German Life Expectancy, 1990-2017

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Introduction

Germany is a country in Central and Western Europe, lying between the Baltic and North Seas to the north, and the Alps to the south. It borders Denmark to the north, Poland and the Czech Republic to the east, Austria and Switzerland to the south, France to the southwest, and Luxembourg, Belgium and the Netherlands to the west. Known for its rich cultural history, Germany has been continuously the home of influential and successful artists, philosophers, musicians, film people, sportspeople, entrepreneurs, scientists, engineers, and inventors. Germany has a large number of World Heritage sites and is among the top tourism destinations in the world.



Text and image taken from Wikipedia.

Data

The following life expectancy data is taken from the Human Mortality Database. The Human Mortality Database (HMD) was created to provide detailed mortality and population data to researchers, students, journalists, policy analysts, and others interested in the history of human longevity.

Table

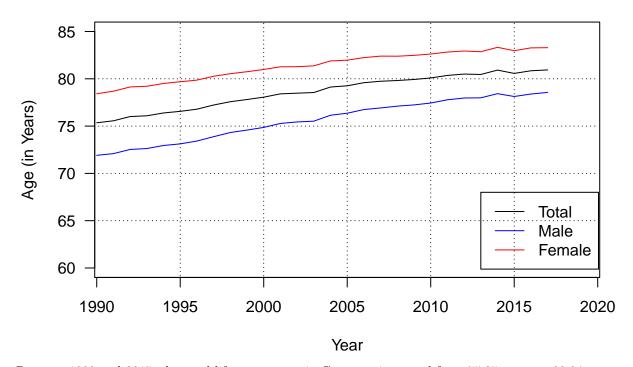
Table 1: German Life Expectancy at Birth

Year	Female	Male	Total
1990	78.42	71.91	75.35
1991	78.69	72.09	75.56
1992	79.14	72.53	76.01
1993	79.21	72.63	76.09
1994	79.51	72.95	76.39
1995	79.69	73.12	76.56
1996	79.86	73.42	76.79
1997	80.27	73.88	77.23

Year	Female	Male	Total
1998	80.54	74.32	77.58
1999	80.75	74.58	77.81
2000	80.99	74.86	78.06
2001	81.27	75.28	78.41
2002	81.28	75.44	78.48
2003	81.37	75.52	78.55
2004	81.89	76.15	79.13
2005	81.97	76.36	79.26
2006	82.24	76.75	79.59
2007	82.40	76.92	79.74
2008	82.39	77.11	79.82
2009	82.48	77.24	79.93
2010	82.62	77.44	80.09
2011	82.83	77.78	80.36
2012	82.94	77.97	80.50
2013	82.86	77.99	80.46
2014	83.33	78.43	80.92
2015	82.97	78.13	80.57
2016	83.27	78.39	80.85
2017	83.29	78.56	80.94

 ${\bf Plot}$

German Life Expectancy at Birth



Between 1990 and 2017, the total life expectancy in Germany increased from 75.35 years to 80.94 years.

Basic Regression Output

Table 2: Regression Table (y = age in years, x = year)

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	-354.0304488	13.8381502	-25.58365	0
Year	0.2159414	0.0069069	31.26445	0

Total German life expectancy increased at a rate of approximately 0.2159414 years per year, from 1990 to 2017. This rate of change is statistically significant.