

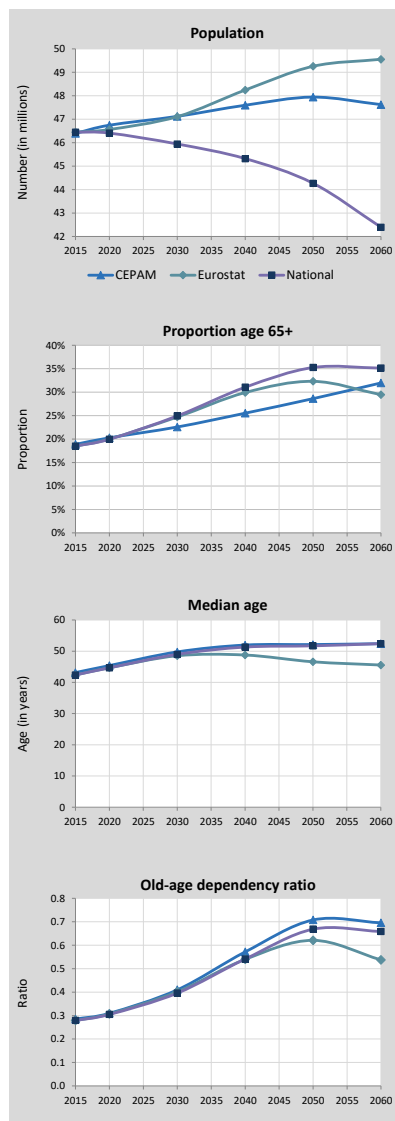
Spain

Detailed Human Capital projections to 2060

Comparison of CEPAM projections with other sources

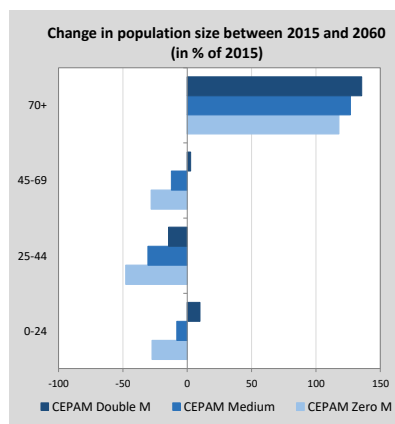
Demographic indicators - CEPAM Medium Scenario (SSP2), Eurostat and national projections							
		2015	2020	2030	2040	2050	2060
Population (in millions)	CEPAM	46.40	46.75	47.12	47.60	47.94	47.62
	Eurostat	46.45	46.56	47.11	48.24	49.26	49.56
	National	46.45	46.41	45.94	45.32	44.27	42.40
Proportion age 65+	CEPAM	18.9%	20.3%	22.6%	25.5%	28.6%	32.0%
	Eurostat	18.5%	20.0%	24.7%	29.9%	32.3%	29.5%
	National	18.5%	20.0%	24.9%	31.1%	35.3%	35.1%
Proportion below age 20	CEPAM	19.4%	19.2%	17.0%	16.2%	16.9%	17.2%
	Eurostat	19.8%	19.9%	18.8%	19.4%	20.7%	21.3%
	National	19.8%	19.6%	17.1%	15.7%	16.1%	15.9%
Median age	CEPAM	43.2	45.4	49.8	52.0	52.1	52.4
	Eurostat	42.4	44.7	48.5	48.8	46.6	45.6
	National	42.4	44.7	49.0	51.3	51.7	52.4
Old-age dependency ratio (65+/15-64)	CEPAM	0.29	0.31	0.41	0.57	0.71	0.70
	Eurostat	0.28	0.31	0.40	0.54	0.62	0.54
	National	0.28	0.30	0.40	0.54	0.67	0.66
Young-age dependency ratio (0-14/15-64)	CEPAM	0.23	0.22	0.20	0.22	0.25	0.25
	Eurostat	0.23	0.23	0.22	0.26	0.30	0.29
	National	0.23	0.22	0.19	0.20	0.23	0.22
Parent support ratio (85+/50-64)	CEPAM	0.15	0.16	0.17	0.28	0.53	0.69
	Eurostat	0.15	0.16	0.17	0.27	0.49	0.56
	National	0.15	0.16	0.17	0.27	0.49	0.61

Demographic assumptions underlying projections							
		2010-2015	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total fertility rate	CEPAM	1.38	1.42	1.47	1.57	1.65	1.69
	Eurostat	1.45	1.65	1.76	1.86	1.88	1.88
	National	1.34	1.35	1.36	1.38	1.41	1.42
Life expectancy at birth (in years)							
Male	CEPAM	80.6	81.7	82.7	84.8	87.0	89.1
	Eurostat	80.6	81.3	82.0	83.3	84.5	85.6
	National	80.6	81.6	82.6	84.4	86.0	87.5
Female	CEPAM	86.0	87.1	88.1	90.2	92.3	94.4
	Eurostat	86.0	86.6	87.2	88.2	89.2	90.1
	National	85.9	86.6	87.3	88.6	89.7	90.9
Five-year net migration flow (in thousands)	CEPAM	484.9	522.6	558.1	621.1	673.3	714.0
	Eurostat	104.4	321.9	499.2	834.9	832.5	794.9
	National	98.0	202.4	262.5	317.1	353.5	386.9



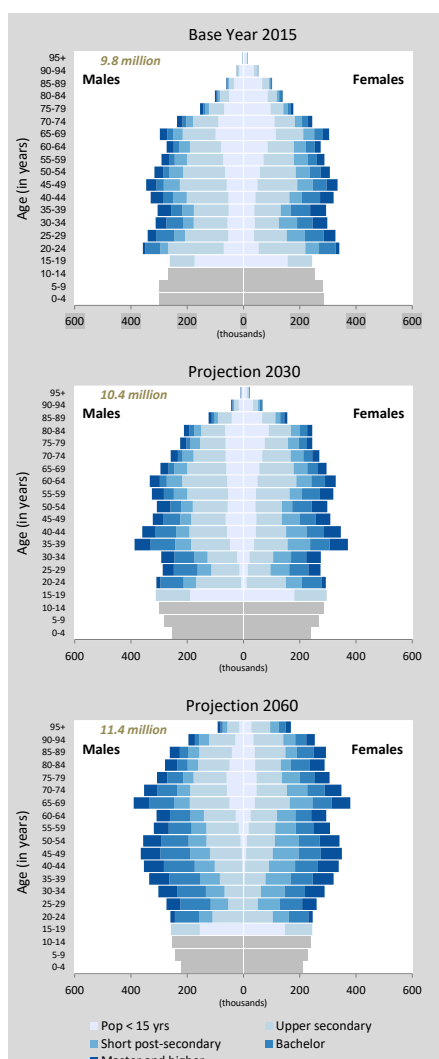
Changes in population size and structure according to CEPAM scenarios (impact of migration)

Population size according to CEPAM projections to 2060							
		2015	2020	2030	2040	2050	2060
Population (in millions)	Zero M	46.40	46.23	45.31	44.17	42.63	40.17
	Medium	46.40	46.75	47.12	47.60	47.94	47.62
	Double M	46.40	47.26	48.90	50.92	53.02	54.64
Population 0-24 (in millions)	Zero M	11.25	10.96	9.99	8.74	8.46	8.18
	Medium	11.25	11.11	10.55	9.82	10.09	10.34
	Double M	11.25	11.27	11.10	10.86	11.64	12.37
Population 25-44 (in millions)	Zero M	13.42	11.65	9.06	8.98	8.30	7.01
	Medium	13.42	11.95	9.99	10.36	10.09	9.32
	Double M	13.42	12.25	10.90	11.68	11.78	11.46
Population 45-69 (in millions)	Zero M	15.33	16.64	17.57	15.06	11.82	11.03
	Medium	15.33	16.69	17.87	15.96	13.51	13.44
	Double M	15.33	16.75	18.17	16.85	15.14	15.73
Population 70+ (in millions)	Zero M	6.40	6.99	8.69	11.38	14.05	13.94
	Medium	6.40	6.99	8.71	11.46	14.26	14.52
	Double M	6.40	6.99	8.74	11.53	14.46	15.08



Sweden (Continued)

Pyramids by education, CEPAM Medium



Detailed Human Capital projections to 2060

Human Capital indicators, CEPAM Medium (SSP2)

	2015	2020	2030	2040	2050	2060
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Population age 25+: highest educational attainment (columns sum to 100%)

E1-E4 - lower secondary and below	26.1%	23.3%	18.9%	15.3%	12.6%	10.7%
E5 - upper secondary	37.8%	37.6%	37.2%	36.3%	34.8%	32.9%
E6 - short post-secondary	13.7%	14.5%	15.8%	16.9%	17.8%	18.7%
E7 - bachelor	11.9%	13.2%	15.2%	17.4%	19.3%	21.1%
E8 - master and higher	10.5%	11.4%	12.8%	14.2%	15.5%	16.6%
Mean years of schooling (in years)	12.21	12.45	12.80	13.09	13.33	13.53

Age gap: highest educational attainment (ratio 35-44/50-64)

E1-E4 - lower secondary and below	0.60	0.81	0.88	0.61	0.54	0.65
E5 - upper secondary	0.95	0.80	0.83	0.97	0.94	0.89
E6 - short post-secondary	0.88	0.91	1.19	1.22	1.16	1.12
E7 - bachelor	1.80	1.82	1.32	1.16	1.17	1.13
E8 - master and higher	1.68	1.55	1.10	1.08	1.16	1.12
Mean years of schooling (35-44 minus 50-64)	0.88	0.58	0.27	0.46	0.59	0.58

Gender gap (population age 25+): highest educational attainment (% males - %females)

E1-E4 - lower secondary and below	-2.04	-0.95	0.47	1.41	1.93	2.03
E5 - upper secondary	8.13	7.84	7.27	7.01	6.80	6.72
E6 - short post-secondary	-1.49	-2.35	-3.54	-4.74	-5.82	-6.80
E7 - bachelor	-4.28	-3.66	-2.54	-1.29	0.08	1.47
E8 - master and higher	-0.32	-0.88	-1.66	-2.39	-3.00	-3.43
Mean years of schooling (male minus female)	-0.10	-0.10	-0.20	-0.30	-0.30	-0.30

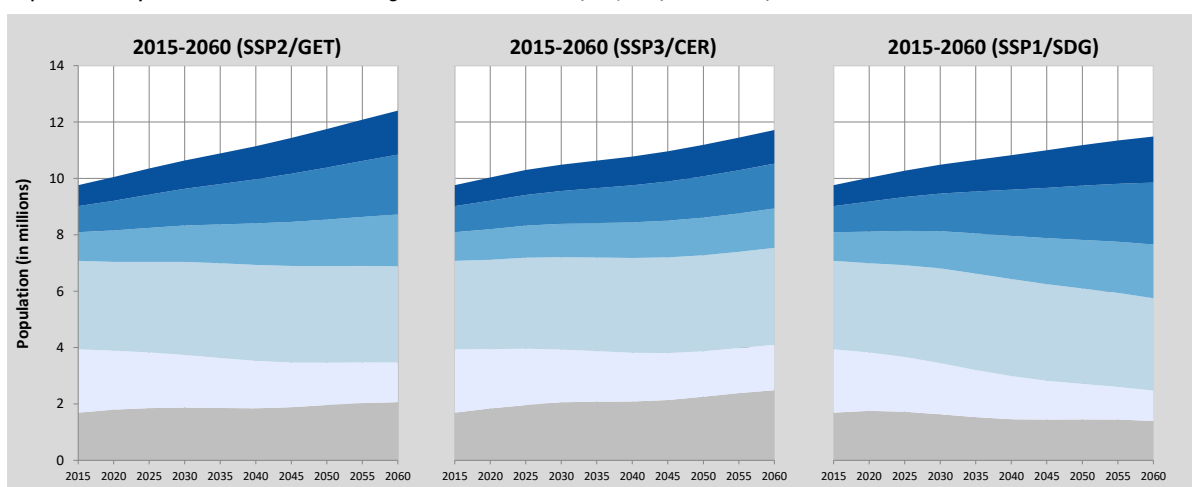
Women age 20-39: highest educational attainment (columns sum to 100%)

E1-E4 - lower secondary and below	13%	13%	9%	7%	6%	5%
E5 - upper secondary	37%	35%	35%	33%	31%	30%
E6 - short post-secondary	17%	20%	21%	23%	24%	25%
E7 - bachelor	20%	19%	21%	22%	23%	24%
E8 - master and higher	13%	14%	14%	15%	16%	17%
Mean years of schooling (in years)	13.25	13.33	13.56	13.80	14.03	14.19

Age gap among women: highest educational attainment (ratio 35-44/50-64)

E1-E4 - lower secondary and below	0.53	0.73	0.84	0.62	0.54	0.61
E5 - upper secondary	0.92	0.75	0.82	0.99	0.91	0.88
E6 - short post-secondary	0.81	1.02	1.51	1.26	1.14	1.11
E7 - bachelor	1.80	1.57	0.96	1.01	1.14	1.11
E8 - master and higher	1.87	1.73	1.16	1.06	1.15	1.11
Mean years of schooling (35-44 minus 50-64)	1.04	0.74	0.27	0.39	0.61	0.61

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)

Spain (Continued)

Alternative scenarios to 2100

Projection results by scenario (SSP1-SSP3)

	2015	2020	2030	2050	2060	2075	2100
Population (in millions)							
SSP1 - Rapid Development	46.40	46.68	46.80	46.84	46.05	43.94	41.24
SSP2 - CEPAM Zero Migration	46.40	46.23	45.31	42.63	40.17	35.88	32.29
SSP2 - CEPAM Medium	46.40	46.75	47.12	47.94	47.62	46.91	49.41
SSP2 - CEPAM Double Migration	46.40	47.26	48.90	53.02	54.64	57.10	64.68
SSP3 - Stalled Development	46.40	46.65	46.33	44.55	42.84	40.80	42.27

Proportion age 65+

SSP1 - Rapid Development	18.9%	20.4%	26.5%	40.6%	42.7%	46.4%	50.8%
SSP2 - CEPAM Zero Migration	18.9%	20.5%	26.5%	39.8%	40.1%	40.0%	41.7%
SSP2 - CEPAM Medium	18.9%	20.3%	25.5%	36.1%	35.8%	35.3%	36.7%
SSP2 - CEPAM Double Migration	18.9%	20.1%	24.7%	33.4%	32.9%	32.7%	34.7%
SSP3 - Stalled Development	18.9%	20.2%	25.1%	34.6%	32.6%	28.6%	26.5%

Proportion below age 20

SSP1 - Rapid Development	19.4%	18.9%	15.5%	13.1%	12.6%	11.5%	10.9%
SSP2 - CEPAM Zero Migration	19.4%	19.2%	16.6%	15.9%	16.1%	15.8%	15.7%
SSP2 - CEPAM Medium	19.4%	19.2%	17.0%	16.9%	17.2%	17.3%	17.1%
SSP2 - CEPAM Double Migration	19.4%	19.2%	17.3%	17.7%	18.0%	18.1%	17.7%
SSP3 - Stalled Development	19.4%	19.5%	18.5%	20.3%	21.6%	23.2%	23.9%

Proportion of women age 20-39 with post-secondary education

SSP1 - Rapid Development	46.8%	50.3%	57.7%	72.2%	76.1%	80.7%	83.4%
SSP2 - CEPAM Zero Migration	46.8%	51.7%	59.8%	71.5%	74.9%	79.3%	82.1%
SSP2 - CEPAM Medium	46.8%	50.7%	58.1%	69.0%	72.3%	76.9%	80.4%
SSP2 - CEPAM Double Migration	46.8%	49.7%	56.6%	67.4%	70.9%	75.7%	79.8%
SSP3 - Stalled Development	46.8%	47.1%	46.6%	47.1%	46.8%	47.0%	46.8%

Mean years of schooling, age 25+

SSP1 - Rapid Development	10.4	10.8	11.6	12.9	13.4	14.0	14.8
SSP2 - CEPAM Zero Migration	10.4	10.8	11.6	12.9	13.4	14.1	14.7
SSP2 - CEPAM Medium	10.4	10.8	11.6	12.7	13.2	13.8	14.4
SSP2 - CEPAM Double Migration	10.4	10.8	11.5	12.6	13.1	13.7	14.3
SSP3 - Stalled Development	10.4	10.7	11.4	12.3	12.6	12.8	12.8

Demographic assumptions underlying SSPs

	2015-2020	2020-2025	2030-2035	2050-2055	2060-2065	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	1.28	1.23	1.19	1.26	1.27	1.28	1.28
SSP2 - CEPAM Zero Migration	1.38	1.42	1.52	1.68	1.70	1.70	1.71
SSP2 - CEPAM Medium	1.38	1.42	1.52	1.68	1.70	1.70	1.70
SSP2 - CEPAM Double Migration	1.38	1.42	1.52	1.68	1.70	1.70	1.70
SSP3 - Stalled Development	1.49	1.66	1.93	2.20	2.23	2.24	2.24

Life expectancy at birth for females (in years)

SSP1 - Rapid Development	86.5	88.1	91.2	97.3	100.4	105.0	109.3
SSP2 - CEPAM Zero Migration	86.0	87.1	89.2	93.4	95.5	98.6	102.8
SSP2 - CEPAM Medium	86.0	87.1	89.2	93.3	95.4	98.5	102.7
SSP2 - CEPAM Double Migration	86.0	87.1	89.2	93.3	95.4	98.5	102.6
SSP3 - Stalled Development	85.5	86.1	87.1	89.3	90.4	91.9	94.0

Migration – net flow over five years (in thousands)

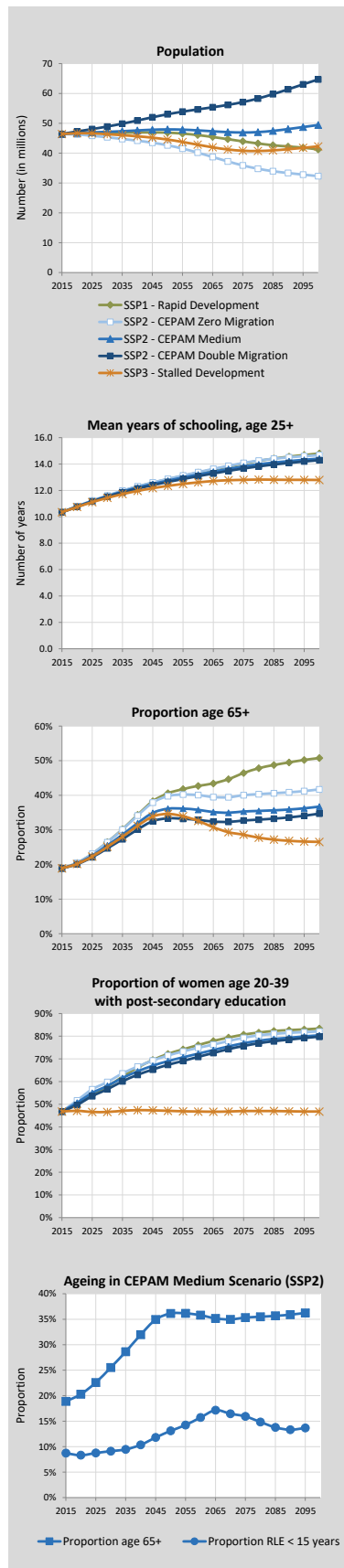
SSP1 - Rapid Development	485.4	518.7	566.0	614.3	616.5	595.6	525.7
SSP2 - CEPAM Zero Migration	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSP2 - CEPAM Medium	485.0	522.5	590.7	692.0	723.9	743.1	717.6
SSP2 - CEPAM Double Migration	969.3	1035.8	1153.7	1314.8	1356.8	1364.7	1278.5
SSP3 - Stalled Development	323.2	176.0	0.5	0.7	0.8	1.0	1.1

Ageing indicators by scenario

	2015	2020	2030	2050	2060	2075	2095
Median age							
SSP1 - Rapid Development	43.2	45.5	50.5	56.6	58.4	62.1	65.2
SSP2 - CEPAM Zero Migration	43.2	45.6	50.7	55.5	55.7	56.3	56.4
SSP2 - CEPAM Medium	43.2	45.4	49.8	52.1	52.4	51.8	52.2
SSP2 - CEPAM Double Migration	43.2	45.1	48.7	49.9	50.3	49.6	50.5
SSP3 - Stalled Development	43.2	45.3	49.5	49.9	48.3	44.1	43.2

Proportion with less than 15 years of remaining life expectancy (RLE)

SSP1 - Rapid Development	8.7%	8.3%	9.1%	13.1%	15.7%	15.9%	13.7%
SSP2 - CEPAM Zero Migration	9.1%	9.1%	9.9%	15.6%	19.4%	16.8%	14.6%
SSP2 - CEPAM Medium	9.1%	9.0%	9.5%	14.0%	16.6%	13.6%	11.8%
SSP2 - CEPAM Double Migration	9.1%	8.9%	9.2%	12.7%	14.6%	11.9%	10.6%
SSP3 - Stalled Development	9.4%	9.6%	10.4%	16.4%	18.6%	13.4%	11.5%



Spain (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)	23.19	22.49	20.55	17.99	15.86	14.84
Constant (CEPAM Medium)	23.19	22.82	21.65	19.99	18.84	18.77
Constant (CEPAM Double Migration)	23.19	23.14	22.74	21.93	21.68	22.46
Swedish (CEPAM Zero Migration)	23.19	22.85	21.78	19.96	18.17	17.53
Swedish (CEPAM Medium)	23.19	23.18	22.91	22.07	21.44	22.02
Swedish (CEPAM Double Migration)	23.19	23.50	24.02	24.12	24.55	26.23
Equalization (CEPAM Zero Migration)	23.19	22.66	20.96	18.49	16.39	15.43
Equalization (CEPAM Medium)	23.19	22.99	22.08	20.56	19.51	19.57
Equalization (CEPAM Double Migration)	23.19	23.31	23.19	22.58	22.49	23.45
Constant (CEPAM Medium-low fertility)	23.19	22.82	21.64	19.83	18.12	17.17
Swedish (CEPAM Medium-low fertility)	23.19	23.18	22.90	21.85	20.54	20.11
Equalization (CEPAM Medium-low fertility)	23.19	22.99	22.07	20.40	18.77	17.92
Labour force participation rates, age 15+, by participation scenario (CEPAM Medium)						
TOTAL (Constant)	58.7%	56.9%	52.3%	47.7%	45.0%	45.1%
TOTAL (Swedish)	58.7%	57.8%	55.4%	52.7%	51.2%	52.9%
TOTAL (Equalization)	58.7%	57.3%	53.4%	49.1%	46.6%	47.1%
MALE (Constant)	65.0%	62.7%	57.1%	51.8%	49.0%	49.2%
MALE (Swedish)	65.0%	63.5%	60.0%	56.8%	55.3%	57.0%
MALE (Equalization)	65.0%	62.7%	57.1%	51.8%	49.0%	49.2%
FEMALE (Constant)	52.8%	51.4%	47.7%	43.8%	41.3%	41.3%
FEMALE (Swedish)	52.8%	52.4%	50.9%	48.8%	47.4%	49.2%
FEMALE (Equalization)	52.8%	52.2%	49.8%	46.5%	44.4%	45.1%
Labour force (15+) by highest level of educational attainment. Columns sum to 100%. (CEPAM Medium; Constant participation)						
TOTAL E1-E4 - lower secondary and below	37.3%	33.0%	24.7%	17.7%	12.2%	8.6%
TOTAL E5 - upper secondary	23.9%	24.8%	26.3%	27.6%	28.4%	28.1%
TOTAL E6 - short post-secondary	10.2%	11.3%	13.3%	14.8%	16.1%	17.2%
TOTAL E7 - bachelor	12.8%	13.7%	15.9%	17.6%	19.1%	20.5%
TOTAL E8 - master and higher	15.8%	17.2%	19.8%	22.2%	24.2%	25.6%
MALE E1-E4 - lower secondary and below	42.1%	38.2%	30.2%	22.4%	15.7%	11.2%
MALE E5 - upper secondary	23.9%	25.1%	27.5%	30.2%	32.3%	33.2%
MALE E6 - short post-secondary	9.6%	10.2%	11.0%	11.2%	11.9%	12.8%
MALE E7 - bachelor	10.4%	11.5%	14.1%	16.5%	18.4%	19.8%
MALE E8 - master and higher	14.0%	15.1%	17.2%	19.7%	21.7%	23.1%
FEMALE E1-E4 - lower secondary and below	31.8%	27.0%	18.5%	12.4%	8.3%	5.8%
FEMALE E5 - upper secondary	23.8%	24.4%	24.9%	24.8%	24.0%	22.4%
FEMALE E6 - short post-secondary	10.8%	12.6%	15.9%	18.8%	20.8%	22.1%
FEMALE E7 - bachelor	15.6%	16.3%	18.0%	18.8%	20.0%	21.3%
FEMALE E8 - master and higher	18.0%	19.7%	22.6%	25.1%	27.0%	28.5%

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

