exact ages x and $(x + 1)$ (L_x): Number of person-years lived by the survivors of the initial cohort between exact ages x and $(x + 1)$;
- Person-years lived above age x (T_x): Total number of person-years lived by survivors after age x ;
- Life expectancy at age x (e_x): The average number of years a person can expect to live from exact age x .

The Complete Life Table for Portugal, which is produced annually, has a reference period of 3 years. The calculation of age-specific probabilities of dying is based on the number of deaths for a period of three consecutive years and the respective estimates for the population exposed-to-the risk of death. Due to the variability in the probabilities of dying at advanced ages (over 85 years) the method proposed by Denuit and Goderniaux (2005) is applied for smoothing and extrapolation to the last applicable age (closing age of the life table).

Life expectancy at birth, one of the most important longevity indicators provided by the life table, is a well-known summary measure of mortality, widely employed in comparisons through time and between populations. When analysing changes in life expectancy at birth or studying differences in life expectancy between two populations, it is useful to estimate the contributions of the various age groups that explain them. In the present exercise, the variation of life expectancy values at birth between 2006-2008 and 2016-2018 was analysed using the method proposed by Andreev, E. M., Shkolnikov, V. M., & Begun, A. (2002).

References:

- Andreev, E. M., Shkolnikov, V. M., & Begun, A. (2002). Algorithm for decomposition of differences between aggregate demographic measures and its application to life expectancies, healthy life expectancies, parity-progression ratios and total fertility rates. *Demographic Research*, 7, 499-522.
- Denuit, M., & Goderniaux, A. C. (2005). Closing and projecting lifetables using log-linear models. *Bulletin of the Swiss Association of Actuaries*, 1, 29-49.

Definitions:

Life expectancy at birth: The mean number of years that a newborn child can expect to live if subjected throughout his life to the current mortality conditions (age specific probabilities of dying).

Life expectancy at age 65: The mean number of years still to be lived by a person who has reached the exact age 65, if subjected throughout the rest of his life to the current age specific probabilities of dying.

Methodological information (only Portuguese version) can be found at:

<http://smi.ine.pt/DocumentacaoMetodologica/Detalhes/1239>.

Detailed statistical information available at:

www.ine.pt > Statistical data > Population > Mortality and life expectancy