

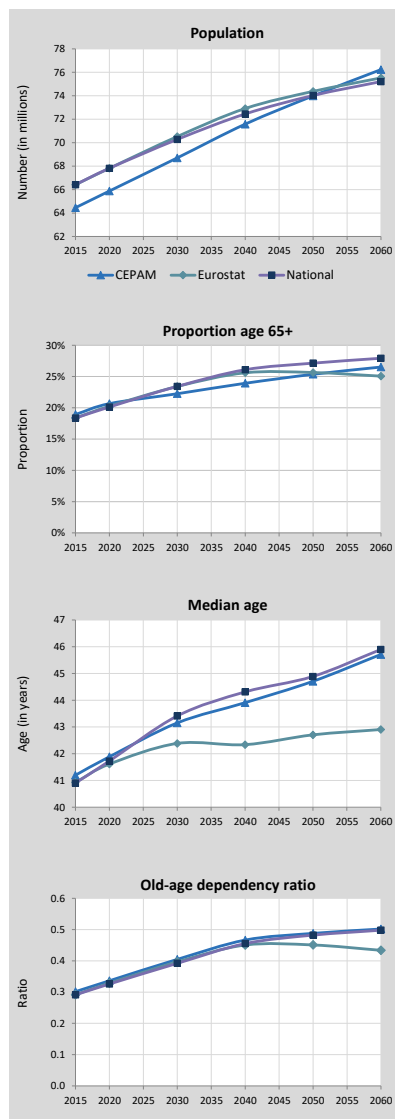
France

Detailed Human Capital projections to 2060

Comparison of CEPAM projections with other sources

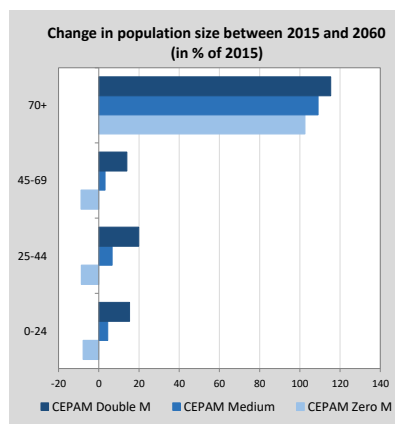
Demographic indicators - CEPAM Medium Scenario (SSP2), Eurostat and national projections							
		2015	2020	2030	2040	2050	2060
Population (in millions)	CEPAM	64.46	65.88	68.71	71.58	73.99	76.23
	Eurostat	66.42	67.82	70.53	72.92	74.38	75.53
	National	66.42	67.82	70.28	72.45	74.02	75.21
Proportion age 65+	CEPAM	18.9%	20.7%	22.3%	23.9%	25.4%	26.5%
	Eurostat	18.4%	20.3%	23.4%	25.6%	25.6%	25.1%
	National	18.4%	20.1%	23.4%	26.1%	27.1%	27.9%
Proportion below age 20	CEPAM	24.2%	23.9%	22.7%	22.1%	21.7%	21.0%
	Eurostat	24.6%	24.3%	23.4%	23.3%	23.3%	23.0%
	National	24.7%	24.4%	23.0%	22.3%	22.3%	21.7%
Median age	CEPAM	41.2	41.9	43.2	43.9	44.7	45.7
	Eurostat	40.9	41.6	42.4	42.3	42.7	42.9
	National	40.9	41.7	43.4	44.3	44.9	45.9
Old-age dependency ratio (65+/15-64)	CEPAM	0.30	0.34	0.40	0.47	0.49	0.50
	Eurostat	0.29	0.33	0.40	0.45	0.45	0.43
	National	0.29	0.33	0.39	0.46	0.48	0.50
Young-age dependency ratio (0-14/15-64)	CEPAM	0.29	0.29	0.29	0.29	0.29	0.28
	Eurostat	0.30	0.29	0.30	0.31	0.31	0.30
	National	0.30	0.29	0.28	0.29	0.29	0.29
Parent support ratio (85+/50-64)	CEPAM	0.16	0.18	0.21	0.36	0.46	0.53
	Eurostat	0.15	0.18	0.20	0.34	0.40	0.41
	National	0.15	0.17	0.20	0.31	0.39	0.45

Demographic assumptions underlying projections							
		2010-2015	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total fertility rate	CEPAM	2.01	1.99	1.97	1.95	1.92	1.89
	Eurostat	2.00	2.00	2.00	1.99	1.99	1.99
	National	1.95	1.95	1.95	1.95	1.95	1.95
Life expectancy at birth (in years)							
Male	CEPAM	79.9	81.0	82.1	84.3	86.5	88.6
	Eurostat	79.7	80.6	81.3	82.7	84.0	85.2
	National	79.9	81.0	82.1	84.3	86.3	88.1
Female	CEPAM	85.7	86.8	87.8	90.0	92.2	94.3
	Eurostat	85.8	86.4	87.0	88.1	89.2	90.1
	National	85.9	86.7	87.4	88.6	90.0	91.4
Five-year net migration flow (in thousands)	CEPAM	479.5	527.0	570.0	643.9	703.7	744.2
	Eurostat	303.2	399.7	430.5	379.9	359.9	321.6
	National	350.0	350.0	350.0	350.0	350.0	350.0



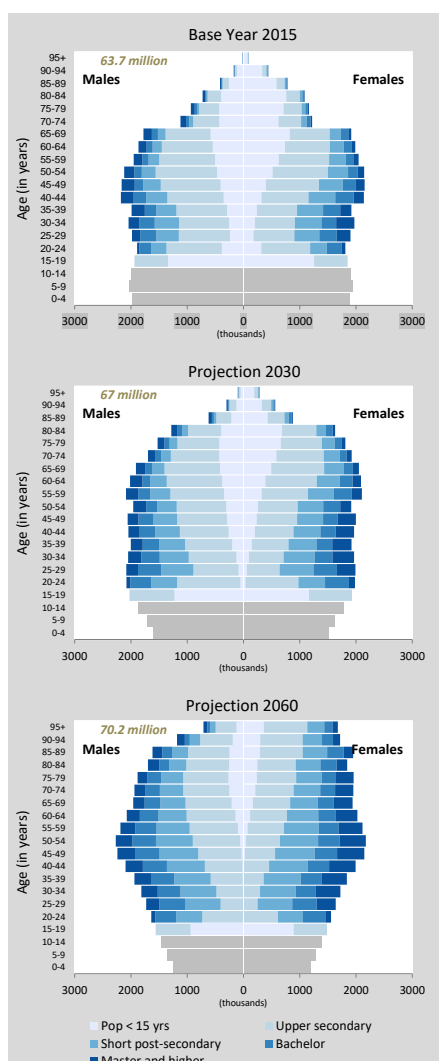
Changes in population size and structure according to CEPAM scenarios (impact of migration)

Population size according to CEPAM projections to 2060							
		2015	2020	2030	2040	2050	2060
Population (in millions)	Zero M	64.46	65.36	66.82	68.00	68.43	68.40
	Medium	64.46	65.88	68.71	71.58	73.99	76.23
	Double M	64.46	66.39	70.53	74.96	79.09	83.23
Population 0-24 (in millions)	Zero M	19.29	19.39	19.04	18.62	18.30	17.80
	Medium	19.29	19.55	19.68	19.83	20.09	20.15
	Double M	19.29	19.72	20.29	20.97	21.72	22.24
Population 25-44 (in millions)	Zero M	16.26	15.56	15.25	15.46	15.29	14.86
	Medium	16.26	15.85	16.18	16.87	17.17	17.34
	Double M	16.26	16.14	17.08	18.17	18.86	19.50
Population 45-69 (in millions)	Zero M	20.48	20.57	20.10	19.05	18.63	18.68
	Medium	20.48	20.63	20.40	19.94	20.32	21.12
	Double M	20.48	20.68	20.70	20.81	21.91	23.34
Population 70+ (in millions)	Zero M	8.43	9.84	12.42	14.87	16.21	17.07
	Medium	8.43	9.84	12.44	14.94	16.42	17.62
	Double M	8.43	9.85	12.47	15.01	16.61	18.15



France (Continued)

Pyramids by education, CEPAM Medium

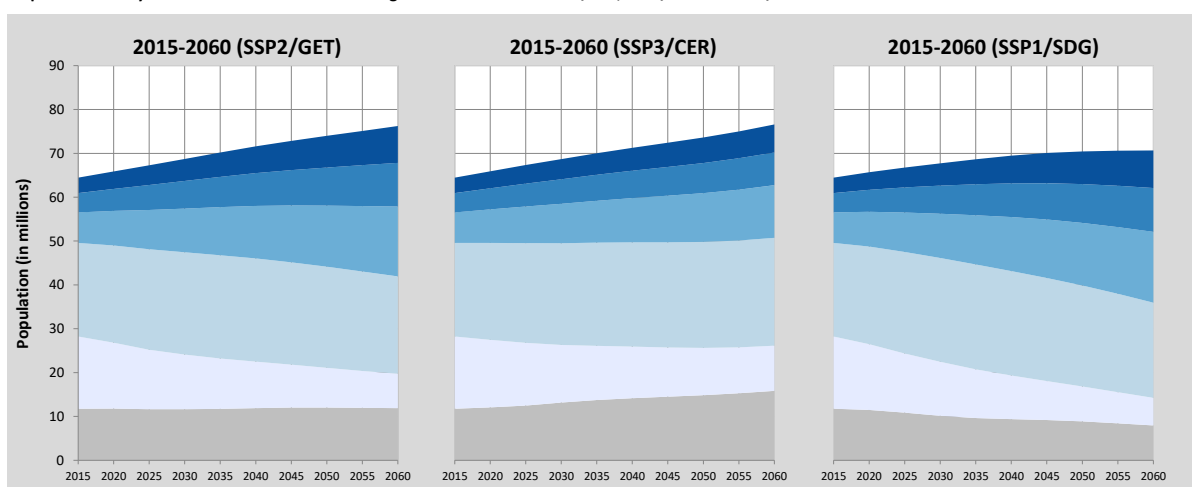


Detailed Human Capital projections to 2060

Human Capital indicators, CEPAM Medium (SSP2)

	2015	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment (columns sum to 100%)						
E1-E4 - lower secondary and below	29.1%	25.9%	20.1%	15.6%	12.1%	9.7%
E5 - upper secondary	40.5%	40.8%	40.9%	39.8%	38.0%	35.8%
E6 - short post-secondary	14.1%	15.5%	18.2%	20.8%	23.2%	25.3%
E7 - bachelor	8.7%	9.5%	11.1%	12.6%	14.0%	15.3%
E8 - master and higher	7.6%	8.3%	9.7%	11.2%	12.6%	14.0%
Mean years of schooling (in years)	11.36	11.66	12.21	12.66	13.04	13.36
Age gap: highest educational attainment (ratio 35-44/50-64)						
E1-E4 - lower secondary and below	0.53	0.58	0.68	0.58	0.55	0.69
E5 - upper secondary	0.91	0.86	0.90	0.93	0.89	0.88
E6 - short post-secondary	1.64	1.48	1.22	1.18	1.18	1.12
E7 - bachelor	1.98	1.75	1.20	1.17	1.18	1.13
E8 - master and higher	1.68	1.63	1.37	1.21	1.18	1.12
Mean years of schooling (35-44 minus 50-64)	1.40	1.11	0.66	0.69	0.68	0.55
Gender gap (population age 25+): highest educational attainment (% males - %females)						
E1-E4 - lower secondary and below	-6.37	-5.20	-3.01	-1.39	-0.13	0.66
E5 - upper secondary	8.34	7.99	7.37	7.08	7.03	7.19
E6 - short post-secondary	-2.95	-2.95	-2.93	-2.81	-2.67	-2.44
E7 - bachelor	-1.37	-1.30	-1.12	-0.84	-0.54	-0.20
E8 - master and higher	2.34	1.46	-0.31	-2.04	-3.69	-5.21
Mean years of schooling (male minus female)	0.40	0.30	0.10	-0.10	-0.20	-0.30
Women age 20-39: highest educational attainment (columns sum to 100%)						
E1-E4 - lower secondary and below	13%	11%	8%	6%	5%	5%
E5 - upper secondary	39%	39%	37%	34%	32%	30%
E6 - short post-secondary	22%	23%	25%	27%	28%	29%
E7 - bachelor	15%	15%	17%	18%	19%	19%
E8 - master and higher	11%	13%	14%	15%	16%	16%
Mean years of schooling (in years)	12.96	13.15	13.57	13.85	14.07	14.24
Age gap among women: highest educational attainment (ratio 35-44/50-64)						
E1-E4 - lower secondary and below	0.46	0.50	0.62	0.55	0.52	0.66
E5 - upper secondary	0.89	0.83	0.88	0.91	0.86	0.85
E6 - short post-secondary	1.59	1.41	1.14	1.15	1.18	1.12
E7 - bachelor	2.20	1.71	1.00	1.09	1.18	1.12
E8 - master and higher	2.15	2.35	1.98	1.31	1.18	1.12
Mean years of schooling (35-44 minus 50-64)	1.69	1.38	0.85	0.76	0.74	0.59

Population size by educational attainment according to three scenarios: SSP2/GET, SSP3/CER and SSP1/SDG



Colour legend as in pyramids above

Education scenarios

SSP2/GET : Global Education Trend Scenario (Medium assumption)

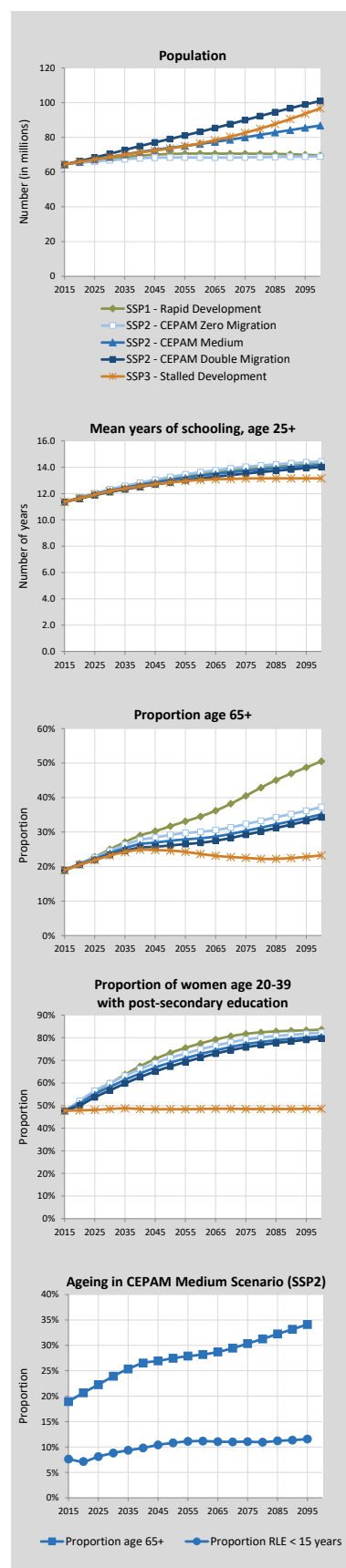
SSP3/CER : Constant Enrollment Rates Scenario (assumption of no future improvements)

SSP1/SDG : Sustainable Development Goal Scenario (universal primary and secondary education by 2030)

France (Continued)

Alternative scenarios to 2100

Projection results by scenario (SSP1-SSP3)							
	2015	2020	2030	2050	2060	2075	2100
Population (in millions)							
SSP1 - Rapid Development	64.46	65.70	67.71	70.44	70.66	70.59	69.60
SSP2 - CEPAM Zero Migration	64.46	65.36	66.82	68.43	68.41	68.48	69.05
SSP2 - CEPAM Medium	64.46	65.88	68.71	73.99	76.23	80.04	86.84
SSP2 - CEPAM Double Migration	64.46	66.40	70.53	79.10	83.23	89.95	100.97
SSP3 - Stalled Development	64.46	65.91	68.68	73.61	76.59	82.60	96.76
Proportion age 65+							
SSP1 - Rapid Development	18.9%	20.9%	25.0%	31.7%	34.5%	40.5%	50.5%
SSP2 - CEPAM Zero Migration	18.9%	20.8%	24.5%	29.2%	30.1%	32.3%	37.3%
SSP2 - CEPAM Medium	18.9%	20.7%	23.9%	27.5%	28.2%	30.4%	35.1%
SSP2 - CEPAM Double Migration	18.9%	20.5%	23.4%	26.1%	26.9%	29.2%	34.3%
SSP3 - Stalled Development	18.9%	20.5%	23.2%	24.6%	23.6%	22.5%	23.2%
Proportion below age 20							
SSP1 - Rapid Development	24.2%	23.5%	20.8%	17.1%	15.6%	13.6%	11.1%
SSP2 - CEPAM Zero Migration	24.2%	23.9%	22.6%	21.4%	20.6%	19.6%	17.9%
SSP2 - CEPAM Medium	24.2%	23.9%	22.7%	21.7%	21.0%	20.1%	18.4%
SSP2 - CEPAM Double Migration	24.2%	23.9%	22.9%	22.0%	21.3%	20.3%	18.6%
SSP3 - Stalled Development	24.2%	24.3%	24.9%	26.6%	27.1%	27.5%	26.8%
Proportion of women age 20-39 with post-secondary education							
SSP1 - Rapid Development	47.7%	51.6%	59.8%	73.3%	77.5%	81.7%	83.6%
SSP2 - CEPAM Zero Migration	47.7%	52.1%	59.9%	71.1%	74.9%	79.2%	82.2%
SSP2 - CEPAM Medium	47.7%	51.0%	58.2%	69.0%	72.8%	77.2%	80.6%
SSP2 - CEPAM Double Migration	47.7%	50.0%	56.7%	67.3%	71.2%	75.8%	79.7%
SSP3 - Stalled Development	47.7%	47.9%	48.5%	48.4%	48.5%	48.5%	48.6%
Mean years of schooling, age 25+							
SSP1 - Rapid Development	11.4	11.7	12.2	13.1	13.5	13.9	14.4
SSP2 - CEPAM Zero Migration	11.4	11.7	12.3	13.3	13.6	14.0	14.4
SSP2 - CEPAM Medium	11.4	11.7	12.2	13.0	13.4	13.7	14.2
SSP2 - CEPAM Double Migration	11.4	11.6	12.1	12.9	13.2	13.5	14.0
SSP3 - Stalled Development	11.4	11.6	12.2	12.8	13.0	13.1	13.2
Demographic assumptions underlying SSPs							
	2015-2020	2020-2025	2030-2035	2050-2055	2060-2065	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	1.86	1.71	1.54	1.42	1.41	1.40	1.38
SSP2 - CEPAM Zero Migration	2.01	1.99	1.97	1.90	1.88	1.86	1.84
SSP2 - CEPAM Medium	2.01	1.99	1.97	1.90	1.88	1.86	1.84
SSP2 - CEPAM Double Migration	2.01	1.99	1.96	1.90	1.87	1.86	1.84
SSP3 - Stalled Development	2.17	2.32	2.49	2.49	2.46	2.43	2.41
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	86.2	87.8	90.9	97.3	100.4	105.2	111.5
SSP2 - CEPAM Zero Migration	85.7	86.8	89.0	93.3	95.5	98.8	103.1
SSP2 - CEPAM Medium	85.7	86.8	88.9	93.3	95.4	98.7	103.0
SSP2 - CEPAM Double Migration	85.7	86.8	88.9	93.2	95.4	98.6	102.9
SSP3 - Stalled Development	85.2	85.8	86.9	89.2	90.4	92.1	94.4
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	479.8	521.0	575.9	626.6	621.5	575.8	464.9
SSP2 - CEPAM Zero Migration	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSP2 - CEPAM Medium	479.5	526.2	608.0	721.7	747.5	740.4	670.2
SSP2 - CEPAM Double Migration	958.0	1036.1	1164.8	1314.4	1324.8	1254.0	1051.9
SSP3 - Stalled Development	319.7	178.0	0.5	0.8	0.9	1.0	1.2
Ageing indicators by scenario							
	2015	2020	2030	2050	2060	2075	2095
Median age							
SSP1 - Rapid Development	41.2	42.1	44.4	49.1	52.2	57.2	63.8
SSP2 - CEPAM Zero Migration	41.2	42.1	43.9	45.8	47.0	48.7	52.0
SSP2 - CEPAM Medium	41.2	41.9	43.2	44.7	45.7	47.3	50.3
SSP2 - CEPAM Double Migration	41.2	41.7	42.5	43.9	44.9	46.5	49.6
SSP3 - Stalled Development	41.2	41.7	42.2	40.3	38.9	38.5	39.0
Proportion with less than 15 years of remaining life expectancy (RLE)							
SSP1 - Rapid Development	7.6%	7.1%	8.8%	10.8%	11.2%	11.0%	11.5%
SSP2 - CEPAM Zero Migration	8.0%	7.7%	9.7%	11.9%	11.7%	11.3%	11.5%
SSP2 - CEPAM Medium	8.0%	7.6%	9.4%	11.1%	10.7%	10.1%	10.3%
SSP2 - CEPAM Double Migration	8.0%	7.6%	9.2%	10.4%	9.8%	9.3%	9.8%
SSP3 - Stalled Development	8.4%	8.4%	10.1%	11.7%	10.8%	9.4%	8.4%



France (Continued)

Labour force projections to 2060

Labour force indicators	2015	2020	2030	2040	2050	2060
Labour force size, by participation and migration scenario (in millions)						
Constant (CEPAM Zero Migration)	29.34	29.15	28.79	28.55	28.47	28.57
Constant (CEPAM Medium)	29.34	29.43	29.82	30.51	31.48	32.62
Constant (CEPAM Double Migration)	29.34	29.71	30.81	32.36	34.23	36.20
Swedish (CEPAM Zero Migration)	29.34	29.72	30.56	31.36	32.28	33.36
Swedish (CEPAM Medium)	29.34	30.00	31.62	33.43	35.59	37.99
Swedish (CEPAM Double Migration)	29.34	30.29	32.65	35.39	38.63	42.10
Equalization (CEPAM Zero Migration)	29.34	29.31	29.24	29.27	29.42	29.76
Equalization (CEPAM Medium)	29.34	29.60	30.31	31.32	32.57	34.02
Equalization (CEPAM Double Migration)	29.34	29.89	31.34	33.24	35.46	37.79
Constant (CEPAM Medium-low fertility)	29.34	29.43	29.80	30.22	30.03	29.44
Swedish (CEPAM Medium-low fertility)	29.34	30.00	31.61	33.03	33.84	34.30
Equalization (CEPAM Medium-low fertility)	29.34	29.60	30.30	31.01	31.07	30.70
Labour force participation rates, age 15+, by participation scenario (CEPAM Medium)						
TOTAL (Constant)	55.7%	54.4%	52.3%	51.1%	50.8%	50.7%
TOTAL (Swedish)	55.7%	55.5%	55.4%	56.0%	57.5%	59.1%
TOTAL (Equalization)	55.7%	54.7%	53.1%	52.5%	52.6%	52.9%
MALE (Constant)	60.7%	59.1%	56.7%	55.5%	54.9%	54.6%
MALE (Swedish)	60.7%	60.1%	59.7%	60.2%	61.3%	62.7%
MALE (Equalization)	60.7%	59.1%	56.7%	55.5%	54.9%	54.6%
FEMALE (Constant)	50.9%	49.9%	48.0%	47.0%	46.9%	47.0%
FEMALE (Swedish)	50.9%	51.0%	51.3%	52.1%	53.7%	55.6%
FEMALE (Equalization)	50.9%	50.5%	49.7%	49.6%	50.3%	51.3%
Labour force (15+) by highest level of educational attainment. Columns sum to 100%. (CEPAM Medium; Constant participation)						
TOTAL E1-E4 - lower secondary and below	16.7%	14.3%	10.4%	8.2%	6.3%	4.8%
TOTAL E5 - upper secondary	44.2%	42.6%	38.9%	35.6%	32.7%	29.7%
TOTAL E6 - short post-secondary	18.5%	20.2%	23.4%	25.8%	28.0%	30.0%
TOTAL E7 - bachelor	11.2%	12.3%	14.6%	16.1%	17.4%	18.6%
TOTAL E8 - master and higher	9.6%	10.6%	12.6%	14.3%	15.7%	16.9%
MALE E1-E4 - lower secondary and below	17.7%	15.6%	11.9%	9.5%	7.5%	5.7%
MALE E5 - upper secondary	47.0%	45.6%	42.2%	39.2%	36.6%	33.9%
MALE E6 - short post-secondary	15.9%	17.9%	21.6%	24.4%	26.7%	28.8%
MALE E7 - bachelor	9.7%	11.0%	13.7%	15.7%	17.3%	18.7%
MALE E8 - master and higher	9.6%	10.0%	10.7%	11.1%	11.9%	12.8%
FEMALE E1-E4 - lower secondary and below	15.5%	12.7%	8.7%	6.6%	5.0%	3.8%
FEMALE E5 - upper secondary	40.9%	39.3%	35.2%	31.5%	28.2%	25.0%
FEMALE E6 - short post-secondary	21.3%	22.8%	25.5%	27.4%	29.4%	31.3%
FEMALE E7 - bachelor	12.8%	13.9%	15.7%	16.5%	17.4%	18.5%
FEMALE E8 - master and higher	9.5%	11.3%	14.9%	18.0%	20.0%	21.4%

Labour force size by educational attainment according to three migration scenarios, 2015-2060 (Labour force participation = Constant scenario)

