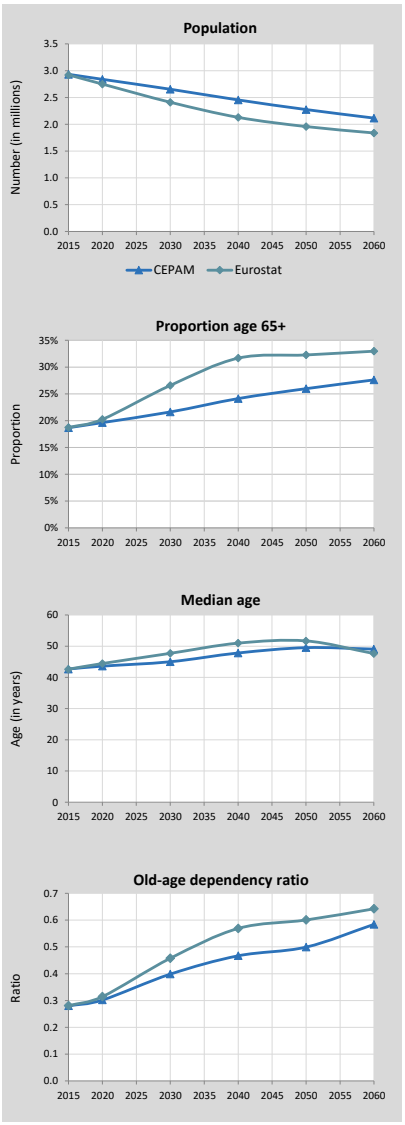
Lithuania

Detailed Human Capital projections to 2060

Comparison of CEPAM projections with other sources

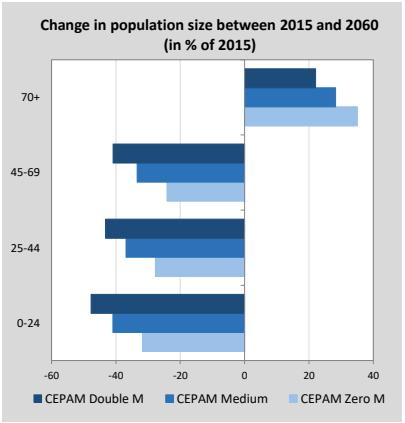
Demographic indicators - CEPAM Medium Scenario (SSP2), Eurostat and national projections		2015	2020	2030	2040	2050	2060
Population (in millions)	*CEPAM*	2.93	2.84	2.65	2.45	2.27	2.12
	Eurostat	2.92	2.75	2.41	2.13	1.96	1.84
	National	-	-	-	-	-	-
Proportion age 65+	*CEPAM*	18.7%	19.6%	21.6%	24.1%	26.0%	27.6%
	Eurostat	18.7%	20.3%	26.6%	31.7%	32.3%	33.0%
	National	-	-	-	-	-	-
Proportion below age 20	*CEPAM*	20.4%	20.1%	20.8%	18.8%	17.5%	17.9%
	Eurostat	20.4%	20.0%	20.6%	18.1%	18.0%	20.5%
	National	-	-	-	-	-	-
Median age	*CEPAM*	42.7	43.6	45.0	47.8	49.5	49.1
	Eurostat	42.6	44.4	47.7	51.0	51.7	47.6
	National	-	-	-	-	-	-
Old-age dependency ratio (65+/15-64)	*CEPAM*	0.28	0.30	0.40	0.47	0.50	0.58
	Eurostat	0.28	0.31	0.46	0.57	0.60	0.64
	National	#VALUE!	#VALUE!	#VALUE!	-	-	-
Young-age dependency ratio (0-14/15-64)	*CEPAM*	0.22	0.23	0.25	0.22	0.22	0.24
	Eurostat	0.22	0.24	0.26	0.23	0.26	0.31
	National	-	-	-	-	-	-
Parent support ratio (85+/50-64)	*CEPAM*	0.10	0.12	0.17	0.21	0.31	0.44
	Eurostat	0.10	0.12	0.18	0.24	0.38	0.57
	National	-	-	-	-	-	-

Demographic assumptions underlying projections		2010-2015	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total fertility rate	*CEPAM*	1.64	1.63	1.62	1.58	1.56	1.56
	Eurostat	1.69	1.73	1.75	1.78	1.80	1.82
	National	-	-	-	-	-	-
Life expectancy at birth (in years)							
Male	*CEPAM*	69.4	70.7	71.9	74.4	76.9	79.4
	Eurostat	70.0	71.6	73.0	75.6	78.1	80.3
	National	-	-	-	-	-	-
Female	*CEPAM*	80.0	81.0	82.0	84.1	86.1	88.2
	Eurostat	80.4	81.4	82.3	84.1	85.6	87.1
	National	-	-	-	-	-	-
Five-year net migration flow (in thousands)	*CEPAM*	-35.3	-31.0	-27.0	-19.3	-12.3	-6.6
	Eurostat	-122.6	-114.0	-97.2	-23.9	-5.1	4.8
	National	-	-	-	-	-	-



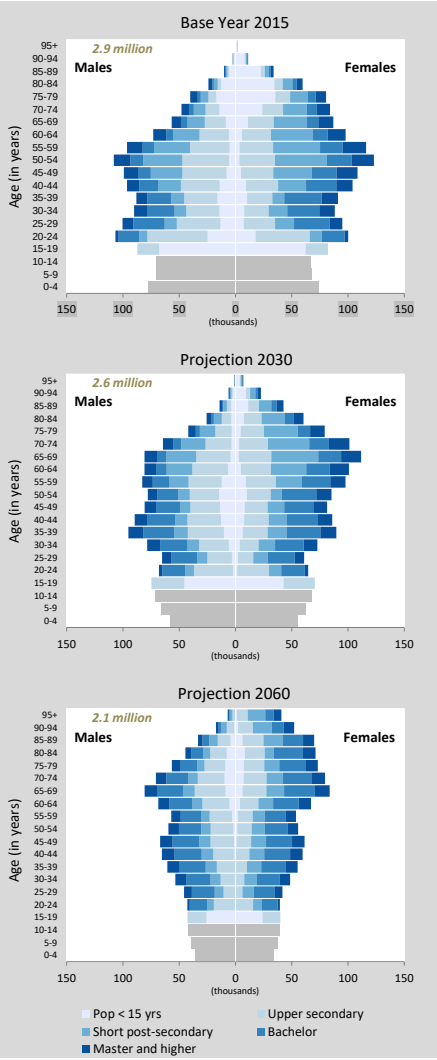
Changes in population size and structure according to CEPAM scenarios (impact of migration)

Population size according to CEPAM projections to 2060		2015	2020	2030	2040	2050	2060
Population (in millions)	*Zero M*	2.93	2.88	2.77	2.63	2.50	2.38
	Medium	2.93	2.84	2.65	2.45	2.27	2.12
	Double M	2.93	2.80	2.55	2.30	2.09	1.92
Population 0-24 (in millions)	*Zero M*	0.80	0.75	0.72	0.66	0.59	0.55
	Medium	0.80	0.74	0.69	0.60	0.52	0.48
	Double M	0.80	0.72	0.65	0.55	0.46	0.42
Population 25-44 (in millions)	*Zero M*	0.76	0.75	0.70	0.59	0.58	0.55
	Medium	0.76	0.73	0.64	0.52	0.52	0.48
	Double M	0.76	0.71	0.59	0.47	0.47	0.43
Population 45-69 (in millions)	*Zero M*	0.97	0.97	0.90	0.86	0.80	0.74
	Medium	0.97	0.97	0.88	0.81	0.72	0.65
	Double M	0.97	0.96	0.86	0.76	0.65	0.57
Population 70+ (in millions)	*Zero M*	0.40	0.40	0.45	0.52	0.53	0.55
	Medium	0.40	0.40	0.45	0.52	0.52	0.52
	Double M	0.40	0.40	0.45	0.51	0.51	0.49



Lithuania (Continued)

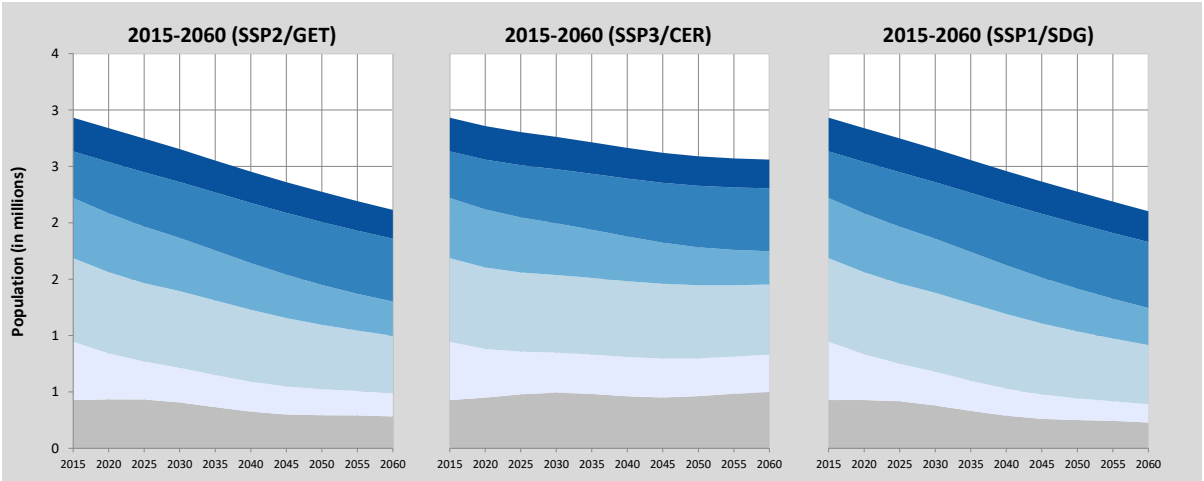
Pyramids by education, CEPAM Medium



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	16.2%	13.8%	10.6%	9.4%	9.0%	8.6%
E5 - upper secondary	28.2%	28.7%	29.1%	28.8%	28.2%	27.4%
E6 - short post-secondary	24.3%	23.9%	22.9%	21.1%	18.9%	17.3%
E7 - bachelor	17.6%	19.7%	23.0%	26.2%	29.2%	31.5%
E8 - master and higher	13.7%	14.0%	14.4%	14.6%	14.8%	15.1%
Mean years of schooling (in years)	13.03	13.27	13.56	13.68	13.74	13.81
Age gap: highest educational attainment (ratio 35-44/50-64)						
E1-E4 - lower secondary and below	2.64	2.84	1.00	0.64	0.63	0.71
E5 - upper secondary	0.98	0.92	0.94	1.00	0.96	0.92
E6 - short post-secondary	0.51	0.41	0.70	1.13	1.08	1.07
E7 - bachelor	1.90	1.98	1.34	1.07	1.09	1.08
E8 - master and higher	0.83	0.89	1.05	1.09	1.09	1.08
Mean years of schooling (35-44 minus 50-64)	-0.42	-0.40	0.19	0.39	0.36	0.46
Gender gap (population age 25+): highest educational attainment (% males - %females)						
E1-E4 - lower secondary and below	-1.06	0.84	3.49	4.39	4.12	3.44
E5 - upper secondary	10.06	9.80	9.39	9.19	8.94	8.72
E6 - short post-secondary	-3.49	-4.72	-6.39	-7.17	-7.21	-6.75
E7 - bachelor	-4.15	-4.05	-3.94	-3.70	-3.39	-3.27
E8 - master and higher	-1.35	-1.88	-2.54	-2.71	-2.46	-2.14
Mean years of schooling (male minus female)	0.00	-0.20	-0.50	-0.50	-0.50	-0.40
Women age 20-39: highest educational attainment (columns sum to 100%)						
E1-E4 - lower secondary and below	12%	10%	7%	6%	5%	5%
E5 - upper secondary	32%	30%	29%	29%	27%	26%
E6 - short post-secondary	15%	17%	18%	19%	19%	20%
E7 - bachelor	30%	31%	33%	34%	35%	35%
E8 - master and higher	11%	12%	13%	12%	13%	14%
Mean years of schooling (in years)	13.47	13.68	13.96	14.06	14.23	14.33
Age gap among women: highest educational attainment (ratio 35-44/50-64)						
E1-E4 - lower secondary and below	2.56	2.87	0.97	0.64	0.60	0.66
E5 - upper secondary	1.01	0.95	0.94	0.95	0.92	0.90
E6 - short post-secondary	0.49	0.43	0.83	1.22	1.08	1.07
E7 - bachelor	1.85	1.83	1.21	1.02	1.08	1.07
E8 - master and higher	0.89	0.92	1.01	1.06	1.08	1.07
Mean years of schooling (35-44 minus 50-64)	-0.26	-0.27	0.14	0.32	0.36	0.44

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)

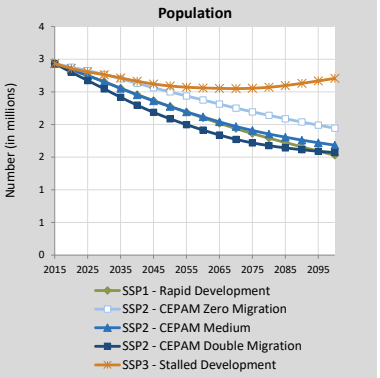
Lithuania (Continued)

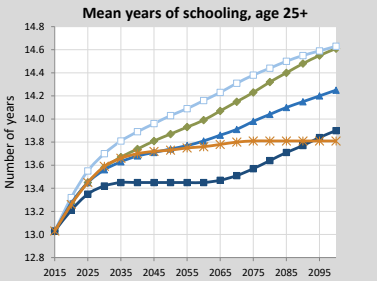
Alternative scenarios to 2100

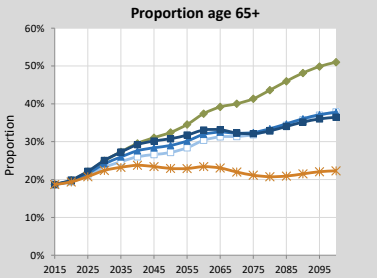
Projection results by scenario (SSP1-SSP3)	2015	2020	2030	2050	2060	2075	2100
Population (in millions)							
SSP1 - Rapid Development	2.93	2.84	2.66	2.28	2.10	1.86	1.53
SSP2 - CEPAM Zero Migration	2.93	2.88	2.77	2.50	2.38	2.19	1.94
SSP2 - CEPAM Medium	2.93	2.84	2.65	2.28	2.12	1.91	1.68
SSP2 - CEPAM Double Migration	2.93	2.80	2.55	2.09	1.92	1.72	1.57
SSP3 - Stalled Development	2.93	2.86	2.76	2.59	2.56	2.56	2.71
Proportion age 65+							
SSP1 - Rapid Development	18.7%	19.8%	25.0%	32.5%	37.4%	41.4%	51.0%
SSP2 - CEPAM Zero Migration	18.7%	19.4%	23.2%	27.1%	30.4%	31.8%	37.9%
SSP2 - CEPAM Medium	18.7%	19.6%	24.1%	29.0%	31.9%	32.4%	37.8%
SSP2 - CEPAM Double Migration	18.7%	19.9%	25.1%	30.8%	33.1%	32.1%	36.5%
SSP3 - Stalled Development	18.7%	19.4%	22.4%	22.9%	23.4%	21.1%	22.3%
Proportion below age 20							
SSP1 - Rapid Development	20.4%	19.9%	19.8%	15.0%	14.8%	12.6%	11.1%
SSP2 - CEPAM Zero Migration	20.4%	20.1%	21.2%	18.1%	18.5%	17.0%	16.1%
SSP2 - CEPAM Medium	20.4%	20.1%	20.8%	17.5%	17.9%	16.5%	15.9%
SSP2 - CEPAM Double Migration	20.4%	20.1%	20.5%	16.8%	17.6%	16.2%	16.1%
SSP3 - Stalled Development	20.4%	20.5%	23.2%	23.6%	25.4%	25.4%	25.6%
Proportion of women age 20-39 with post-secondary education							
SSP1 - Rapid Development	56.2%	61.0%	67.0%	75.4%	78.5%	80.7%	82.9%
SSP2 - CEPAM Zero Migration	56.2%	62.4%	69.3%	75.6%	78.3%	80.2%	82.5%
SSP2 - CEPAM Medium	56.2%	61.3%	67.2%	73.1%	75.3%	77.0%	79.4%
SSP2 - CEPAM Double Migration	56.2%	60.1%	64.8%	70.3%	71.8%	73.6%	76.5%
SSP3 - Stalled Development	56.2%	57.7%	59.1%	57.7%	58.6%	57.3%	57.7%
Mean years of schooling, age 25+							
SSP1 - Rapid Development	13.0	13.3	13.6	13.9	14.0	14.2	14.6
SSP2 - CEPAM Zero Migration	13.0	13.3	13.7	14.0	14.2	14.4	14.6
SSP2 - CEPAM Medium	13.0	13.3	13.6	13.7	13.8	14.0	14.3
SSP2 - CEPAM Double Migration	13.0	13.2	13.4	13.5	13.5	13.6	13.9
SSP3 - Stalled Development	13.0	13.3	13.6	13.7	13.8	13.8	13.8

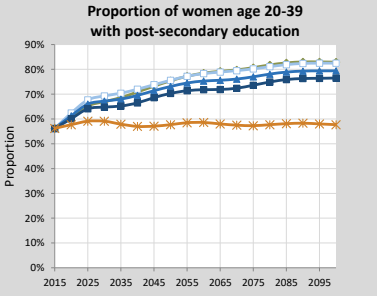
Demographic assumptions underlying SSPs	2015-2020	2020-2025	2030-2035	2050-2055	2060-2065	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	1.58	1.51	1.41	1.36	1.36	1.37	1.38
SSP2 - CEPAM Zero Migration	1.63	1.63	1.59	1.56	1.55	1.57	1.57
SSP2 - CEPAM Medium	1.64	1.63	1.59	1.56	1.56	1.57	1.58
SSP2 - CEPAM Double Migration	1.64	1.63	1.59	1.56	1.57	1.57	1.58
SSP3 - Stalled Development	1.78	1.93	2.08	2.15	2.16	2.18	2.18
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	80.5	82.0	85.1	91.2	94.2	98.8	105.0
SSP2 - CEPAM Zero Migration	80.0	81.0	83.1	87.2	89.3	92.4	96.5
SSP2 - CEPAM Medium	80.0	81.0	83.1	87.2	89.2	92.3	96.4
SSP2 - CEPAM Double Migration	80.0	81.0	83.0	87.1	89.1	92.2	96.3
SSP3 - Stalled Development	79.5	80.0	81.0	83.2	84.2	85.8	87.8
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	-35.5	-31.6	-24.9	-13.2	-9.4	-5.3	-2.9
SSP2 - CEPAM Zero Migration	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSP2 - CEPAM Medium	-35.4	-31.1	-23.2	-8.6	-3.5	2.1	5.4
SSP2 - CEPAM Double Migration	-70.8	-60.6	-41.7	-9.4	1.1	11.1	14.4
SSP3 - Stalled Development	-23.5	-10.4	0.0	0.0	0.0	0.0	0.0

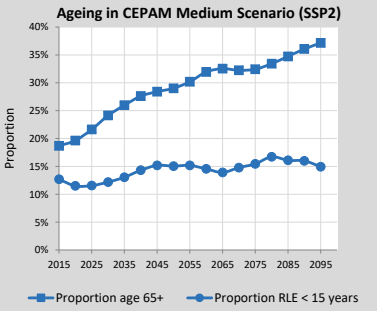
Ageing indicators by scenario	2015	2020	2030	2050	2060	2075	2095
Median age							
SSP1 - Rapid Development	42.7	43.8	45.9	52.7	54.3	58.6	64.9
SSP2 - CEPAM Zero Migration	42.7	43.2	44.1	48.1	48.2	51.1	53.4
SSP2 - CEPAM Medium	42.7	43.6	45.0	49.5	49.1	51.7	53.4
SSP2 - CEPAM Double Migration	42.7	44.0	46.1	50.7	49.6	51.7	52.4
SSP3 - Stalled Development	42.7	43.2	43.0	41.8	40.2	40.1	40.0
Proportion with less than 15 years of remaining life expectancy (RLE)							
SSP1 - Rapid Development	12.7%	11.5%	12.2%	15.1%	14.6%	15.4%	14.9%
SSP2 - CEPAM Zero Migration	13.1%	12.1%	12.8%	14.7%	13.4%	15.4%	13.5%
SSP2 - CEPAM Medium	13.1%	12.3%	13.3%	16.0%	14.7%	16.2%	13.4%
SSP2 - CEPAM Double Migration	13.1%	12.5%	13.8%	17.3%	15.9%	16.4%	12.7%
SSP3 - Stalled Development	13.4%	13.0%	13.7%	14.0%	13.0%	12.6%	9.9%







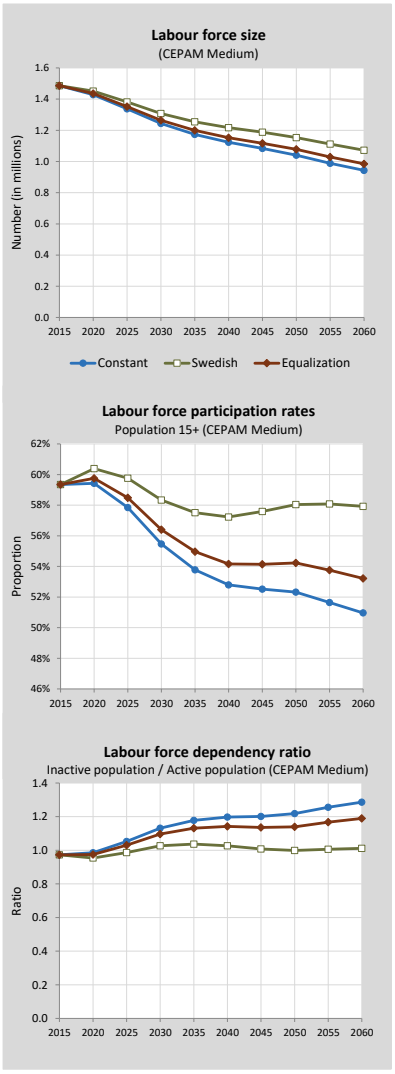




Lithuania (Continued)

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)	1.49	1.46	1.32	1.24	1.18	1.09
Constant (CEPAM Medium)	1.49	1.43	1.24	1.12	1.04	0.94
Constant (CEPAM Double Migration)	1.49	1.40	1.17	1.02	0.92	0.83
Swedish (CEPAM Zero Migration)	1.49	1.48	1.38	1.33	1.30	1.23
Swedish (CEPAM Medium)	1.49	1.45	1.31	1.22	1.15	1.07
Swedish (CEPAM Double Migration)	1.49	1.42	1.24	1.11	1.03	0.95
Equalization (CEPAM Zero Migration)	1.49	1.46	1.34	1.27	1.22	1.14
Equalization (CEPAM Medium)	1.49	1.44	1.26	1.15	1.08	0.98
Equalization (CEPAM Double Migration)	1.49	1.41	1.19	1.05	0.96	0.87
Constant (CEPAM Medium-low fertility)	1.49	1.43	1.24	1.11	0.99	0.85
Swedish (CEPAM Medium-low fertility)	1.49	1.45	1.31	1.20	1.10	0.96
Equalization (CEPAM Medium-low fertility)	1.49	1.44	1.26	1.14	1.03	0.89
Labour force participation rates, age 15+, by participation scenario (CEPAM Medium)						
TOTAL (Constant)	59.3%	59.4%	55.5%	52.8%	52.3%	51.0%
TOTAL (Swedish)	59.3%	60.4%	58.3%	57.2%	58.0%	57.9%
TOTAL (Equalization)	59.3%	59.8%	56.4%	54.2%	54.2%	53.2%
MALE (Constant)	65.4%	65.6%	61.7%	59.2%	58.9%	56.9%
MALE (Swedish)	65.4%	66.6%	64.6%	63.9%	64.9%	64.3%
MALE (Equalization)	65.4%	65.6%	61.7%	59.2%	58.9%	56.9%
FEMALE (Constant)	54.4%	54.3%	50.3%	47.4%	46.6%	45.6%
FEMALE (Swedish)	54.4%	55.2%	53.1%	51.6%	52.1%	52.2%
FEMALE (Equalization)	54.4%	54.9%	52.0%	49.9%	50.2%	49.9%
Labour force (15+) by highest level of educational attainment. Columns sum to 100%. (CEPAM Medium; Constant participation)						
TOTAL E1-E4 - lower secondary and below	7.6%	7.5%	7.8%	7.0%	5.6%	4.4%
TOTAL E5 - upper secondary	30.7%	29.5%	28.0%	26.9%	25.6%	24.5%
TOTAL E6 - short post-secondary	23.7%	21.8%	17.9%	16.2%	16.4%	16.9%
TOTAL E7 - bachelor	23.1%	26.1%	31.2%	34.7%	36.5%	37.6%
TOTAL E8 - master and higher	14.9%	15.0%	15.1%	15.2%	15.9%	16.6%
MALE E1-E4 - lower secondary and below	10.1%	9.9%	10.0%	9.0%	7.2%	5.7%
MALE E5 - upper secondary	36.5%	35.2%	33.3%	32.2%	30.9%	29.9%
MALE E6 - short post-secondary	21.3%	19.4%	15.5%	13.3%	13.3%	13.7%
MALE E7 - bachelor	19.1%	22.3%	27.6%	31.6%	33.9%	35.2%
MALE E8 - master and higher	13.0%	13.2%	13.6%	13.9%	14.7%	15.5%
FEMALE E1-E4 - lower secondary and below	5.1%	5.2%	5.5%	4.8%	3.8%	3.0%
FEMALE E5 - upper secondary	25.0%	23.9%	22.6%	21.3%	19.7%	18.4%
FEMALE E6 - short post-secondary	26.1%	24.1%	20.4%	19.2%	19.8%	20.4%
FEMALE E7 - bachelor	27.1%	30.0%	34.8%	38.0%	39.4%	40.4%
FEMALE E8 - master and higher	16.7%	16.8%	16.7%	16.7%	17.3%	17.8%



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