

Online Appendix II

Projection Parameters*

Policy-based Population Projections for the European Union: A Complementary Approach

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Tab. All-1: Fertility assumptions (TFR) for the five fertility scenarios – TFR values held constant from 2036

<i>(births per women)</i>	Start fertility (2016)	Status quo economic and social policies	Strong neoliberal policy shift	Moderate neoliberal policy shift	Moderate egalitarian policy shift	Strong egalitarian policy shift
Austria	1.53	1.63	1.33	1.48	1.78	1.93
Belgium	1.68	1.78	1.48	1.63	1.93	2.08
Bulgaria	1.54	1.64	1.34	1.49	1.79	1.94
Croatia	1.42	1.62	1.32	1.47	1.77	1.92
Cyprus	1.37	1.57	1.27	1.42	1.72	1.87
Czech Republic	1.63	1.73	1.43	1.58	1.88	2.03
Denmark	1.79	1.79	1.49	1.64	1.94	2.09
Estonia	1.60	1.70	1.40	1.55	1.85	2.00
Finland	1.57	1.67	1.37	1.52	1.82	1.97
France	1.92	1.92	1.62	1.77	2.07	2.22
Germany	1.60	1.70	1.40	1.55	1.85	2.00
Greece	1.38	1.58	1.28	1.43	1.73	1.88
Hungary	1.53	1.63	1.33	1.48	1.78	1.93
Ireland	1.81	1.81	1.51	1.66	1.96	2.11
Italy	1.34	1.54	1.24	1.39	1.69	1.84
Latvia	1.74	1.74	1.44	1.59	1.89	2.04
Lithuania	1.69	1.79	1.49	1.64	1.94	2.09
Luxembourg	1.41	1.61	1.31	1.46	1.76	1.91
Malta	1.37	1.57	1.27	1.42	1.72	1.87
The Netherlands	1.66	1.76	1.46	1.61	1.91	2.06
Poland	1.39	1.59	1.29	1.44	1.74	1.89
Portugal	1.36	1.56	1.26	1.41	1.71	1.86
Romania	1.64	1.74	1.44	1.59	1.89	2.04
Slovakia	1.48	1.68	1.38	1.53	1.83	1.98
Slovenia	1.58	1.68	1.38	1.53	1.83	1.98
Spain	1.34	1.54	1.24	1.39	1.69	1.84
Sweden	1.85	1.85	1.55	1.70	2.00	2.15
United Kingdom	1.79	1.79	1.49	1.64	1.94	2.09

Source: own calculations

Tab. All-2: Net migration assumptions for the migration scenarios of the positive status quo net migration countries – net migration values held constant from 2026

<i>(net migration per year)</i>	Start net migration (2016)	Status quo migration	Half status quo migration	2X status quo migration	4X status quo migration
Austria	65,388	40,547	20,274	81,094	162,189
Belgium	26,811	42,575	21,288	85,151	170,301
Cyprus	2,499	5,855	2,928	11,710	23,421
Czech Republic	20,064	18,747	9,374	37,494	74,988
Denmark	32,728	16,778	8,389	33,555	67,111
European Union	1,222,979	1,188,235	594,118	2,376,470	4,752,940
Finland	17,098	11,104	5,552	22,208	44,415
France	68,310	100,525	50,263	201,051	402,101
Germany	464,734	259,316	129,658	518,631	1,037,263
Greece	10,332	8,390	4,195	16,780	33,560
Hungary	- 1,187	13,652	6,826	27,304	54,608
Ireland	24,801	21,645	10,822	43,290	86,580
Italy	65,717	229,093	114,547	458,186	916,372
Luxembourg	9,446	6,967	3,484	13,934	27,869
Malta	8,748	3,642	1,821	7,285	14,569
The Netherlands	78,864	26,427	13,213	52,853	105,706
Portugal	- 8,310	12,262	6,131	24,524	49,049
Slovenia	1,051	4,128	2,064	8,257	16,514
Spain	87,422	270,112	135,056	540,224	1,080,448
Sweden	117,693	50,024	25,012	100,049	200,097
United Kingdom	247,286	230,107	115,054	460,215	920,430

Source: own calculations

Tab. All-3: Total fertility rate assumptions for the migration scenarios of the positive status quo net migration countries – TFR values held constant from 2036

<i>(births per woman)</i>	TFR under zero net migration	TFR under half status quo migration	TFR under 2X status quo migration	TFR under 4X status quo migration	TFR under status quo migration
Austria	1.58	1.60	1.68	1.83	1.63
Belgium	1.73	1.76	1.83	1.98	1.78
Cyprus	1.52	1.54	1.62	1.77	1.57
Czech Republic	1.68	1.70	1.78	1.93	1.73
Denmark	1.74	1.76	1.84	1.99	1.79
European Union	1.65	1.67	1.75	1.90	1.70
Finland	1.62	1.64	1.72	1.87	1.67
France	1.87	1.90	1.97	2.12	1.92
Germany	1.65	1.67	1.75	1.90	1.70
Greece	1.53	1.56	1.63	1.78	1.58
Hungary	1.58	1.61	1.68	1.83	1.63
Ireland	1.76	1.78	1.86	2.01	1.81
Italy	1.49	1.52	1.59	1.74	1.54
Luxembourg	1.56	1.59	1.66	1.81	1.61
Malta	1.52	1.55	1.62	1.77	1.57
The Netherlands	1.71	1.74	1.81	1.96	1.76
Portugal	1.51	1.54	1.61	1.76	1.56
Slovenia	1.63	1.66	1.73	1.88	1.68
Spain	1.49	1.51	1.59	1.74	1.54
Sweden	1.80	1.83	1.90	2.05	1.85
United Kingdom	1.74	1.76	1.84	1.99	1.79

Source: own calculations

Tab. All-4: Net migration assumptions for migration scenarios of net negative migration status quo countries – net migration values held constant from 2026 except for the status quo scenario

<i>(net migration per year)</i>	Start net migration (2016)	Status quo net migration	EU status quo migration	2X EU status quo migration	4X EU status quo migration
Bulgaria	- 9,329	0 by 2100	17,044	34,089	68,178
Croatia	- 22,451	0 by 2100	9,970	19,940	39,880
Estonia	1,030	0 by 2100	3,158	6,315	12,630
Latvia	- 12,229	0 by 2100	4,680	9,361	18,721
Lithuania	- 30,171	0 by 2100	6,835	13,670	27,340
Poland	11,507	0 by 2100	91,135	182,270	364,540
Romania	- 58,758	0 by 2100	47,146	94,293	188,586
Slovakia	3,885	0 by 2100	13,045	26,090	52,179

Source: own calculations

Tab. All-5: Fertility assumptions for migration scenarios of net negative migration status quo countries – TFR values held constant from 2036

<i>(births per woman)</i>	TFR under zero migration	TFR under EU status quo migration	TFR under 2X EU status quo migration	TFR under 4X EU status quo migration	TFR under status quo migration
Bulgaria	1.64	1.69	1.74	1.84	1.64
Croatia	1.62	1.67	1.72	1.82	1.62
Estonia	1.70	1.75	1.80	1.90	1.70
Latvia	1.74	1.79	1.84	1.94	1.74
Lithuania	1.79	1.84	1.89	1.99	1.79
Poland	1.59	1.64	1.69	1.79	1.59
Romania	1.74	1.79	1.84	1.94	1.74
Slovakia	1.68	1.73	1.78	1.88	1.68

Source: own calculations

Tab. All-6: Total fertility rate assumptions for combination scenarios of the positive status quo net migration countries – TFR values held constant from 2036

<i>(births per woman)</i>	Start fertility (2016)	2X status quo migration & strong egalitarian policies	Half status quo net migration & strong egalitarian policies	Status quo migration & status quo family support policies	Half status quo migration & strong neoliberal policies
Austria	1.53	1.98	1.90	1.63	1.30
Belgium	1.68	2.13	2.06	1.78	1.46
Cyprus	1.37	1.92	1.84	1.57	1.24
Czech Republic	1.63	2.08	2.00	1.73	1.40
Denmark	1.79	2.14	2.06	1.79	1.46
European Union	1.60	2.05	1.97	1.70	1.37
Finland	1.57	2.02	1.94	1.67	1.34
France	1.92	2.27	2.20	1.92	1.60
Germany	1.60	2.05	1.97	1.70	1.37
Greece	1.38	1.93	1.86	1.58	1.26
Hungary	1.53	1.98	1.91	1.63	1.31
Ireland	1.81	2.16	2.08	1.81	1.48
Italy	1.34	1.89	1.82	1.54	1.22
Luxembourg	1.41	1.96	1.89	1.61	1.29
Malta	1.37	1.92	1.85	1.57	1.25
The Netherlands	1.66	2.11	2.04	1.76	1.44
Portugal	1.39	1.91	1.84	1.56	1.24
Slovenia	1.36	2.03	1.96	1.68	1.36
Spain	1.58	1.89	1.81	1.54	1.21
Sweden	1.34	2.20	2.13	1.85	1.53
United Kingdom	1.85	2.14	2.06	1.79	1.46

Source: own calculations

Tab. All-7: Net migration assumptions for the combination scenarios of the positive status quo net migration countries – net migration values held constant from 2026

<i>(net migration per year)</i>	Start net migration (2016)	2X status quo migration & strong egalitarian policies	Half status quo net migration & strong egalitarian policies	Status quo migration & status quo family support policies	Half status quo migration & strong neoliberal policies
Austria	65,388	81,094	20,274	40,547	20,274
Belgium	26,811	85,151	21,288	42,575	21,288
Cyprus	2,499	11,710	2,928	5,855	2,928
Czech Republic	20,064	37,494	9,374	18,747	9,374
Denmark	32,728	33,555	8,389	16,778	8,389
European Union	1,222,979	2,376,470	594,118	1,188,235	594,118
Finland	17,098	22,208	5,552	11,104	5,552
France	68,310	201,051	50,263	100,525	50,263
Germany	464,734	518,631	129,658	259,316	129,658
Greece	10,332	16,780	4,195	8,390	4,195
Hungary	- 1,187	27,304	6,826	13,652	6,826
Ireland	24,801	43,290	10,822	21,645	10,822
Italy	65,717	458,186	114,547	229,093	114,547
Luxembourg	9,446	13,934	3,484	6,967	3,484
Malta	8,748	7,285	1,821	3,642	1,821
The Netherlands	78,864	52,853	13,213	26,427	13,213
Portugal	- 8,310	24,524	6,131	12,262	6,131
Slovenia	1,051	8,257	2,064	4,128	2,064
Spain	87,422	540,224	135,056	270,112	135,056
Sweden	117,693	100,049	25,012	50,024	25,012
United Kingdom	247,286	460,215	115,054	230,107	115,054

Source: own calculations

Tab. All-8: Fertility assumptions for combination scenarios of net negative migration status quo countries – TFR values held constant from 2036

<i>(births per woman)</i>	2X EU status quo migration & strong egalitarian policies	EU status quo migration & strong egalitarian policies	EU status quo migration & status quo family support policies	Zero net migration & strong egalitarian policies	Zero net migration & status quo family support policies
Bulgaria	2.04	1.99	1.69	1.94	1.64
Croatia	2.02	1.97	1.67	1.92	1.62
Estonia	2.10	2.05	1.75	2.00	1.70
Latvia	2.14	2.09	1.79	2.04	1.74
Lithuania	2.19	2.14	1.84	2.09	1.79
Poland	1.99	1.94	1.64	1.89	1.59
Romania	2.14	2.09	1.79	2.04	1.74
Slovakia	2.08	2.03	1.73	1.98	1.68

Source: own calculations

Tab. All-9: Net migration assumptions for combination scenarios of net negative migration status quo countries – net migration values held constant from 2026

<i>(net migration per year)</i>	2X EU status quo migration & strong egalitarian policies	EU status quo migration & strong egalitarian policies	EU status quo migration & status quo family support policies	Zero net migration & strong egalitarian policies	Zero net migration & status quo family support policies
Bulgaria	34,089	17,044	17,044	0	0
Croatia	19,940	9,970	9,970	0	0
Estonia	6,315	3,158	3,158	0	0
Latvia	9,361	4,680	4,680	0	0
Lithuania	13,670	6,835	6,835	0	0
Poland	182,270	91,135	91,135	0	0
Romania	94,293	47,146	47,146	0	0
Slovakia	26,090	13,045	13,045	0	0

Source: own calculations

Tab. All-10: Life expectancy assumptions for women under all scenarios (the average number of years a newborn can expect to live based on the mortality conditions at the time). Life expectancy is held constant between 2080-2100 at 2080 levels

<i>Females (years)</i>	2016	2020	2030	2040	2050	2060	2070	2080
Austria	84.1	84.5	85.8	87.0	88.2	89.2	90.2	91.2
Belgium	84.0	84.3	85.7	86.9	88.1	89.2	90.2	91.2
Bulgaria	78.5	79.2	81.2	83.0	84.7	86.3	87.8	89.2
Croatia	81.3	81.8	83.4	84.9	86.3	87.6	88.9	90.0
Cyprus	84.9	85.0	86.2	87.2	88.3	89.3	90.2	91.1
Czech Republic	82.1	82.6	84.1	85.5	86.8	88.1	89.3	90.4
Denmark	82.8	83.6	85.0	86.4	87.7	88.9	90.0	91.0
Estonia	82.2	82.5	84.1	85.6	87.0	88.3	89.5	90.6
European Union	83.6	84.3	85.6	86.9	88.1	89.2	90.3	91.2
Finland	84.4	84.6	85.8	87.0	88.1	89.2	90.2	91.1
France	85.7	86.1	87.3	88.4	89.4	90.3	91.1	92.0
Germany	83.5	84.2	85.5	86.7	87.9	89.0	90.1	91.0
Greece	84.0	84.5	85.8	87.0	88.2	89.3	90.3	91.3
Hungary	79.7	80.4	82.3	84.0	85.7	87.2	88.6	89.9
Ireland	83.6	84.2	85.5	86.9	88.1	89.2	90.3	91.3
Italy	85.6	85.8	86.9	88.0	89.0	90.0	90.9	91.7
Latvia	79.6	80.4	82.3	84.1	85.7	87.2	88.6	89.9
Lithuania	80.1	81.0	82.8	84.5	86.0	87.4	88.8	90.0
Luxembourg	85.4	85.3	86.6	87.8	88.9	89.9	90.9	91.7
Malta	84.4	84.8	86.1	87.4	88.5	89.6	90.6	91.5
The Netherlands	83.2	84.1	85.5	86.7	87.9	89.0	90.1	91.0
Poland	82.0	82.4	84.0	85.6	87.0	88.3	89.5	90.6
Portugal	84.3	84.9	86.1	87.3	88.4	89.4	90.4	91.3
Romania	79.1	79.9	81.8	83.6	85.3	86.9	88.3	89.7
Slovakia	80.7	81.4	83.2	84.8	86.3	87.8	89.1	90.3
Slovenia	84.3	84.4	85.7	86.9	88.0	89.1	90.1	91.1
Spain	86.3	86.3	87.4	88.4	89.4	90.3	91.2	92.0
Sweden	84.1	84.8	86.1	87.2	88.3	89.4	90.3	91.3
United Kingdom	83.0	83.9	85.3	86.7	87.9	89.0	90.1	91.1

Source: own calculations

Tab. All-11: Life expectancy assumptions for men under all scenarios (the average number of years a newborn can expect to live based on the mortality conditions at the time). Life expectancy is held constant between 2080-2100 at 2080 levels

<i>Males (years)</i>	2016	2020	2030	2040	2050	2060	2070	2080
Austria	79.3	79.8	81.3	82.7	84.0	85.2	86.3	87.3
Belgium	79.0	79.5	81.0	82.4	83.8	85.0	86.2	87.2
Bulgaria	71.3	72.6	75.1	77.4	79.5	81.5	83.3	84.9
Croatia	75.0	75.8	77.8	79.6	81.3	82.9	84.4	85.8
Cyprus	80.5	81.4	82.7	83.8	84.9	86.0	87.0	87.9
Czech Republic	76.1	76.8	78.6	80.3	82.0	83.5	84.9	86.2
Denmark	79.0	79.5	81.0	82.4	83.7	84.9	86.1	87.2
Estonia	73.3	73.8	76.1	78.3	80.3	82.2	83.9	85.4
European Union	78.2	79.1	80.7	82.3	83.6	84.9	86.1	87.2
Finland	78.6	79.1	80.6	82.1	83.4	84.7	85.9	87.0
France	79.5	80.2	81.7	83.1	84.3	85.5	86.6	87.6
Germany	78.6	79.4	80.9	82.3	83.6	84.9	86.1	87.1
Greece	78.9	79.6	81.2	82.6	84.0	85.3	86.5	87.5
Hungary	72.6	73.7	76.0	78.2	80.3	82.1	83.9	85.5
Ireland	79.9	80.1	81.5	82.9	84.1	85.3	86.4	87.5
Italy	81.0	81.2	82.5	83.7	84.8	85.9	86.9	87.8
Latvia	69.8	70.7	73.5	76.1	78.5	80.7	82.7	84.5
Lithuania	69.5	70.8	73.6	76.2	78.6	80.8	82.8	84.6
Luxembourg	80.1	80.0	81.5	82.8	84.1	85.3	86.4	87.4
Malta	80.6	80.5	82.0	83.4	84.7	85.8	86.8	87.8
The Netherlands	80.0	80.7	82.0	83.2	84.4	85.5	86.5	87.5
Poland	73.9	74.9	77.1	79.2	81.1	82.8	84.4	85.9
Portugal	78.1	78.9	80.5	82.0	83.4	84.7	85.9	87.0
Romania	71.7	72.9	75.4	77.8	79.9	81.8	83.6	85.3
Slovakia	73.8	74.6	76.8	78.9	80.8	82.6	84.2	85.7
Slovenia	78.2	78.9	80.4	81.9	83.3	84.6	85.8	87.0
Spain	80.5	81.0	82.3	83.6	84.8	85.9	86.9	87.9
Sweden	80.6	81.1	82.3	83.5	84.6	85.7	86.7	87.6
United Kingdom	79.4	80.2	81.6	83.0	84.2	85.4	86.5	87.5

Source: own calculations

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